Project Aquatic WILD

K-12 Curriculum &Activity Guide

Correlations to Florida State Standards (Correlations)

Understanding and Using the Project Aquatic WILD K-12 Curriculum & Activity Guide (Guide) Standards Correlations

Focus:
The standards listed in the Correlations are Florida Next Generation Sunshine State Standards (NGSSS) for Science and Social Studies and Florida Standards (FS) for Language Arts and Mathematics. Correlated standards are arranged in order of increasing grade level and highlighted by color for each subject area – Science | Language Arts | Mathematics | Social Studies

Grades:
Targeted grades for each activity in the Guide are listed in the Correlations. Teachers will need to determine if a standard that serves multiple grade levels is or is not appropriate for their particular student audience. Many activities lend themselves well to being adapted up or down for other grade levels not targeted by the activity, in which case, additional standards not listed in the Correlations may apply.

Applicability of Standards to Activities:
Correlated standards are keyed to the *Procedure* (main activity), as well as *Extensions*, *Variations*, and *In Step with STEM* portions of each activity. Teachers will need to select correlated standards for the portions of the activity they are incorporating into their lesson plans. Should teachers elect to use C-Palms connections, additional standards not listed in the Correlations may apply.

Level of Complexity:
The **Level of Complexity** refers to the cognitive complexity and depth of knowledge designation for that standard as established by the Florida Department of Education.

Each standard listed in a Correlations is hyperlinked to C-Palms. More information about levels of cognitive complexity for each subject area can be found there under "Standards/Content Complexity Rating/Content Complexity Common Definitions." If no level of complexity has been determined for listing on C-Palms, the Correlations will display a dash (-) to so denote it.

Level
Level 1: Recall
Level 2: Basic application of concepts or skills
Level 3: Strategic thinking and complex reasoning
Level 4: Extended thinking and complex reasoning

C-Palms Links:

Each standard is hyperlinked to C-Palms. There are substantial resources on C-Palms to support each activity. Included are items such as, but not limited to:

- **Access Points** – Expectations for students with significant cognitive disabilities to access the general education curriculum, which reflect the core intent of the Standards with reduced levels of complexity. Each standard is broken down into Independent, Supported, and Participatory elements.
- **Related Resources –** Numerous resources to facilitate teaching and learning are available for every standard/benchmark. Below are a few examples:
  - Teaching Ideas and Lesson Plans – Many of these facilitate extension of Guide lessons. For example, SC.7.L.17.3 applies to 15 different activities in the Guide. One of the lessons it offers, "Investigating Factors of Impact on Populations within Ecosystems," is Florida specific, and is an excellent introduction to or culmination for a unit on limiting factors and interdependence.
  - **Professional Development –** For those educators who want more information about incorporating specific content or skills development into their lessons, websites and other resources are offered. For example, SC.8.N.1.4 (correlated to several activities in the Guide) offers a professional development entitled "Generating and Testing Hypotheses" that summarizes the research-based rationale for using inquiry-based lessons. It also provides specific suggestions to help teachers guide students in generating predictions, designing investigations to test the validity of their hypotheses, and strategies to promote critical thinking.
  - **Video/Audio Animations, Images/Photographs, Educational Games, Presentations/Slide Shows, Worksheets, Center Ideas**, and other teaching tools – Numerous standards provide tools to support or expand Guide lessons. For example: SC.2.L.17.2 (correlated to several activities in the Guide) provides a video called "Coral Kid." It is Florida specific and is an excellent description of a coral ecosystems. It has the added bonus of being narrated by a Florida youth.
  - **STEM Lessons** – Many Benchmarks offer STEM lessons, most of which require C-Palms membership to access (free and easy to sign up). The majority of the lessons are model-eliciting activities (MEAs), which encourage students to invent and test models.
  - **Student Resources** – Mini-lessons intended for student use. For example, MAFS.7.SP.1.2 offers a student tutorial called "Exploring Mean Absolute Deviation: Lionfish." It is Florida specific and uses real life data to clarify the mathematics concepts in standard MAFS.7.SP.1.2.

Organization:

The correlated activities appear in order as they are listed in the Project Aquatic WILD K-12 Curriculum & Activity Guide, and are grouped by their topic area (such as Wildlife Populations, Interdependence, etc.) that directly correspond to the conceptual framework.

Acknowledgements:

Florida State Standards correlations to the Project Aquatic WILD K-12 Curriculum & Activity Guide was made possible by an agreement between Florida Project WILD/Florida Youth Conservation Centers Network/Florida Fish and Wildlife Conservation Commission and Gugliotti Environmental and Conservation Education Services – Nature Teach.

Are You Me? Wildlife Populations

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.K2.CS-CP.1.1	Identify different kinds of data (e.g., text, charts, graphs, numbers, pictures, audio, video, and collections of objects).	SC	Data Analysis	Computer Science – Communication Systems and Computing	K-2	-
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	K-3	4
SC.1.N.1.2	Using the five senses as tools, make careful observations, describe objects in terms of number, shape, texture, size, weight, color, and natural motion, and compare their observations with others.	SC	Practice of Science	Nature of Science	K-3	2
SC.2.L.16.1	Observe and describe major stages in the life cycles of plants and animals, including beans and butterflies.	SC	Heredity and Reproduction	Life Science	K-3	2
SC.2.L.17.2	Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs.	SC	Interdependence	Life Science	K-3	2
MAFS.2.MD.1.1	Measure the length of an object to the nearest inch, foot, centimeter, or meter by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	SC	Measure and estimate lengths in standard units	Measurement and Data	K-3	2
MAFS.2.MD.4.9	Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	MA	Represent and Interpret Data	Measurement and Data	K-2	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.2.MD.4.10	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple, put-together, take-apart, and compare problems using information presented in a bar graph.	MA	Represent and Interpret Data	Measurement and Data	K-2	2

Are You Me?

Fishy Who's Who

Wildlife Populations

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.1.2	Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.	LA	Comprehension and Collaboration	Speaking and Listening	3-5	2
LAFS.K12.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.	LA	Text Types and Purposes	Writing	3-5	3
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	3-5	2
LAFS.K12.W.3.8	Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.	LA	Research to Build and Present Knowledge	Writing	3-5	2
SC.3.N.1.2	Compare the observations made by different groups using the same tools and seek reasons to explain the differences across groups.	SC	The Practice of Science	Nature of Science	3-5	3
LAFS.3.W.3.7	Conduct short research projects that build knowledge about a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	4
LAFS.3.W.3.8	Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.	LA	Research to Build and Present Knowledge	Writing	3-5	3
SC.35.CS-PC.3.1	Identify digital information resources used to answer research questions (e.g., online library catalog, online encyclopedias, databases, and websites).	SC	Evaluation of Digital Information Resources	Computer Science – Personal, Community, Global and Ethical Impact	3-5	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.35.CS-PC.3.2	Gather, organize, and analyze information from digital resources.	SC	Evaluation of Digital Information Resources	Computer Science – Communication Systems and Computing	3-5	-
SC.4.L.17.4	Recognize ways plants and animals, including humans, can impact the environment.	SC	Interdependence	Life Science	3-5	3
SC.4.N.1.2	Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups.	SC	The Practice of Science	Nature of Science	3-5	3
LAFS.4.W.3.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	4
LAFS.4.W.3.8	Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.	LA	Research to Build and Present Knowledge	Writing	3-5	3
SC.5.L.17.1	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	SC	Interdependence	Life Science	3-5	2
LAFS.5.RI.3.7	Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.	LA	Integration of Knowledge and Ideas	Reading Standards for Informational Text	3-5	3
LAFS.5.W.3.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	2

Fishy Who's Who

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.W.3.8	Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.	LA	Research to Build and Present Knowledge	Writing	3-5	2
SS.5.G.1.4	Construct maps, charts, and graphs to display geographic information	SS	The World in Spatial terms	Geography	3-5	-

Fishy Who's Who

Whale of a Tale — Wildlife Populations

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-8	4
MAFS.K12.MP.4.1	**Model with mathematics.** Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.	MA	Model with Mathematics	Mathematical Practice	6-8	3
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-8	4

Whale of a Tail

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-8	4
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-8	2
MAFS.7.G.1.1	Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	MA	Draw, construct, and describe geometrical figures and describe the relationships between them.	Geometry	6-8	2
SS.7.C.2.10	Examine the impact of media, individuals, and interest groups on monitoring and influencing government.	SS	Evaluate the roles, rights, and responsibilities of United States citizens and determine methods of active participation in society, government, and the political system.	Civics and Government	6-8	-

Whale of a Tail

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.7.C.4.2	Recognize government and citizen participation in international organizations.	SS	Demonstrate an understanding of contemporary issues in world affairs, and evaluate the role and impact of United States foreign policy.	Civics and Government	6-8	-
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	3-8	4

Whale of a Tail

Migration Headache

Wildlife Populations

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-8	2
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-8	4
SC.68.CS-CS.1.2	Create or modify and use a simulation to analyze and illustrate a concept in depth (i.e., use a simulation to illustrate a genetic variation), individually and collaboratively.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-PC.3.1	Answer research questions using digital information resources.	SC	Evaluation of Digital Information Resources	Computer Science – Personal, Community, Global and Ethical Impact	6-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-8	4
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	SC	Earth Structures	Earth and Space Science	6-8	2
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	6-8	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-8	2
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-8	4
SS.7.G.5.1	Use a choropleth or other map to geographically represent current information about issues of conservation or ecology in the local community.	SS	Understand How Human Actions Can Impact the Environment	Geography	6-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.8.A.1.2	Analyze charts, graphs, maps, photographs and timelines; analyze political cartoons; determine cause and effect.	SS	Use research and inquiry skills to analyze American History using primary and secondary sources	American History	6-8	-
SS.8.G.2.3	Use geographic terms and tools to analyze case studies of how selected regions of the United States have changed over time.	SS	Understand physical and cultural characteristics of places.	Geography	6-8	-
SS.8.G.3.1	Locate and describe in geographic terms the major ecosystems of the United States.	SS	Understand the relationships between Earth's ecosystems and the populations that dwell within them.	Geography	6-8	-
SS.8.G.5.2	Describe the impact of human modifications on the physical environment and ecosystems of the United States throughout history.	SS	Understand how human actions can impact the environment.	Geography	6-8	-

Migration Headache

Got Water? Habitats, Ecosystems, and Niches

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.K.N.1.3	Keep records as appropriate - such as pictorial and written records - of investigations conducted.	SC	Practice of Science	Nature of Science	3-5	2
LAFS.K12.SL.2.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	3
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	3-5	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	3-5	2
MAFS.K12.MP.5.1	Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.	MA	Use Appropriate Tools Strategically	Mathematical Practice	3-5	2
SC.3.N.1.1	Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	SC	The Practice of Science	Nature of Science	3-5	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.3.N.1.2	Compare the observations made by different groups using the same tools and seek reasons to explain the differences across groups.	SC	The Practice of Science	Nature of Science	3-5	3
SC.3.N.1.3	Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.	SC	The Practice of Science	Nature of Science	3-5	2
SC.3.N.1.5	Recognize that scientists question, discuss, and check each other's evidence and explanations.	SC	The Practice of Science	Nature of Science	3-5	2
SC.3.N.1.6	Infer based on observation.	SC	The Practice of Science	Nature of Science	3-5	3
SC.3.N.1.7	Explain that empirical evidence is information, such as observations or measurements, that is used to help validate explanations of natural phenomena.	SC	The Practice of Science	Nature of Science	3-5	3
LAFS.3.SL.2.4	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2
LAFS.3.W.3.7	Conduct short research projects that build knowledge about a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	4
MAFS.3.MD.2.4	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.	MA	Represent and Interpret Data	Measurement and Data	3-5	2
SS.3.G.1.1	Use thematic maps, tables, charts, graphs, and photos to analyze geographic information.	SS	The World in Spatial Term	Geography	3-5	-
SS.3.G.1.6	Use maps to identify different types of scale to measure distances between two places.	SS	The World in Spatial Term	Geography	3-5	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.35.CS-CS.2.1	Solve age-appropriate problems using information organized using digital graphic organizers (e.g., concept maps and Venn-diagrams).	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	3-5	-
SC.4.N.1.1	Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	SC	The Practice of Science	Nature of Science	3-5	3
SC.4.N.1.2	Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups.	SC	The Practice of Science	Life Science	3-5	3
SC.4.N.1.3	Explain that science does not always follow a rigidly defined method ("the scientific method") but that science does involve the use of observations and empirical evidence.	SC	The Practice of Science	Nature of Science	3-5	2
SC.4.N.1.4	Attempt reasonable answers to scientific questions and cite evidence in support.	SC	The Practice of Science	Nature of Science	3-5	3
SC.4.N.1.5	Compare the methods and results of investigations done by other classmates.	SC	The Practice of Science	Nature of Science	3-5	2
SC.4.N.1.6	Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.	SC	The Practice of Science	Nature of Science	3-5	3
SC.4.N.1.7	Recognize and explain that scientists base their explanations on evidence.	SC	The Practice of Science	Nature of Science	3-5	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.SL.2.4	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2
LAFS.4.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within categories of information using words and phrases (e.g., *another, for example, also, because*). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	LA	Text Types and Purposes	Writing	3-8	2
LAFS.4.W.3.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	4
SC.5.L.17.1	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	SC	Interdependence	Life Science	3-5	2
SC.5.N.2.1	Recognize and explain that science is grounded in empirical observations that are testable; explanation must always be linked with evidence.	SC	The Characteristics of Scientific Knowledge	Nature of Science	3-5	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.5.N.2.2	Recognize and explain that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others.	SC	Characteristics of Scientific Knowledge	Nature of Science	3-5	2
LAFS.5.SL.2.4	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2
LAFS.5.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	LA	Text Types and Purposes	Writing	3-5	2
LAFS.5.W.3.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	2
SS.5.G.1.4	Construct maps, charts, and graphs to display geographic information.	SS	The World in Spatial Term	Geography	3-5	-

Designing a Habitat

Habitats, Ecosystems, and Niches

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.2.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	3
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	3-8	4
SC.3.L.15.1	Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors.	SC	Diversity and Evolution of Living Organisms	Life Science	3-8	2
SC.3.N.3.3	Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2
LAFS.3.SL.2.4	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	2
LAFS.3.W.3.7	Conduct short research projects that build knowledge about a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	4
SC.35.CS-CS.1.4	Create a simple model of a system (e.g., flower or solar system) and explain what the model shows and does not show.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.4.N.3.1	Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2
LAFS.4.SL.2.4	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	2
LAFS.4.W.3.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	4
SC.5.L.17.1	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	SC	Interdependence	Life Science	3-8	2
LAFS.5.SL.2.4	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	2
LAFS.5.W.3.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	2
SC.6.L.15.1	Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains.	SC	Diversity and Evolution of Living Organisms	Life Science	3-8	3
SC.6.N.3.4	Identify the role of models in the context of the sixth grade science benchmarks.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2

Designing a Habitat

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.SL.2.4	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	3
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	3-8	4
SC.7.N.3.2	Identify the benefits and limitations of the use of scientific models.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2
LAFS.7.SL.2.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	2
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	3-8	2
LAFS.8.SL.2.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	3-8	4

Designing a Habitat

Water Safari

Habitats, Ecosystems, and Niches

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.K.N.1.3	Keep records as appropriate - such as pictorial and written records - of investigations conducted.	SC	Practice of Science	Nature of Science	K-2	2
SC.K2.CS-CS.1.3	Describe how models represent a real-life system (e.g., globe or map).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	K-2	-
SC.K2.CS-CS.2.1	Arrange or sort information into useful order, such as sorting students by birth date, with or without technology.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	K-2	-
SC.K2.CS-CS.2.6	Illustrate thoughts, ideas, and stories in a step-by-step manner using writing tools, digital cameras, and drawing tools.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	K-2	-
SC.K2.CS-CP.1.4	Create data visualizations (e.g., charts and infographics), individually and collaboratively.	SC	Data Analysis	Computer Science – Communication Systems and Computing	K-2	-
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	K-2	2
SC.1.E.5.3	Investigate how magnifiers make things appear bigger and help people see things they could not see without them.	SC	Earth in Space and Time	Earth and Space Science	K-2	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.1.L.17.1	Through observation, recognize that all plants and animals, including humans, need the basic necessities of air, water, food, and space.	SC	Interdependence	Life Science	K-8	1
SC.1.N.1.1	Raise questions about the natural world, investigate them in teams through free exploration, and generate appropriate explanations based on those explorations.	SC	The Practice of Science	Nature of Science	K-2	3
SC.1.N.1.2	Using the five senses as tools, make careful observations, describe objects in terms of number, shape, texture, size, weight, color, and natural motion, and compare their observations with others.	SC	Practice of Science	Nature of Science	K-2	2
SC.1.N.1.3	Keep records as appropriate - such as pictorial and written records - of investigations conducted.	SC	The Practice of Science	Nature of Science	K-2	2
LAFS.K.SL.2.4	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	K-2	2
LAFS.1.SL.2.4	Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	K-2	2
SC.2.N.1.1	Raise questions about the natural world, investigate them in teams through free exploration, and generate appropriate explanations based on those explorations.	SC	The Practice of Science	Nature of Science	K-2	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1.L.3.5	With guidance and support from adults, demonstrate understanding, word relationships and nuances in word meanings. a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. b. Define words by category and by one or more key attributes (e.g., a duck is a bird that swims; a tiger is a large cat with stripes). c. Identify real-life connections between words and their use (e.g., note places at home that are cozy). d. Distinguish shades of meaning among verbs differing in manner (e.g., look, peek, glance, stare, glare, scowl) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings.	LA	Vocabulary Acquisition and Use	Language	K-2	2
LAFS.2.L.3.5	Demonstrate understanding of word relationships and nuances in word meanings. a. Identify real-life connections between words and their use (e.g., *describe foods that are spicy or juicy*). b. Distinguish shades of meaning among closely related verbs (e.g., *toss, throw, hurl*) and closely related adjectives (e.g., *thin, slender, skinny, scrawny*).	LA	Vocabulary Acquisition and Use	Language	K-2	3

Where Does Water Run? Habitats, Ecosystems, and Niches

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.6.N.1.4	Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.	SC	The Practice of Science	Nature of Science	6-12	3
LAFS.K12.L.3.6	Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.	LA	Vocabulary Acquisition and Use	Language	6-12	2
LAFS.6.L.3.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	LA	Vocabulary Acquisition and Use	Language	6-12	1
MAFS.6.EE.3.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.	MA	Represent and analyze quantitative relationships between dependent and independent variables.	Expressions and Equations	6-12	2
MAFS.6.SP.1.1	Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.	MA	Develop Understanding of Statistical Variability	Statistics and Probability	6-12	1

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.68.CS-PC.3.1	Answer research questions using digital information resources.	SC	Evaluation of Digital Information Resources	Computer Science – Personal, Community, Global and Ethical Impact	6-12	-
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	SC	Earth Structures	Earth and Space Science	6-12	2
LAFS.7.L.3.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	LA	Vocabulary Acquisition and Use	Language	6-12	1
MAFS.7.G.2.6	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	MA	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Geometry	6-12	2
SS.7.G.6.1	Use Geographic Information Systems (GIS) or other technology to view maps of current information about the United Sta	SS	Understand how to apply geography to interpret the past and present and plan for the future	Geography	6-12	-
SC.8.N.1.4	Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data.	SC	The Practice of Science	Nature of Science	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.8.N.1.6	Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.	SC	The Practice of Science	Nature of Science	6-12	2
LAFS.8.L.3.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	LA	Vocabulary Acquisition and Use	Language	6-12	1
SC.912.CS-CS.1.3	Explain how data analysis is used to enhance the understanding of complex natural and human systems.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
SC.912.CS-CP.1.3	Analyze and manipulate data collected by a variety of data collection techniques to support a hypothesis.	SC	Data Analysis	Computer Science – Personal, Community, Global and Ethical Impact	6-12	-
SC.912.L.17.16	Discuss the large-scale environmental impacts resulting from human activity, including waste spills, oil spills, runoff, greenhouse gases, ozone depletion, and surface and groundwater pollution.	SC	Interdependence	Life Science	6-12	3
SC.912.N.1.7	Recognize the role of creativity in constructing scientific questions, methods and explanations.	SC	The Practice of Science	Nature of Science	6-12	1
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-12	4
SC.68.CS-PC.3.1	Answer research questions using digital information resources.	SC	Evaluation of Digital Information Resources	Computer Science – Personal, Community, Global and Ethical Impact	6-12	-
SC.7.N.1.4	Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment.	SC	The Practice of Science	Nature of Science	6-12	2
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-12	2
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-12	4
LAFS.910.L.3.6	Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.	LA	Vocabulary Acquisition and Use	Language	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4
LAFS.910.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4
SC.912.L.17.10	Diagram and explain the biogeochemical cycles of an ecosystem, including water, carbon, and nitrogen cycle.	SC	Interdependence	Life Science	6-12	2
MAFS.912.N-VM.1.3	Solve problems involving velocity and other quantities that can be represented by vectors.	MA	Represent and Model with Vector Quantities	Number & Quantity: Vector & Matrix Quantities	6-12	2
MAFS.912.S-MD.1.2	Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.	MA	Calculate expected values and use them to solve problems.	Statistics & Probability: Using Probability to Make Decisions	6-12	2
LAFS.1112.L.3.6	Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.	LA	Vocabulary Acquisition and Use	Language	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2
LAFS.1112.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4

Where Does Water Run?

Urban Waterway Checkup Habitats, Ecosystems, and Niches

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build Knowledge	Writing	6-8	2
MAFS.K12.MP.5.1	Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.	MA	Use Appropriate Tools Strategically	Mathematical Practice	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.6.N.1.2	Explain why scientific investigations should be replicable.	SC	The Practice of Science	Nature of Science	6-8	3
LAFS.6.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	2
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-8	4
MAFS.6.SP.2.4	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	MA	Summarize and Describe Distributions	Statistics and Probability	6-8	2
SC.68.CS-CS.2.1	Create, modify, and use a database (e.g., define field formats, adding new records, manipulate data) to analyze data and propose solutions for a task/problem, individually and collaboratively.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	6-8	-
LAFS.68.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-8	4
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	6-8	3
LAFS.7.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-8	2
LAFS.8.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.8.A.1.2	Analyze charts, graphs, maps, photographs and timelines; analyze political cartoons; determine cause and effect.	SS	Use research and inquiry skills to analyze American History using primary and secondary sources	American History	6-8	-
SS.8.G.5.1	Describe human dependence on the physical environment and natural resources to satisfy basic needs in local environments in the United States.	SS	Understand how human actions can impact the environment	Geography	6-8	-

Water Canaries

Habitats, Ecosystems, and Niches

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2
SC.6.N.1.1	Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-12	3
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-12	4
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-12	4
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.7.N.1.1	Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-12	3
SC.7.N.1.3	Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation.	SC	The Practice of Science	Nature of Science	6-12	2
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-12	2
SC.8.N.1.1	Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-12	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4
LAFS.910.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4
SC.912.L.17.2	Explain the general distribution of life in aquatic systems as a function of chemistry, geography, light, depth, salinity, and temperature.	SC	Interdependence	Life Science	6-12	3
SC.912.N.1.6	Describe how scientific inferences are drawn from scientific observations and provide examples from the content being studied.	SC	The Practice of Science	Nature of Science	6-12	2
MAFS.912.C.3.10	Find the velocity and acceleration of a particle moving in a straight line.	MA	Applications of Derivatives	Calculus	6-12	2
MAFS.912.N-VM.1.3	Solve problems involving velocity and other quantities that can be represented by vectors.	MA	Represent and Model with Vector Quantities	Number & Quantity: Vector & Matrix Quantities	6-12	2
SS.912.G.5.6	Analyze case studies to predict how a change to an environmental factor can affect an ecosystem.	SS	Understand how human actions can impact the environment	Geography	6-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	9-12	4

Aqua Words

Interdependence

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.K2.CS-CS.2.6	Illustrate thoughts, ideas, and stories in a step-by-step manner using writing tools, digital cameras, and drawing tools.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	K-5	-
LAFS.K12.L.3.6	Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.	LA	Vocabulary Acquisition and Use	Language	K-5	2
LAFS.K12.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.	LA	Text Types and Purposes	Writing	K-5	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.1.E.6.2	Describe the need for water and how to be safe around water.	SC	Earth Structures	Earth and Space Science	K-5	2
LAFS.1.L.3.5	With guidance and support from adults, demonstrate understanding, word relationships and nuances in word meanings. a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. b. Define words by category and by one or more key attributes (e.g., a duck is a bird that swims; a tiger is a large cat with stripes). c. Identify real-life connections between words and their use (e.g., note places at home that are cozy). d. Distinguish shades of meaning among verbs differing in manner (e.g., look, peek, glance, stare, glare, scowl) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings.	LA	Vocabulary Acquisition and Use	Language	K-5	2
LAFS.1.RL.2.4	Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.	LA	Craft and Structure	Reading Standards for Literature	K-5	2
LAFS.2.L.3.5	Demonstrate understanding of word relationships and nuances in word meanings. a. Identify real-life connections between words and their use (e.g., *describe foods that are spicy or juicy*). b. Distinguish shades of meaning among closely related verbs (e.g., *toss, throw, hurl*) and closely related adjectives (e.g., *thin, slender, skinny, scrawny*).	LA	Vocabulary Acquisition and Use	Language Standards	K-5	3

Aqua Words

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.2.L.17.2	Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs.	SC	Interdependence	Life Science	K-5	2
LAFS.3.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure.	LA	Text Types and Purposes	Writing	K-5	3
LAFS.4.L.3.5	Demonstrate understanding of word relationships, and nuances in word meanings. a. Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).	LA	Vocabulary Acquisition and Use	Language Standards	K-5	3
LAFS.4.L.3.6	Acquire and use accurately general academic and domain-specific words and phrases as found in grade level appropriate texts, including those that signal precise actions, emotions, or states of being (e.g., *wildlife*, *conservation*, and *endangered* when discussing animal preservation).	LA	Vocabulary Acquisition and Use	Language	K-5	1

Aqua Words

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	K-5	3
LAFS.5.L.3.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figurative language, including similes and metaphors, in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.	LA	Vocabulary Acquisition and Use	Language Standards	K-5	3

Aqua Words

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	K-5	3

Water Plant Art

Interdependence

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.K.L.14.3	Observe plants and animals, describe how they are alike and how they are different in the way they look and in the things they do.	SC	Organization and Development of Living Organisms	Life Science	K-5	2
SC.2.L.17.2	Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs.	SC	Interdependence	Life Science	K-5	2
SC.5.L.17.1	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	SC	Interdependence	Life Science	K-5	2

Note – Numerous Visual Arts standards apply to this activity

Marsh Munchers

Interdependence

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.2.5	Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2
SC.3.L.15.1	Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors.	SC	Diversity and Evolution of Living Organisms	Life Science	3-5	2
SC.3.L.17.2	Recognize that plants use energy from the Sun, air, and water to make their own food.	SC	Interdependence	Life Science	3-5	1
MAFS.3.MD.2.3	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets.*	MA	Represent and Interpret Data	Measurement and Data	3-5	2
SC.35.CS-CS.1.1	Identify the concepts illustrated by a simulation (e.g., ecosystem, predator/prey, and invasive species).	SC	Modeling and Simulation	Computer Science – Communication Systems and Computing	3-5	-
SC.35.CS-CS.1.3	Answer a question, individually and collaboratively, using data from a simulation.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-5	-
SC.4.L.16.3	Recognize that animal behaviors may be shaped by heredity and learning.	SC	Heredity and Reproduction	Life Science	3-5	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.4.L.17.2	Explain that animals, including humans, cannot make their own food and that when animals eat plants or other animals, the energy stored in the food source is passed to them.	SC	Interdependence	Life Science	3-5	2
SC.4.L.17.3	Trace the flow of energy from the Sun as it is transferred along the food chain through the producers to the consumers.	SC	Interdependence	Life Science	3-5	2
SC.5.L.17.1	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	SC	Interdependence	Life Science	3-5	2
LAFS.5.W.3.8	Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.	LA	Research to Build and Present Knowledge	Writing	3-5	2

Wetland Metaphors

Interdependence

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.2.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	3
SC.3.N.3.2	Recognize that scientists use models to help understand and explain how things work.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-5	1
SC.3.N.3.3	Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-5	2
SC.35.CS-CS.1.4	Create a simple model of a system (e.g., flower or solar system) and explain what the model shows and does not show.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-5	-
LAFS.3.SL.2.4	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2
SC.4.L.17.4	Recognize ways plants and animals, including humans, can impact the environment.	SC	Interdependence	Life Science	3-5	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.L.3.5	Demonstrate understanding of word relationships, and nuances in word meanings. a. Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).	LA	Vocabulary Acquisition and Use	Language Standards	3-5	3
LAFS.4.SL.2.4	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2
LAFS.5.L.3.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figurative language, including similes and metaphors, in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.	LA	Vocabulary Acquisition and Use	Language Standards	3-5	3
LAFS.5.RL.2.4	Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.	LA	Craft and Structure	Reading Standards for Literature	3-5	2
LAFS.5.SL.2.4	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2

Wetland Metaphors

Hooks and Ladders

Interdependence

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-8	4
LAFS.6.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-8	4
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.68.CS-CS.1.2	Create or modify and use a simulation to analyze and illustrate a concept in depth (i.e., use a simulation to illustrate a genetic variation), individually and collaboratively.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.1.3	Evaluate what kinds of real-world problems can be solved using modeling and simulation.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.2.4	Organize and display information in a variety of ways such as number formats (e.g., scientific notation, percentages, and exponents), charts, tables and graphs.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	6-8	-

Hooks and Ladders

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.1.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style and objective tone. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-8	3
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	SC	Earth Structures	Earth and Space Science	6-8	2
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	6-8	3

Hooks and Ladders

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-8	4
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-8	2
MAFS.7.SP.1.1	Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	MA	Use random sampling to draw inferences about a population.	Statistics and Probability	6-8	2

Hooks and Ladders

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal styleProvide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-8	4
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-8	4

Micro Odyssey

Interdependence

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	3-8	4
SC.3.N.1.1	Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	SC	The Practice of Science	Nature of Science	3-8	3
LAFS.3.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.3.W.3.7	Conduct short research projects that build knowledge about a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.4.L.17.2	Explain that animals, including humans, cannot make their own food and that when animals eat plants or other animals, the energy stored in the food source is passed to them.	SC	Interdependence	Life Science	3-8	2
SC.4.L.17.3	Trace the flow of energy from the Sun as it is transferred along the food chain through the producers to the consumers.	SC	Interdependence	Life Science	3-8	2
SC.4.N.1.1	Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	SC	The Practice of Science	Nature of Science	3-8	3
LAFS.4.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.4.W.3.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	4

Micro Odyssey

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.5.W.3.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	2
SS.5.A.3.2	Investigate (nationality, sponsoring country, motives, dates and routes of travel, accomplishments) the European explorers.	SS	Exploration and Settlement of North America	American History	3-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	3-8	4
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	3-8	4
SC.7.L.17.1	Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web.	SC	Interdependence	Life Science	3-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	3-8	3
LAFS.7.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	3-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	3-8	4

Blue Ribbon Niche

Interdependence

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.2.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	3
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	3-8	2
SC.3.N.1.3	Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.	SC	The Practice of Science	Nature of Science	3-8	2
SC.3.N.1.6	Infer based on observation.	SC	The Practice of Science	Nature of Science	3-8	3
SC.3.N.3.3	Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2
SC.35.CS-CS.1.4	Create a simple model of a system (e.g., flower or solar system) and explain what the model shows and does not show.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-
LAFS.3.SL.2.4	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	2
LAFS.3.W.3.7	Conduct short research projects that build knowledge about a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.3.MD.3.7	Relate area to the operations of multiplication and addition. a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of a × b and a × c. Use area models to represent the distributive property in mathematical reasoning. d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	MA	Geometric measurement: understand concepts of area and relate area to multiplication and to addition	Measurement and Data	3-8	3
SC.4.L.17.4	Recognize ways plants and animals, including humans, can impact the environment.	SC	Interdependence	Life Science	3-8	3
SC.4.N.1.3	Explain that science does not always follow a rigidly defined method ("the scientific method") but that science does involve the use of observations and empirical evidence.	SC	The Practice of Science	Nature of Science	3-8	2
SC.4.N.1.6	Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.	SC	The Practice of Science	Nature of Science	3-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.4.N.3.1	Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2
LAFS.4.SL.2.4	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	2
LAFS.4.W.3.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	4
LAFS.4.W.3.8	Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.	LA	Research to Build and Present Knowledge	Writing	3-8	3
LAFS.5.SL.2.4	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	2
LAFS.5.W.3.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	2
LAFS.5.W.3.8	Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.	LA	Research to Build and Present Knowledge	Writing	3-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.5.G.2.3	Apply the area and perimeter formulas for rectangles in real world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.*	MA	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit	Measurement and Data	3-8	2
MAFS.4.MD.1.3	Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. *For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.*	MA	Classify two-dimensional figures into categories based on their properties	Geometry	3-8	2
SC.6.N.1.3	Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.	SC	The Practice of Science	Nature of Science	3-8	3
SC.6.N.3.4	Identify the role of models in the context of the sixth grade science benchmarks.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2
LAFS.6.SL.2.4	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	3
SC.7.L.17.1	Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web.	SC	Interdependence	Life Science	3-8	3
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	3-8	4

Blue Ribbon Niche

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	3-8	4
SC.7.L.17.1	Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web.	SC	Interdependence	Life Science	3-8	3
SC.7.N.1.3	Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation.	SC	The Practice of Science	Nature of Science	3-8	2
SC.7.N.1.6	Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based.	SC	The Practice of Science	Nature of Science	3-8	2
SC.7.N.3.2	Identify the benefits and limitations of the use of scientific models.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2
LAFS.7.SL.2.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	2
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	3-8	2

Blue Ribbon Niche

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.7.G.2.4	Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	MA	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume	Geometry	3-8	2
MAFS.7.G.2.6	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	MA	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Geometry	3-8	2
MAFS.7.SP.1.1	Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	MA	Use random sampling to draw inferences about a population.	Statistics and Probability	3-8	2
SC.8.N.1.6	Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.	SC	The Practice of Science	Nature of Science	3-8	2
SC.8.N.4.2	Explain how political, social, and economic concerns can affect science, and vice versa.	SC	Science and Society	Nature of Science	3-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.SL.2.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-8	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	3-8	4

Fashion a Fish

Changes and Adaptations

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.K.N.1.4	Observe and create a visual representation of an object which includes its major features.	SC	The Practice of Science	Nature of Science	K-5	3
SC.K.P.8.1	Sort objects by observable properties, such as size, shape, color, temperature (hot or cold), weight (heavy or light) and texture.	SC	Properties of Matter	Physical Science	K-5	2
SC.K2.CS-CS.3.1	Create a digital artifact (independently and collaboratively) that clearly expresses thoughts and ideas.	SC	Digital Tools	Computer Science – Communication Systems and Computing	K-5	-
SC.1.P.8.1	Sort objects by observable properties, such as size, shape, color, temperature (hot or cold), weight (heavy or light), texture, and whether objects sink or float.	SC	Properties of Matter	Physical Science	K-5	2
SC.3.L.15.1	Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors.	SC	Diversity and Evolution of Living Organisms	Life Science	K-5	2
SC.3.N.1.6	Infer based on observation.	SC	The Practice of Science	Nature of Science	K-5	3
SC.35.CS-CS.3.2	Create an artifact (independently and collaboratively) that answers a research question clearly communicating thoughts and ideas.	SC	Digital Tools	Computer Science – Communication Systems and Computing	K-5	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.5.L.17.1	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	SC	Interdependence	Life Science	K-5	2

Note – Numerous Visual Arts Standards may also apply.

Fashion a Fish

Sockeye Scents

Changes and Adaptations

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K.SL.2.5	Add drawings or other visual displays to descriptions as desired to provide additional detail.	SC	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	3
LAFS.K12.SL.1.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	LA	Comprehension and Collaboration	Speaking and Listening	3-5	2
LAFS.K12.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.	LA	Text Types and Purposes	Writing	3-5	3
LAFS.K.W.3.7	Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).	LA	Research to Build and Present Knowledge	Writing	3-5	4
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	3-5	4
SC.3.N.1.2	Compare the observations made by different groups using the same tools and seek reasons to explain the differences across groups.	SC	The Practice of Science	Nature of Science	3-5	3
LAFS.3.W.3.7	Conduct short research projects that build knowledge about a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	4
SC.35.CS-CS.1.1	Identify the concepts illustrated by a simulation (e.g., ecosystem, predator/prey, and invasive species)	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-5	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.35.CS-CS.1.2	Describe how models and simulations can be used to solve real-world issues in science and engineering.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-5	-
SC.35.CS-CS.1.3	Answer a question, individually and collaboratively, using data from a simulation.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-5	-
SC.35.CS-CS.3.2	Create an artifact (independently and collaboratively) that answers a research question clearly communicating thoughts and ideas.	SC	Digital Tools	Computer Science – Communication Systems and Computing	3-5	-
SC.35.CS-CP.1.3	Identify, research, and collect a data set on a topic, issue, problem, or question using age-appropriate technologies.	SC	Data Analysis	Computer Science – Communication Systems and Computing	3-5	-
SC.35.CS-PC.3.1	Identify digital information resources used to answer research questions (e.g., online library catalog, online encyclopedias, databases, and websites).	SC	Evaluation of Digital Information Resources	Computer Science – Personal, Community, Global and Ethical Impact	3-5	-
LAFS.4.SL.2.5	Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.W.3.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	4
SC.5.L.17.1	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	SC	Interdependence	Life Science	3-5	2
LAFS.5.SL.2.5	Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2
LAFS.5.W.3.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	2
SS.5.G.1.4	Construct maps, charts, and graphs to display geographic information	SS	The World in Spatial terms	Geography	3-5	-

Pond Succession

Changes and Adaptations

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	6-8	2
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
SC.6.N.1.5	Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.	SC	The Practice of Science	Nature of Science	6-8	2
LAFS.6.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	2
LAFS.68.WHS.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-8	3
SC.7.E.6.4	Explain and give examples of how physical evidence supports scientific theories that Earth has evolved over geologic time due to natural processes.	SC	Earth Structures	Earth and Space Science	6-8	3
LAFS.7.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.8.N.1.6	Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.	SC	The Practice of Science	Nature of Science	6-8	2
LAFS.8.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
SS.8.G.2.3	Use geographic terms and tools to analyze case studies of how selected regions of the United States have changed over time.	SS	Understand physical and cultural characteristics of places.	Geography	6-8	-

Eat and Glow

Changes and Adaptations

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.RST.1.3	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.	LA	Key Ideas and Details	Reading Standards for Literacy in Science and Technical Subjects 6-12	9-12	2
LAFS.910.RST.3.7	Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.	LA	Integrations of Knowledge and Ideas	Reading Standards for Literacy in Science and Technical Subjects 6-12	9-12	2
SC.912.CS-CS.1.3	Explain how data analysis is used to enhance the understanding of complex natural and human systems.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	9-12	-
SC.912.L.17.8	Recognize the consequences of the losses of biodiversity due to catastrophic events, climate changes, human activity, and the introduction of invasive, non-native species.	SC	Interdependence	Life Science	9-12	3
SC.912.N.1.6	Describe how scientific inferences are drawn from scientific observations and provide examples from the content being studied.	SC	The Practice of Science	Nature of Science	9-12	2
SC.912.P.8.2	Differentiate between physical and chemical properties and physical and chemical changes of matter.	SC	Matter	Physical Science	9-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.912.S-IC.2.3	Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.	MA	Make inferences and justify conclusions from sample surveys, experiments, and observational studies	Statistics & Probability: Making Inferences & Justifying Conclusions	9-12	2
MAFS.912.S-IC.2.5	Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.	MA	Make inferences and justify conclusions from sample surveys, experiments, and observational studies	Statistics & Probability: Making Inferences & Justifying Conclusions	9-12	2
MAFS.912.S-MD.1.1	Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.	MA	Calculate expected values and use them to solve problems	Statistics & Probability : Using Probability to Make Decisions	9-12	2
SS.912.P.2.12	Explain how validity and reliability of observations and measurements relate to data analysis.	SS	Scientific Inquiry Domain/ Research Methods, Measurement, and Statistics	Psychology	9-12	-
LAFS.1112.RST.1.3	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.	LA	Key Ideas and Details	Reading Standards for Literacy in Science and Technical Subjects 6-12	9-12	3

Edge of Home

Biodiversity

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	3-8	2
LAFS.K12.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3
SC.35.CS-CS.1.4	Create a simple model of a system (e.g., flower or solar system) and explain what the model shows and does not show.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-
SC.3.N.1.2	Compare the observations made by different groups using the same tools and seek reasons to explain the differences across groups.	SC	The Practice of Science	Nature of Science	3-8	3
SC.3.N.1.3	Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.	SC	The Practice of Science	Nature of Science	3-8	2
SC.3.N.3.2	Recognize that scientists use models to help understand and explain how things work.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	1

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.3.N.3.3	Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2
LAFS.3.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. b. Develop the topic with facts, definitions, and details. c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information. d. Provide a concluding statement or section.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.3.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.3.W.2.4	With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose.	LA	Production and Distribution of Writing	Writing	3-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.4.N.1.6	Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.	SC	The Practice of Science	Nature of Science	3-8	3
LAFS.4.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within categories of information using words and phrases (e.g., *another, for example, also, because*). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	LA	Text Types and Purposes	Writing	3-8	2

Edge of Home

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.4.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.5.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3
SS.5.G.1.4	Construct maps, charts, and graphs to display geographic information	SS	The World in Spatial terms	Geography	3-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	3-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.6.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	3-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.7.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3
SS.7.G.5.1	Use a choropleth or other map to geographically represent current information about issues of conservation or ecology in the local community.	SC	Understand How Human Actions Can Impact the Environment	Geography	3-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	3-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.8.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3

Mermaids and Manatees

Cultural Perspectives

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	3-8	2
LAFS.3.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.3.W.3.7	Conduct short research projects that build knowledge about a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.4.W.3.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	4
LAFS.4.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 4 Reading standards to literature (e.g., "Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions]."). b. Apply grade 4 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").	LA	Research to Build and Present Knowledge	Writing	3-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.5.W.3.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	2
LAFS.5.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 5 Reading standards to literature (e.g., "Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]"). b. Apply grade 5 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]").	LA	Research to Build and Present Knowledge	Writing	3-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	3-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 6 Reading standards to literature (e.g., "Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics"). b. Apply grade 6 Reading standards to literary nonfiction (e.g., "Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not").	LA	Research to Build and Present Knowledge	Writing	3-8	3
LAFS.7.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	3-8	2
LAFS.7.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 7 Reading standards to literature (e.g., "Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history"). b. Apply grade 7 Reading standards to literary nonfiction (e.g. "Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims").	LA	Research to Build and Present Knowledge	Writing	3-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	3-8	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	3-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 8 Reading standards to literature (e.g., "Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new"). b. Apply grade 8 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced").	LA	Research to Build and Present Knowledge	Writing	3-8	3

Water We Eating?

Economic, Commercial, and Recreational Considerations

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.3.N.1.3	Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.	SC	The Practice of Science	Nature of Science	3-5	2
SC.3.N.1.6	Infer based on observation.	SC	The Practice of Science	Nature of Science	3-5	3
LAFS.3.SL.2.4	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2
MAFS.3.NBT.1.1	Use place value understanding to round whole numbers to the nearest 10 or 100.	MA	Use place value understanding and properties of operations to perform multi-digit arithmetic	Number and Operations in Base Ten	3-5	1
SS.3.G.1.1	Use thematic maps, tables, charts, graphs, and photos to analyze geographic information.	SS	The World in Spatial Terms	Geography	3-5	-
SC.4.N.1.6	Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.	SC	The Practice of Science	Nature of Science	3-5	3
SC.4.N.1.7	Recognize and explain that scientists base their explanations on evidence.	SC	The Practice of Science	Nature of Science	3-5	2
LAFS.4.SL.2.4	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.4.NBT.1.3	Use place value understanding to round multi-digit whole numbers to any place.	MA	Generalize place value understanding for multi-digit who numbers.	Number and Operations in Base Ten	3-5	1
SC.5.N.1.2	Explain the difference between an experiment and other types of scientific investigation.	SC	The Practice of Science	Nature of Science	3-5	2
SC.5.N.1.6	Recognize and explain the difference between personal opinion/interpretation and verified observation.	SC	The Practice of Science	Nature of Science	3-5	2
LAFS.5.SL.2.4	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2
MAFS.5.NBT.1.4	Use place value understanding to round decimals to any place.	MA	Understand the Place Value System	Number and Operations in Base Ten	3-5	1

Net Gain, Net Effect

Economic, Commercial, and Recreational Considerations

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.2.5	Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-8	2
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	6-8	2
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-8	4
MAFS.6.SP.2.5	Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations. b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	MA	Summarize and Describe Distributions	Statistics and Probability	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.68.CS-CS.1.2	Create or modify and use a simulation to analyze and illustrate a concept in depth (i.e., use a simulation to illustrate a genetic variation), individually and collaboratively.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.1.3	Evaluate what kinds of real-world problems can be solved using modeling and simulation.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.2.1	Create, modify, and use a database (e.g., define field formats, adding new records, manipulate data) to analyze data and propose solutions for a task/problem, individually and collaboratively.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.2.4	Organize and display information in a variety of ways such as number formats (e.g., scientific notation, percentages, and exponents), charts, tables and graphs.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	6-8	-
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.RST.3.9	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.	LA	Integration of Knowledge and Ideas	Reading Standards for Literacy in Science and Technical Subjects 6-12	6-8	3
LAFS.68.WHST.1.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style and objective tone. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-8	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-8	2

Net Gain, Net Effect

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.7.SP.1.1	Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	MA	Use random sampling to draw inferences about a population.	Statistics and Probability	6-8	2
MAFS.7.SP.1.2	Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*	MA	Use random sampling to draw inferences about a population	Statistics and Probability	6-8	3
SC.8.N.4.1	Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels.	SC	Science and Society	Nature of Science	6-8	2
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-8	4
SS.8.A.1.2	Analyze charts, graphs, maps, photographs and timelines; analyze political cartoons; determine cause and effect.	SS	Use research and inquiry skills to analyze American History using primary and secondary sources	American History	6-8	-

Net Gain, Net Effect

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.8.E.2.2	Explain the economic impact of government policies.	SS	Understand the fundamental concepts relevant to the institutions, structure, and functions of a national economy.	Economics	6-8	-

Net Gain, Net Effect

Watered-Down History

Historical and Geographic Development

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	6-8	2
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-8	2
SS.6.G.2.3	Analyze the relationship of physical geography to the development of ancient river valley civilizations.	SS	Understand physical and cultural characteristics of places.	Geography	6-8	-
SS.6.W.1.1	Use timelines to identify chronological order of historical events.	SS	Utilize historical inquiry skills and analytical processes.	World History	6-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-8	4
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-8	4
SS.6.W.1.4	Describe the methods of historical inquiry and how history relates to the other social sciences.	SS	Utilize historical inquiry skills and analytical processes.	World History	6-8	-
SS.6.W.1.6	Describe how history transmits culture and heritage and provides models of human character.	SS	Utilize historical inquiry skills and analytical processes	History	6-8	-

Watered-Down History

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	2
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.1.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style and objective tone. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-8	3
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	SC	Earth Structures	Earth and Space Science	6-8	2
SC.7.N.1.5	Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics.	SC	The Practice of Science	Nature of Science	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-8	4
LAFS.7.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.7.C.2.14	Conduct a service project to further the public good.	SS	Evaluate the roles, rights, and responsibilities of United States citizens and determine methods of active participation in society, government, and the political system.	Civics and Government	6-8	-
SC.8.N.1.5	Analyze the methods used to develop a scientific explanation as seen in different fields of science.	SC	The Practice of Science	Nature of Science	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-8	4
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-8	4
SS.8.G.1.2	Use appropriate geographic tools and terms to identify and describe significant places and regions in American history.	SS	Understand how to use maps and other geographic representations, tools, and technology to report information.	Geography	6-8	-

Watered-Down History

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.8.G.2.3	Use geographic terms and tools to analyze case studies of how selected regions of the United States have changed over time.	SS	Understand physical and cultural characteristics of places.	Geography	6-8	-
SS.8.G.5.2	Describe the impact of human modifications on the physical environment and ecosystems of the United States throughout history.	SS	Understand how human actions can impact the environment.	Geography	6-8	-
SS.8.G.6.1	Use appropriate maps and other graphic representations to analyze geographic problems and changes over time throughout American history.	SS	Understand how to apply geography to interpret the past and present and plan for the future.	Geography	6-8	-
SS.8.G.6.2	Illustrate places and events in U.S. history through the use of narratives and graphic representations.	SS	Understand how to apply geography to interpret the past and present and plan for the future	Geography	6-8	-

A Whale of an Issue — Political and Legislative Frameworks

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.1.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	2
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2
LAFS.K12.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.	LA	Research to Build and Present Knowledge	Writing	6-12	3
SC.6.L.15.1	Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains.	SC	Diversity and Evolution of Living Organisms	Life Science	6-12	3
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
SC.68.CS-PC.3.1	Answer research questions using digital information resources.	SC	Evaluation of Digital Information Resources	Computer Science – Personal, Community, Global and Ethical Impact	6-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	3
LAFS.6.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s) and organize the reasons and evidence clearly. b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from the argument presented	LA	Text Types and Purposes	Writing	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-12	4
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-12	4
LAFS.68.WHST.3.9	Draw evidence from informational texts to support analysis reflection, and research.	LA	Research to Build and Present Knowledge	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	3
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	6-12	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-12	2
SS.7.C.4.2	Recognize government and citizen participation in international organizations.	SS	Demonstrate an understanding of contemporary issues in world affairs, and evaluate the role and impact of United States foreign policy.	Civics and Government	6-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	6-12	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.SL.1.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed. c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.W.1.1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns. c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	6-12	4
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.WHST.1.1	Write arguments focused on *discipline-specific content.* a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns. c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from or supports the argument presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	4
LAFS.910.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.WHST.3.9	Draw evidence from informational texts to support analysis, reflection, and research.	LA	Research to Build and Present Knowledge	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	3
SS.912.E.3.4	Assess the economic impact of negative and positive externalitieson the international environment.	SS	Understand the fundamental concepts and interrelationships of the United States economy in the international marketplace.	Economics	6-12	-
SC.912.L.17.1	Discuss the characteristics of populations, such as number of individuals, age structure, density, and pattern of distribution.	SC	Interdependence	Life Science	6-12	2
SC.912.L.17.5	Analyze how population size is determined by births, deaths, immigration, emigration, and limiting factors (biotic and abiotic) that determine carrying capacity.	SC	Interdependence	Life Science	6-12	3
LAFS.1112.RST.3.9	Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.	LA	Reading Standards for Literacy in Science and Technical Subjects 6-12	Reading Standards for Literacy in Science and Technical Subjects 6-12	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.SL.1.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed. c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	3
LAFS.1112.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.WHST.1.1	Write arguments focused on *discipline-specific content.* a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from or supports the argument presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	4
LAFS.1112.WHST.3.9	Draw evidence from informational texts to support analysis, reflection, and research.	LA	Research to Build and Present Knowledge	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4

Sea Turtles International

Political and Legislative Frameworks

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.SL.1.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed. c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.	LA	Comprehension and Collaboration	Speaking and Listening	9-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	9-12	4
LAFS.910.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	9-12	4
SC.912.L.17.1	Discuss the characteristics of populations, such as number of individuals, age structure, density, and pattern of distribution.	SC	Interdependence	Life Science	9-12	2
SC.912.L.17.12	Discuss the political, social, and environmental consequences of sustainable use of land.	SC	Interdependence	Life Science	9-12	3
SC.912.L.17.13	Discuss the need for adequate monitoring of environmental parameters when making policy decisions.	SC	Interdependence	Life Science	9-12	3
SC.912.N.4.2	Weigh the merits of alternative strategies for solving a specific societal problem by comparing a number of different costs and benefits, such as human, economic, and environmental.	SC	Science and Society	Nature of Science	9-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.912.C.2.8	Analyze the impact of citizen participation as a means of achieving political and social change.	SS	Evaluate the roles, rights, and responsibilities of United States citizens and determine methods of active participation in society, government, and the political system.	Civics and Government	9-12	-
SS.912.E.3.4	Assess the economic impact of negative and positive externalitieson the international environment.	SS	Understand the fundamental concepts and interrelationships of the United States economy in the international marketplace.	Economics	9-12	-
SS.912.G.4.8	Use geographic concepts to analyze spatial phenomena and to discuss economic, political, and social factors that define and interpret space.	SS	Understand the characteristics, distribution, and migration of human populations	Geography	9-12	-
SS.912.G.5.5	Use geographic terms and tools to analyze case studies of policies and programs for resource use and management.	SS	Understand how human actions can impact the environment.	Geography	9-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.912.S.5.2	Discuss the concept of political power and factors that influence political power.	SS	Social Institutions/Identify the effects of social institutions on individual and group behavior.	Sociology	9-12	-
SS.912.S.2.11	Demonstrate democratic approaches to managing disagreements and resolving conflicts within a culture.	SS	Culture/Examine the influence on the individual and the way cultural transmission is accomplished	Sociology	9-12	-
SS.912.S.3.2	Explain how roles and role expectations can lead to role conflict.	SS	Social Status/Identify how social status influences individual and group behaviors and how that status relates to the position a person occupies within a social group.	Sociology	9-12	-
SS.912.S.5.11	Demonstrate democratic approaches to managing disagreements and solving conflicts within a social institution.	SS	Social Institutions/Identify the effects of social institutions on individual and group behavior	Sociology	9-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.RST.3.9	Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.	LA	Reading Standards for Literacy in Science and Technical Subjects 6-12	Reading Standards for Literacy in Science and Technical Subjects 6-12	9-12	3
LAFS.1112.SL.1.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed. c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.	LA	Comprehension and Collaboration	Speaking and Listening	9-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	9-12	2
LAFS.1112.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	9-12	4

Water Wings

Attitudes and Awareness

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.L.3.5	Demonstrate understanding of word relationships and nuances in word meanings.	LA	Vocabulary Acquisition and Use	Language Standards	3-8	3
SC.3.N.3.2	Recognize that scientists use models to help understand and explain how things work.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	1
SC.3.N.3.3	Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2
SC.3.P.9.1	Describe the changes water undergoes when it changes state through heating and cooling by using familiar scientific terms such as melting, freezing, boiling, evaporation, and condensation.	SC	Earth Systems and Patterns	Earth and Space Science	3-8	2
SC.35.CS-CS.1.4	Create a simple model of a system (e.g., flower or solar system) and explain what the model shows and does not show.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-
SC.4.P.8.2	Identify properties and common uses of water in each of its states.	SC	Properties of Matter	Physical Science	3-8	1

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.L.3.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g. verbal irony, puns) in context. b. Use the relationship between particular words to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., bullheaded, willful, firm, persistent, resolute).	LA	Vocabulary Acquisition and Use	Language Standards	3-12	3
LAFS.4.L.3.5	Demonstrate understanding of word relationships, and nuances in word meanings. a. Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).	LA	Vocabulary Acquisition and Use	Language Standards	3-8	3
SC.5.E.7.1	Create a model to explain the parts of the water cycle. Water can be a gas, a liquid, or a solid and can go back and forth from one state to another.	SC	Earth Systems and Patterns	Earth and Space Science	3-8	3
SC.5.E.7.2	Recognize that the ocean is an integral part of the water cycle and is connected to all of Earth's water reservoirs via evaporation and precipitation processes.	SC	Earth Systems and Patterns	Earth and Space Science	3-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.L.3.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figurative language, including similes and metaphors, in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.	LA	Vocabulary Acquisition and Use	Language Standards	3-8	3
SC.6.N.3.4	Identify the role of models in the context of the sixth grade science benchmarks.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2
LAFS.6.L.3.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., personification) in context. b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *stingy, scrimping, economical, unwasteful, thrifty*).	LA	Vocabulary Acquisition and Use	Language Standards	3-8	3
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.L.3.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context. b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *refined, respectful, polite, diplomatic, condescending*).	LA	Vocabulary Acquisition and Use	Language Standards	3-8	3
LAFS.8.L.3.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. d. Interpret figures of speech (e.g. verbal irony, puns) in context. e. Use the relationship between particular words to better understand each of the words. f. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *bullheaded, willful, firm, persistent, resolute*).	LA	Vocabulary Acquisition and Use	Language Standards	3-8	3

Puddle Wonders

Attitudes and Awareness

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-8	2
SC.6.N.1.1	Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-8	3
SC.6.N.1.2	Explain why scientific investigations should be replicable.	SC	The Practice of Science	Nature of Science	6-8	3
SC.6.N.1.4	Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.	SC	The Practice of Science	Nature of Science	6-8	3
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.6.EE.1.2	Write, read, and evaluate expressions in which letters stand for numbers. a. Write expressions that record operations with numbers and with letters standing for numbers. *For example, express the calculation "Subtract y from 5" as 5 – y.* b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. *For example, describe the expression 2 (8 + 7) as a product of two factors; view (8 + 7) as both a single entity and a sum of two terms.* c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). *For example, use the formulas $V = s^3$ and $A = 6 s^2$ to find the volume and surface area of a cube with sides of length s = 1/2.*	MA	Apply and extend previous understandings of arithmetic to algebraic expressions.	Expressions and Equations	6-8	2
SC.68.CS-CS.6.3	Identify novel ways humans interact with computers, including software, probes, sensors, and handheld devices.	SC	Human-Computer Interactions and Artificial Intelligence	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CP.1.2	Select and use data-collection technology (e.g., probes, handheld devices, geographic mapping systems and output from multiple runs of a computer program) to gather, view, organize, analyze, and report results for content-related problems, individually and collaboratively.	SC	Data Analysis	Computer Science – Communication Systems and Computing	6-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-8	4
SC.7.N.1.1	Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-8	3
SC.7.N.1.3	Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation.	SC	The Practice of Science	Nature of Science	6-8	2
SC.7.N.1.4	Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment.	SC	The Practice of Science	Nature of Science	6-8	2
SC.7.N.1.6	Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based.	SC	The Practice of Science	Nature of Science	6-8	2
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.7.G.2.6	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	MA	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Geometry	6-8	2
SC.8.N.1.1	Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-8	3
SC.8.N.1.4	Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data.	SC	The Practice of Science	Nature of Science	6-8	3
SC.8.N.1.6	Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.	SC	The Practice of Science	Nature of Science	6-8	2
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-8	4

Riparian Retreat

Attitudes and Awareness

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.L.3.6	Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.	LA	Vocabulary Acquisition and Use	Language	3-5	2
LAFS.K12.W.1.1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	LA	Text Types and Purposes	Writing	3-5	2
LAFS.3.W.1.1	Write opinion pieces on topics or texts, supporting a point of view with reasons. a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion. c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons. d. Provide a concluding statement or section.	LA	Text Types and Purposes	Writing	3-5	2
SC.35.CS-CS.1.1	Identify the concepts illustrated by a simulation (e.g., ecosystem, predator/prey, and invasive species).	SC	Modeling and Simulation	Computer Science – Communication Systems and Computing	3-5	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.W.1.1	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. b. Provide reasons that are supported by facts and details. c. Link opinion and reasons using words and phrases (e.g., *for instance, in order to, in addition*). d. Provide a concluding statement or section related to the opinion presented.	LA	Text Types and Purposes	Writing	3-5	3
LAFS.5.W.1.1	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. b. Provide logically ordered reasons that are supported by facts and details. c. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically). d. Provide a concluding statement or section related to the opinion presented.	LA	Text Types and Purposes	Writing	3-5	3

How Wet Is Our Planet? Attitudes and Awareness

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.K12.MP.4.1	**Model with mathematics.** Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.	MA	Model with Mathematics	Mathematical Practice	6-8	3
SC.6.N.3.4	Identify the role of models in the context of the sixth grade science benchmarks.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.6.NS.2.3	Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	MA	Compute fluently with multi-digit numbers and find common factors and multiples	The Number System	6-8	1
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.2.4	Organize and display information in a variety of ways such as number formats (e.g., scientific notation, percentages, and exponents), charts, tables and graphs.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	6-8	-
MAFS.7.EE.2.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *For example: If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.*	MA	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	Expressions and Equations	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.7.G.2.6	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	MA	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Geometry	6-8	2
SC.8.P.8.3	Explore and describe the densities of various materials through measurement of their masses and volumes.	SC	Properties of Matter	Physical Science	6-8	2
SC.8.P.8.4	Classi1y and compare substances on the basis of characteristic physical properties that can be demonstrated or measured; for example, density, thermal or electrical conductivity, solubility, magnetic properties, melting and boiling points, and know that these properties are independent of the amount of the sample.	SC	Properties of Matter	Physical Science	6-8	2
MAFS.8.G.3.9	Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	MA	Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.	Geometry	6-8	2
MAFS.8.NS.1.1	Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.	MA	Know that there are numbers that are not rational, and approximate them rational numbers	The Number System	6-8	1

Facts and Falsehoods

Attitudes and Awareness

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.R.1.1	Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.	LA	Key Ideas and Details	Reading	6-12	2
LAFS.K12.R.2.6	Assess how point of view or purpose shapes the content and style of a text.	LA	Craft and Structure	Reading	6-12	2
LAFS.K12.R.3.8	Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.	LA	Integration of Knowledge and Ideas	Reading	6-12	2
LAFS.K12.SL.1.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	2
LAFS.K12.SL.2.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	2
LAFS.6.RI.1.1	Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	LA	Key Ideas and Details	Reading Standards for Informational Text	6-12	2
LAFS.6.RI.3.8	Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.	LA	Integration of Knowledge and Ideas	Reading Standards for Informational Text	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.RL.1.1	Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	LA	Key Ideas and Details	Reading Standards for Literature	6-12	2
LAFS.6.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	3
LAFS.6.SL.2.4	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.7.C.2.11	Analyze media and political communications (bias, symbolism, propaganda).	SS	Evaluate the roles, rights, and responsibilities of United States citizens, and determine methods of active participation in society, government, and the political system.	Civics and Government	6-12	-
LAFS.7.RI.1.1	Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	LA	Key Ideas and Details	Reading Standards for Informational Text	6-12	2
LAFS.7.RI.2.6	Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.	LA	Craft and Structure	Reading Standards for Informational Text	6-12	3
LAFS.7.RI.3.8	Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.	LA	Integration of Knowledge and Ideas	Reading Standards for Informational Text	6-12	2
LAFS.7.RL.1.1	Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	LA	Key Ideas and Details	Reading Standards for Literature	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	3
LAFS.7.SL.2.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	2
LAFS.8.RI.1.1	Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	LA	Key Ideas and Details	Reading Standards for Informational Text	6-12	2
LAFS.8.RI.2.6	Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.	LA	Craft and Structure	Reading Standards for Informational Text	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.RI.3.8	Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.	LA	Integration of Knowledge and Ideas	Reading Standards for Informational Text	6-12	2
LAFS.8.RL.1.1	Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	LA	Key Ideas and Details	Reading Standards for Literature	6-12	2
LAFS.8.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	3
LAFS.8.SL.2.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	3

Facts and Falsehoods

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.8.G.5.1	Describe human dependence on the physical environment and natural resources to satisfy basic needs in local environments in the United States.	SS	Understand how human actions can impact the environment	Geography	6-12	-
LAFS.910.RI.1.1	Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	LA	Key Ideas and Details	Reading Standards for Informational Text	6-12	2
LAFS.910.RI.2.6	Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	LA	Craft and Structure	Reading Standards for Informational Text	6-12	3
LAFS.910.RI.3.8	Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.	LA	Integration of Knowledge and Ideas	Reading Standards for Informational Text	6-12	3
LAFS.910.RH.2.6	Compare the point of view of two or more authors for how they treat the same or similar topics, including which details they include and emphasize in their respective accounts.	LA	Craft and Structure	Reading Standards for Literacy in History/Social Studies 6-12	6-12	3
LAFS.910.RH.3.8	Assess the extent to which the reasoning and evidence in a text support the authors claims.	LA	Integration of Knowledge and Ideas	Reading Standards for Literacy in History/Social Studies 6-12	6-12	3
LAFS.910.RL.1.1	Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	LA	Key Ideas and Details	Reading Standards for Literature	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.SL.1.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed. c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	3
LAFS.910.SL.2.4	Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	3

Facts and Falsehoods

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.912.CS-PC.3.1	Evaluate the quality of digital resources for reliability (i.e., currency, relevancy, authority, accuracy, and purpose of digital information).	SC	Evaluation of digital information resources	Computer Science – Communication Systems and Computing	6-12	-
SC.912.CS-PC.2.3	Discuss and analyze the impact of values and points of view that are presented in media messages (e.g., racial, gender, and political).	SC	The impact of computing resources on local and global society	Computer Science – Communication Systems and Computing	6-12	-
SC.912.CS-PC.3.2	Evaluate the accuracy, relevance, comprehensiveness, appropriateness, and bias of electronic information resources.	SC	Evaluation of digital information resources	Computer Science – Communication Systems and Computing	6-12	-
SS.912.A.1.5	Evaluate the validity, reliability, bias, and authenticity of current events and Internet resources.	SS	Use research and inquiry skills to analyze American history using primary and secondary sources.	American History	6-12	-
SS.912.C.2.13	Analyze various forms of political communication and evaluate for bias, factual accuracy, omission, and emotional appeal.	SS	Evaluate the roles, rights, and responsibilities of United States citizens and determine methods of active participation in society, governments, and the political system.	Civics and Government	6-12	-

Facts and Falsehoods

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.912.S.1.6	Distinguish fact from opinion in data sources to analyze various points of view about a social issue.	SS	Foundations of Sociology as a Social Science/Identify methods and strategies of research and examine the contributions of sociology to the understanding of social issues.	Sociology	6-12	-
SS.912.S.3.3	Examine and analyze various points of view relating to historical and current events.	SS	Social Status/Identify how social status influences individual and group behaviors and how that status relates to the position a person occupies within a social group.	Sociology	6-12	-
LAFS.1112.RH.3.8	Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.	LA	Integration of Knowledge and Ideas	Reading Standards for Literacy in History/Social Studies 6-12	6-12	3
LAFS.1112.RI.2.6	Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness or beauty of the text.	LA	Craft and Structure	Reading Standards for Informational Text	6-12	3

Facts and Falsehoods

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.RL.1.1	Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.	LA	Key Ideas and Details	Reading Standards for Literature	6-12	3
LAFS.1112.SL.1.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed. c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	3

Facts and Falsehoods

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.SL.2.4	Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	3

Plastic Voyages

Human Impacts

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.2.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	3
SC.3.N.1.3	Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.	SC	The Practice of Science	Nature of Science	3-5	2
SC.3.N.3.3	Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-5	2
SC.3.N.1.6	Infer based on observation.	SC	The Practice of Science	Nature of Science	3-5	3
SC.35.CS-CS.1.1	Identify the concepts illustrated by a simulation (e.g., ecosystem, predator/prey, and invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-5	-
SC.35.CS-CS.1.2	Describe how models and simulations can be used to solve real-world issues in science and engineering.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-5	-
SC.35.CS-CS.1.3	Answer a question, individually and collaboratively, using data from a simulation.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-5	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.35.CS-CP.1.4	Collect, organize, graph, and analyze data to answer a question using a database or spreadsheet.	SC	Data Analysis	Computer Science – Communication Systems and Computing	3-5	-
SC.4.N.1.6	Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.	SC	The Practice of Science	Nature of Science	3-5	3
SS.5.G.1.4	Construct maps, charts, and graphs to display geographic information	SS	The World in Spatial terms	Geography	3-5	-

Watershed

Human Impacts

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.K12.MP.1.1	**Make sense of problems and persevere in solving them.** Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem.	MA	Make Sense of Problems and Persevere in Solving Them.	Mathematical Practice	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.K12.MP.4.1	**Model with mathematics.** Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.	MA	Model with Mathematics	Mathematical Practice	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.6.EE.1.2	Write, read, and evaluate expressions in which letters stand for numbers. a. Write expressions that record operations with numbers and with letters standing for numbers. *For example, express the calculation "Subtract y from 5" as 5 – y.* b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. *For example, describe the expression 2 (8 + 7) as a product of two factors; view (8 + 7) as both a single entity and a sum of two terms.* **c.** Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). *For example, use the formulas $V = s^3$ and $A = 6 s^2$ to find the volume and surface area of a cube with sides of length s = 1/2.*	MA	Apply and extend previous understandings of arithmetic to algebraic expressions.	Expressions and Equations	6-12	2
MAFS.6.G.1.1	Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	MA	Solve real-world and mathematical problems involving area, surface area, and volume	Geometry	6-12	2

Watershed

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.68.CS-CS.1.2	Create or modify and use a simulation to analyze and illustrate a concept in depth (i.e., use a simulation to illustrate a genetic variation), individually and collaboratively.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
SC.912.CS-CS.1.5	Represent and understand natural phenomena using modeling and simulation.	SC	Modeling and Simulation	Computer Science – Communication Systems and Computing	6-12	-
SS.7.C.2.12	Develop a plan to resolve a state or local problem by researching public policy alternatives, identifying appropriate government agencies to address the issue, and determining a course of action.	SS	Evaluate the roles, rights, and responsibilities of United States citizens, and determine methods of active participation in society, government, and the political system.	Civics and Government	6-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.7.G.1.1	Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	MA	Draw, construct, and describe geometrical figures and describe the relationships between them.	Geometry	6-12	2
MAFS.7.G.2.6	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	MA	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Geometry	6-12	2
SS.7.G.5.1	Use a choropleth or other map to geographically represent current information about issues of conservation or ecology in the local community.	SS	Understand How Human Actions Can Impact the Environment	Geography	6-12	-
SC.912.L.17.18	Describe how human population size and resource use relate to environmental quality	SC	Interdependence	Life Science	6-12	2

Watershed

What's in the Air? Human Impacts

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	6-8	2
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-8	2
MAFS.K12.MP.2.1	**Reason abstractly and quantitatively**. Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.	MA	Reason abstractly and quantitatively	Mathematica Practice	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.6.N.1.1	Define a problem from the sixth grade curriculum, use appropriate reference3materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-8	3
SC.6.N.1.3	Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.	SC	The Practice of Science	Nature of Science	6-8	3
SC.6.N.1.5	Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.	SC	The Practice of Science	Nature of Science	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-8	4
LAFS.6.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	2
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.6.EE.3.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.*	MA	Represent and analyze quantitative relationships between dependent and independent variables.	Expressions and Equations	6-8	2
MAFS.6.SP.1.1	Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. *For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.*	MA	Develop Understanding of Statistical Variability	Statistics and Probability	6-8	1
MAFS.6.SP.1.2	Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.	MA	Develop Understanding of Statistical Variability	Statistics and Probability	6-8	2
MAFS.6.SP.1.3	Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	MA	Develop understanding of statistical variability	Statistics and Probability	6-8	1

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.6.SP.2.5	Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations. b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	MA	Summarize and Describe Distributions	Statistics and Probability	6-8	3
SC.68.CS-CS.2.1	Create, modify, and use a database (e.g., define field formats, adding new records, manipulate data) to analyze data and propose solutions for a task/problem, individually and collaboratively.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.2.4	Organize and display information in a variety of ways such as number formats (e.g., scientific notation, percentages, and exponents), charts, tables and graphs.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CP.1.2	Select and use data-collection technology (e.g., probes, handheld devices, geographic mapping systems and output from multiple runs of a computer program) to gather, view, organize, analyze, and report results for content-related problems, individually and collaboratively.	SC	Data Analysis	Computer Science – Communication Systems and Computing	6-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.RST.1.3	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.	LA	Key Ideas and Details	Reading Standards for Literacy in Science and Technical Subjects 6-12	6-8	2
LAFS.68.WHST.1.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style and objective tone. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-8	3

What's in the Air?

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-8	3
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-8	4
SC.7.N.1.1	Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-8	3
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	6-8	3
SC.7.N.1.3	Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation.	SC	The Practice of Science	Nature of Science	6-8	2
SC.7.N.1.4	Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment.	SC	The Practice of Science	Nature of Science	6-8	2

What's in the Air?

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.7.N.1.6	Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based.	SC	The Practice of Science	Nature of Science	6-8	2
LAFS.7.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-8	4
LAFS.7.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.7.RP.1.2	Recognize and represent proportional relationships between quantities. a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. c. Represent proportional relationships by equations. *For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn.* d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r) where r is the unit rate.	MA	Analyze proportional relationships and use them to solve real-world and mathematical problems.	Ratios and Proportional Relationships	6-8	2
MAFS.7.SP.2.4	Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.*	MA	Draw informal comparative inferences about two populations	Statistics and Probability	6-8	2
SC.8.N.1.4	Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data.	SC	The Practice of Science	Nature of Science	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.8.N.1.6	Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.	SC	The Practice of Science	Nature of Science	6-8	2
SC.8.N.1.1	Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-8	3
LAFS.8.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-8	4
MAFS.8.EE.2.5	Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. *For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.*	MA	Understand the connections between proportional relationships, lines, and linear equations	Expressions and Equations	6-8	2
MAFS.8.F.2.4	Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.	MA	Use functions to model relationships between quantities	Functions	6-8	3
MAFS.8.F.2.5	Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	MA	Use functions to model relationships between quantities	Functions	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.8.SP.1.3	Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.*	MA	Investigate patterns of association in bivariate data.	Statistics and Probability	6-8	2

What's in the Water? Human Impacts

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.1.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	2
LAFS.K12.W.1.1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	LA	Text Types and Purposes	Writing	6-8	2
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
SC.6.N.1.4	Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.	SC	The Practice of Science	Nature of Science	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	3
LAFS.6.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s) and organize the reasons and evidence clearly. b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from the argument presented	LA	Text Types and Purposes	Writing	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	2
SC.68.CS-CS.1.2	Create or modify and use a simulation to analyze and illustrate a concept in depth (i.e., use a simulation to illustrate a genetic variation), individually and collaboratively.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.2.4	Organize and display information in a variety of ways such as number formats (e.g., scientific notation, percentages, and exponents), charts, tables and graphs.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CP.3.2	Create online content (e.g., webpage, blog, digital portfolio, multimedia), using advanced design tools.	SC	Programming Applications	Computer Science – Communication Systems and Computing	6-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.1.1	Write arguments focused on *discipline-specific content.* a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social studies, Science, and Technical Subjects	6-8	3
LAFS.68.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-8	3
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	SC	Earth Structures	Earth and Space Science	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	3
LAFS.7.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
SS.7.C.2.14	Conduct a service project to further the public good.	SS	Evaluate the roles, rights, and responsibilities of United States citizens and determine methods of active participation in society, government, and the political system.	Civics and Government	6-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	6-8	3
LAFS.8.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3

Something's Fishy Here

Human Impacts

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.1.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	2
LAFS.K12.SL.2.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-8	2
LAFS.K12.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.	LA	Text Types and Purposes	Writing	6-8	3
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-8	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	3
LAFS.6.SL.2.4	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s) and organize the reasons and evidence clearly. b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from the argument presented	LA	Text Types and Purposes	Writing	6-8	3
LAFS.6.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	6-8	3

Something's Fishy Here

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	2
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-8	4
LAFS.68.WHST.1.1	Write arguments focused on *discipline-specific content.* a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social studies, Science, and Technical Subjects	6-8	3
LAFS.68.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	4
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	SC	Earth Structures	Earth and Space Science	6-8	2
LAFS.7.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.SL.2.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-8	2
LAFS.7.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	6-8	3
LAFS.7.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.7.C.2.3	Experience the responsibilities of citizens at the local, state, or federal levels.	SS	Evaluate the roles, rights, and responsibilities of United States citizens, and determine methods of active participation in society, government, and the political system.	Civics and Government	6-8	-
SS.7.C.2.12	Develop a plan to resolve a state or local problem by researching public policy alternatives, identifying appropriate government agencies to address the issue, and determining a course of action.	SS	Evaluate the roles, rights, and responsibilities of United States citizens, and determine methods of active participation in society, government, and the political system.	Civics and Government	6-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	3
LAFS.8.SL.2.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	6-8	3
LAFS.8.W.1.3	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	LA	Text Types and Purposes	Writing	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-8	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-8	4
SS.8.A.1.2	Analyze charts, graphs, maps, photographs and timelines; analyze political cartoons; determine cause and effect.	SS	Use research and inquiry skills to analyze American History using primary and secondary sources	American History	6-8	-

Water Works

Human Impacts

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	3-8	4
LAFS.3.W.3.7	Conduct short research projects that build knowledge about a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	
SS.3.E.1.3	Recognize that buyers and sellers interact to exchange goods and services through the use of trade or money.	SS	Beginning Economics	Economics	3-8	-
SC.35.CS-CS.1.1	Identify the concepts illustrated by a simulation (e.g., ecosystem, predator/prey, and invasive species)	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-
SC.35.CS-CS.2.1	Solve age-appropriate problems using information organized using digital graphic organizers (e.g., concept maps and Venn-diagrams).	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	3-8	-
SC.4.P.8.2	Identify properties and common uses of water in each of its states.	SC	Properties of Matter	Physical Science	3-8	1
LAFS.4.W.3.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	4
LAFS.5.W.3.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	3-8	4
MAFS.6.RP.1.2	Understand the concept of a unit rate a/b associated with a ratio a:b with b ≠ 0, and use rate language in the context of a ratio relationship. *For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is 3/4 cup of flour for each cup of sugar." "We paid $75 for 15 hamburgers, which is a rate of $5 per hamburger."*	MA	Understand ratio concepts and use ratio reasoning to solve problems	Ratio and Proportional Relationships	3-8	2
SC.68.CS-CS.1.2	Create or modify and use a simulation to analyze and illustrate a concept in depth (i.e., use a simulation to illustrate a genetic variation), individually and collaboratively.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	3-8	4
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	3-8	

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	3-8	2
MAFS.7.RP.1.1	Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. *For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction 1/2/1/4 miles per hour, equivalently 2 miles per hour.*	MA	Analyze proportional relationships and use them to solve real-world and mathematical problems.	Ratios and Proportional Relationships	3-8	2
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	3-8	4
SS.8.G.5.1	Describe human dependence on the physical environment and natural resources to satisfy basic needs in local environments in the United States.	SS	Understand how human actions can impact the environment	Geography	3-8	-

Alice in Waterland

Human Impacts

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-8	4
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-8	4
SC.68.CS-CS.1.2	Create or modify and use a simulation to analyze and illustrate a concept in depth (i.e., use a simulation to illustrate a genetic variation), individually and collaboratively.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
SC.68.CS-CS.2.4	Organize and display information in a variety of ways such as number formats (e.g., scientific notation, percentages, and exponents), charts, tables and graphs.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	6-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-12	4
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	SC	Earth Structures	Earth and Space Science	6-8	2
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	6-8	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-8	2
SC.8.N.4.2	Explain how political, social, and economic concerns can affect science, and vice versa.	SC	Science and Society	Nature of Science	6-8	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-8	4
SS.8.G.5.1	Describe human dependence on the physical environment and natural resources to satisfy basic needs in local environments in the United States.	SS	Understand how human actions can impact the environment	Geography	6-8	-

The Glass Menagerie

Human Impacts

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.2.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	9-12	3
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	9-12	2
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	9-12	3
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	9-12	4
LAFS.910.RST.1.3	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.	LA	Key Ideas and Details	Reading Standards for Literacy in Science and Technical Subjects 6-12	9-12	2
LAFS.910.SL.2.4	Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	9-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.W.1.2	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. a. Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language and domain-specific vocabulary to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	LA	Text Types and Purposes	Writing	9-12	4
LAFS.910.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	LA	Production and Distribution of Writing	Writing	9-12	3

The Glass Menagerie

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	9-12	4
LAFS.910.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science and Technical Subjects	9-12	3
LAFS.910.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	9-12	4
SC.912.CS-CS.1.1	Analyze data and identify real-world patterns through modeling and simulation	SC	Modeling and Simulation	Computer Science – Communication Systems and Computing	9-12	-
SC.912.CS-CS.1.2	Formulate, refine, and test scientific hypotheses using models and simulations.	SC	Modeling and Simulation	Computer Science – Communication Systems and Computing	9-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.912.CS-CP.1.3	Analyze and manipulate data collected by a variety of data collection techniques to support a hypothesis.	SC	Data Analysis	Computer Science – Personal, Community, Global and Ethical Impact	9-12	-
SC.912.L.17.1	Discuss the characteristics of populations, such as number of individuals, age structure, density, and pattern of distribution.	SC	Interdependence	Life Science	9-12	2
SC.912.L.17.2	Explain the general distribution of life in aquatic systems as a function of chemistry, geography, light, depth, salinity, and temperature.	SC	Interdependence	Life Science	6-12	3
SC.912.L.17.16	Discuss the large-scale environmental impacts resulting from human activity, including waste spills, oil spills, runoff, greenhouse gases, ozone depletion, and surface and groundwater pollution.	SC	Interdependence	Life Science	9-12	3
SC.912.N.1.6	Describe how scientific inferences are drawn from scientific observations and provide examples from the content being studied.	SC	The Practice of Science	Nature of Science	9-12	2
SS.912.C.2.11	Analyze public policy solutions or courses of action to resolve a local, state, or federal issue.	SS	Evaluate the roles, rights, and responsibilities of United States citizens and determine methods of active participation in society, government, and the political system.	Civics and Government	9-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.912.P.2.12	Explain how validity and reliability of observations and measurements relate to data analysis.	SS	Scientific Inquiry Domain/ Research Methods, Measurement, and Statistics	Psychology	9-12	-
SS.912.S.7.6	Evaluate possible solutions to resolving social problems and the consequences that might result from those solutions.	SS	Social Problems/ Analyze a range of social problems in today's world.	Sociology	9-12	-
LAFS.1112.RST.1.3	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.	LA	Key Ideas and Details	Reading Standards for Literacy in Science and Technical Subjects 6-12	9-12	3
LAFS.1112.SL.2.4	Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	9-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.W.1.2	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	LA	Text Types and Purposes	Writing	9-12	4
LAFS.1112.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	LA	Production and Distribution of Writing	Writing	9-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	9-12	2
LAFS.1112.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science and Technical Subjects	9-12	3
LAFS.1112.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	9-12	4

Fishable Waters

Human Impacts

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.1.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	2
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-12	4
SC.68.CS-CS.1.2	Create or modify and use a simulation to analyze and illustrate a concept in depth (i.e., use a simulation to illustrate a genetic variation), individually and collaboratively.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
SC.68.CS-CS.1.3	Evaluate what kinds of real-world problems can be solved using modeling and simulation.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.912.CS-CS.1.5	Represent and understand natural phenomena using modeling and simulation.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-12	4
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	SC	Earth Structures	Earth and Space Science	6-12	2
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	6-12	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.7.C.2.13	Examine multiple perspectives on public and current issues.	SS	Evaluate the roles, rights and responsibilities of United States citizens and determine methods of active participation in society, government, and the political system.	Civics and Government	6-12	-
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-12	4
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4
LAFS.910.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.912.L.17.1	Discuss the characteristics of populations, such as number of individuals, age structure, density, and pattern of distribution.	SC	Interdependence	Life Science	6-12	2
SC.912.L.17.11	Evaluate the costs and benefits of renewable and nonrenewable resources, such as water, energy, fossil fuels, wildlife, and forests.	SC	Interdependence	Life Science	6-12	3
SC.912.L.17.5	Analyze how population size is determined by births, deaths, immigration, emigration, and limiting factors (biotic and abiotic) that determine carrying capacity.	SC	Interdependence	Life Science	6-12	3
SC.912.L.17.20	Predict the impact of individuals on environmental systems and examine how human lifestyles affect sustainability.	SC	Interdependence	Life Science	6-12	3
SS.912.G.5.4	Analyze case studies of how humans impact the diversity and productivity of ecosystems.	SS	Understand how human actions can impact the environment.	Geography	6-12	-
SS.912.G.5.6	Analyze case studies to predict how a change to an environmental factor can affect an ecosystem.	SS	Understand how human actions can impact the environment	Geography	9-12	-
SS.912.S.8.9	Identify a community social problem and discuss appropriate actions to address the problem.	SS	Individual and Community/Examine the role of the individual as a member of the community; explore both individual and collective behavior.	Sociology	6-12	-

Fishable Waters

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2
LAFS.1112.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4

Turtle Hurdles

Issues and Trends

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	3-8	2
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3
LAFS.3.W.2.4	With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose.	LA	Production and Distribution of Writing	Writing	3-8	3
SC.35.CS-CS.1.1	Identify the concepts illustrated by a simulation (e.g., ecosystem, predator/prey, and invasive species)	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-
SC.4.L.16.4	Compare and contrast the major stages in the life cycles of Florida plants and animals, such as those that undergo incomplete and complete metamorphosis, and flowering and nonflowering seed-bearing plants.	SC	Heredity and Reproduction	Life Science	3-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within categories of information using words and phrases (e.g., *another, for example, also, because*). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	LA	Text Types and Purposes	Writing	3-8	2
LAFS.4.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3
SC.5.L.17.1	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	SC	Interdependence	Life Science	3-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	LA	Text Types and Purposes	Writing	3-8	2
LAFS.5.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	3-8	4
LAFS.6.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	2
LAFS.68.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	3-8	3

Turtle Hurdles

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.7.L.15.3	Explore the scientific theory of evolution by relating how the inability of a species to adapt within a changing environment may contribute to the extinction of that species.	SC	Diversity and Evolution of Living Organisms	Life Science	3-8	3
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	3-8	3
LAFS.7.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	3-8	4
LAFS.7.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3

Turtle Hurdles

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.7.C.3.9	Illustrate the law making process at the local, state, and federal levels.	SS	Demonstrate an understanding of the principle, functions, and organization of government.	Civics and Government	3-8	-
LAFS.8.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	3-8	4
LAFS.8.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3

Aquatic Roots

Issues and Trends

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.2.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	3
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	3-5	2
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	3-5	4
LAFS.K12.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.	LA	Research to Build and Present Knowledge	Writing	3-5	3
SC.3.N.1.1	Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	SC	The Practice of Science	Nature of Science	3-5	3
SC.3.N.1.3	Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.	SC	The Practice of Science	Nature of Science	3-5	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.3.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 *topics and texts*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion.	LA	Comprehension and Collaboration	Speaking and Listening	3-5	3
LAFS.3.SL.2.4	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2
LAFS.3.W.1.1	Write opinion pieces on topics or texts, supporting a point of view with reasons. a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion. c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons. d. Provide a concluding statement or section.	LA	Text Types and Purposes	Writing	3-5	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.3.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. b. Develop the topic with facts, definitions, and details. c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information. d. Provide a concluding statement or section.	LA	Text Types and Purposes	Writing	3-5	3
LAFS.K.W.3.7	Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).	LA	Research to Build and Present Knowledge	Writing	3-5	4
SC.4.L.17.4	Recognize ways plants and animals, including humans, can impact the environment.	SC	Interdependence	Life Science	3-5	3
SC.4.N.1.1	Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	SC	The Practice of Science	Nature of Science	3-5	3
SC.4.N.1.4	Attempt reasonable answers to scientific questions and cite evidence in support.	SC	The Practice of Science	Nature of Science	3-5	3
SC.4.N.1.6	Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.	SC	The Practice of Science	Nature of Science	3-5	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade *4 topics and texts*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.	LA	Comprehension and Collaboration	Speaking and Listening	3-5	3
LAFS.4.SL.2.4	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.W.1.1	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. b. Provide reasons that are supported by facts and details. c. Link opinion and reasons using words and phrases (e.g., *for instance, in order to, in addition*). d. Provide a concluding statement or section related to the opinion presented.	LA	Text Types and Purposes	Writing	3-5	3
LAFS.4.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within categories of information using words and phrases (e.g., *another, for example, also, because*). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	LA	Text Types and Purposes	Writing	3-5	2
LAFS.4.W.3.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 4 Reading standards to literature (e.g., "Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions]."). Apply grade 4 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").	LA	Research to Build and Present Knowledge	Writing	3-5	3
SC.5.L.17.1	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	SC	Interdependence	Life Science	3-5	2
SC.5.N.1.1	Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	3-5	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 5 topics and texts*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.	LA	Comprehension and Collaboration	Speaking and Listening	3-5	3
LAFS.5.SL.2.4	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	3-5	2
LAFS.5.W.1.1	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. b. Provide logically ordered reasons that are supported by facts and details. c. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically). d. Provide a concluding statement or section related to the opinion presented.	LA	Text Types and Purposes	Writing	3-5	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	LA	Text Types and Purposes	Writing	3-5	2
LAFS.5.W.3.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	2
LAFS.5.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 5 Reading standards to literature (e.g., "Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]"). b. Apply grade 5 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]").	LA	Research to Build and Present Knowledge	Writing	3-5	3

Where Have All the Salmon Gone? Issues and Trends

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2
MAFS.K12.MP.4.1	**Model with mathematics.** Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.	MA	Model with Mathematics	Mathematical Practice	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.SL.1.2	Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	3
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-12	4
SS.6.W.1.1	Use timelines to identify chronological order of historical events.	SS	Utilize historical inquiry skills and analytical processes.	World History	6-12	-
SC.68.CS-CS.2.4	Organize and display information in a variety of ways such as number formats (e.g., scientific notation, percentages, and exponents), charts, tables and graphs.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	6-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.1.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style and objective tone. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	3
LAFS.68.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-12	4
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	SC	Earth Structures	Earth and Space Science	6-12	2
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	6-12	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-12	2
MAFS.7.SP.1.1	Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	MA	Use random sampling to draw inferences about a population.	Statistics and Probability	6-12	2
MAFS.7.SP.2.4	Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.*	MA	Draw informal comparative inferences about two populations	Statistics and Probability	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-12	4
SS.8.A.1.2	Analyze charts, graphs, maps, photographs and timelines; analyze political cartoons; determine cause and effect.	SS	Use research and inquiry skills to analyze American History using primary and secondary sources	American History	6-12	-
LAFS.910.RH.3.7	Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.	LA	Integration of Knowledge and Ideas	Reading Standards for Literacy in Science and Technical Subjects 6-12	6-12	3
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.WHST.1.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to manage the complexity of the topic and convey a style appropriate to the discipline and context as well as to the expertise of likely readers. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science and Technical Subjects	6-12	3
LAFS.910.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4
SC.912.CS-CS.1.3	Explain how data analysis is used to enhance the understanding of complex natural and human systems.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
SC.912.CS-CP.1.3	Analyze and manipulate data collected by a variety of data collection techniques to support a hypothesis.	SC	Data Analysis	Computer Science – Personal, Community, Global and Ethical Impact	6-12	-
SC.912.L.17.18	Describe how human population size and resource use relate to environmental quality	SC	Interdependence	Life Science	6-12	2
SC.912.L.17.5	Analyze how population size is determined by births, deaths, immigration, emigration, and limiting factors (biotic and abiotic) that determine carrying capacity.	SC	Interdependence	Life Science	6-12	3

Where Have All the Salmon Gone?

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.912.L.17.13	Discuss the need for adequate monitoring of environmental parameters when making policy decisions.	SC	Interdependence	Life Science	6-12	3
MAFS.912.S-IC.1.1	Understand statistics as a process for making inferences about population parameters based on a random sample from that population.	SC	Understand and evaluate random processes underlying statistical experiments	Statistics & Probability: Making Inferences & Justifying Conclusions	6-12	1
SS.912.G.2.5	Use geographic terms and tools to analyze case studies of debates over how human actions modify a selected region.	SS	Understand physical and cultural characteristics of places.	Geography	6-12	-
SS.912.G.5.4	Analyze case studies of how humans impact the diversity and productivity of ecosystems.	SS	Understand how human actions can impact the environment.	Geography	6-12	-
SS.912.G.5.5	Use geographic terms and tools to analyze case studies of policies and programs for resource use and management.	SS	Understand how human actions can impact the environment.	Geography	6-12	-
SS.912.P.2.10	Interpret graphical representations of data as used in both quantitative and qualitative methods.	SS	Scientific Inquiry Domain/Research Method, Measurement, and Statistics	Psychology	6-12	-
SS.912.W.1.1	Use timelines to establish cause and effect relationships of historical events.	SS	Utilize historical inquiry skills and analytical processes.	World History	6-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.RST.3.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.	LA	Integration of Knowledge and Ideas	Reading Standards for Literacy in Science and Technical Subjects 6-12	6-12	3
LAFS.1112.WHST.1.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers. e. Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2
LAFS.1112.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science and Technical Subjects	6-12	3
LAFS.1112.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4

To Dam or Not to Dam

Issues and Trends

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.1.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	2
LAFS.K12.W.1.1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	LA	Text Types and Purposes	Writing	6-8	2
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-8	2
SC.6.N.3.4	Identify the role of models in the context of the sixth grade science benchmarks.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	6-8	2
LAFS.6.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s) and organize the reasons and evidence clearly. b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from the argument presented	LA	Text Types and Purposes	Writing	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-8	4
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-8	-
LAFS.68.RST.3.9	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.	LA	Integration of Knowledge and Ideas	Reading Standards for Literacy in Science and Technical Subjects 6-12	6-8	3
LAFS.6.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.1.1	Write arguments focused on *discipline-specific content.* a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social studies, Science, and Technical Subjects	6-8	3
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-8	4
SC.7.N.1.6	Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based.	SC	The Practice of Science	Nature of Science	6-8	2
SC.7.N.3.2	Identify the benefits and limitations of the use of scientific models.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	6-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	3
LAFS.7.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-8	2
LAFS.8.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	LA	Comprehension and Collaboration	Speaking and Listening	6-8	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	6-8	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-8	4

Aquatic Times

Issues and Trends

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.1.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	LA	Comprehension and Collaboration	Speaking and Listening	6-12	2
LAFS.K12.W.1.1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	LA	Text Types and Purposes	Writing	3-12	2
LAFS.K12.W.2.6	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.	LA	Production and Distribution of Writing	Writing	3-12	2
SC.35.CS-CC.1.1	Identify technology tools for individual and collaborative data collection, writing, communication, and publishing activities.	SC	Communications and Collaboration	Computer Science – Communication and Collaboration	3-12	-
SC.35.CS-CS.3.1	Manipulate and publish multimedia artifacts using digital tools (local and online).	SC	Digital Tools	Computer Science – Communication Systems and Computing	3-12	-
SC.35.CS-CP.3.1	Write, communicate and publish activities using technology tools.	SC	Programming Applications	Computer Science – Communication Systems and Computing	3-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.3.W.1.1	Write opinion pieces on topics or texts, supporting a point of view with reasons. a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion. c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons. d. Provide a concluding statement or section.	LA	Text Types and Purposes	Writing	3-12	2
LAFS.4.W.1.1	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. b. Provide reasons that are supported by facts and details. c. Link opinion and reasons using words and phrases (e.g., *for instance, in order to, in addition*). d. Provide a concluding statement or section related to the opinion presented.	LA	Text Types and Purposes	Writing	3-12	3

Aquatic Times

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.W.1.1	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. b. Provide logically ordered reasons that are supported by facts and details. c. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically). d. Provide a concluding statement or section related to the opinion presented.	LA	Text Types and Purposes	Writing	3-12	3
LAFS.6.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s) and organize the reasons and evidence clearly. b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from the argument presented	LA	Text Types and Purposes	Writing	3-12	3
LAFS.6.W.2.6	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.	LA	Production and Distribution of Writing	Writing	3-12	2
SC.68.CS-CC.1.1	Demonstrate an ability to communicate appropriately through various online tools.	SC	Communication and Collaboration	Computer Science – Communication and Collaboration	3-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.68.CS-CC.1.3	Design, develop, and publish a collaborative digital product using a variety of digital tools and media-rich resources that demonstrate and communicate concepts to inform, persuade, and/or entertain.	SC	Communication and Collaboration	Computer Science – Communication and Collaboration	3-12	-
SC.68.CS-CP.3.2	Create online content (e.g., webpage, blog, digital portfolio, multimedia), using advanced design tools.	SC	Programming Applications	Computer Science – Communication Systems and Computing	3-12	-
LAFS.68.WHST.2.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	3-12	2
LAFS.7.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	3-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.2.6	Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.	LA	Production and Distribution of Writing	Writing	3-12	2
SS.7.C.2.13	Examine multiple perspectives on public and current issues.	SS	Evaluate the roles, rights and responsibilities of United States citizens and determine methods of active participation in society, government, and the political system.	Civics and Government	3-12	-
LAFS.8.W.1.1	Write arguments to support claims with clear reasons and relevant evidence. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. Establish and maintain a formal style. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	3-12	3

Aquatic Times

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.2.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.	LA	Production and Distribution of Writing	Writing	3-12	2
LAFS.910.W.1.1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns. c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing	3-12	4
LAFS.910.W.2.6	Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.	LA	Production and Distribution of Writing	Writing	3-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.WHST.2.6	Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.	LA	Production and Distribution of Writing	Writing	3-12	2
SC.912.CS-CC.1.5	Communicate and publish key ideas and details to a variety of audiences using digital tools and media-rich resources.	SC	Communication and Collaboration	Computer Science – Communication and Collaboration	3-12	-
SS.912.S.1.6	Distinguish fact from opinion in data sources to analyze various points of view about a social issue.	SS	Foundations of Sociology as a Social Science/Identify methods and strategies of research and examine the contributions of sociology to the understanding of social issues.	Sociology	3-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.W.1.1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases. c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Type and Purpose	Writing	3-12	4

Silt: A Dirty Word

Wildlife Management

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.1.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	LA	Comprehension and Collaboration	Speaking and Listening	3-5	2
SC.3.N.1.3	Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.	SC	The Practice of Science	Nature of Science	3-5	2
SC.3.N.3.2	Recognize that scientists use models to help understand and explain how things work.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-5	1
SC.3.N.3.3	Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-5	2
SC.3.N.1.6	Infer based on observation.	SC	The Practice of Science	Nature of Science	3-5	3
SC.35.CS-CS.1.1	Identify the concepts illustrated by a simulation (e.g., ecosystem, predator/prey, and invasive species)	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-5	-
SC.35.CS-CS.1.4	Create a simple model of a system (e.g., flower or solar system) and explain what the model shows and does not show.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-5	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.4.L.17.4	Recognize ways plants and animals, including humans, can impact the environment.	SC	Interdependence	Life Science	3-5	3
SC.4.N.1.6	Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.	SC	The Practice of Science	Nature of Science	3-5	3

Dam Design

Wildlife Management

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.R.3.7	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.	LA	Integration of Knowledge and Ideas	Reading Standards for Literacy in Science and Technical Subjects 6-12	6-12	2
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	6-12	2
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4
LAFS.K12.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.	LA	Research to Build and Present Knowledge	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	3
SC.6.N.3.4	Identify the role of models in the context of the sixth grade science benchmarks.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	6-12	2
LAFS.6.SL.2.5	Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-12	4
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 5 Reading standards to literature (e.g., "Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]"). b. Apply grade 5 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]").	LA	Research to Build and Present Knowledge	Writing	6-12	3
SC.68.CS-CS.1.3	Evaluate what kinds of real-world problems can be solved using modeling and simulation.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
LAFS.68.WHST.1.1	Write arguments focused on *discipline-specific content.* a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social studies, Science, and Technical Subjects	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.3.9	Draw evidence from informational texts to support analysis reflection, and research.	LA	Research to Build and Present Knowledge	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	3
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	SC	Earth Structures	Earth and Space Science	6-12	2
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	6-12	3
SC.7.N.3.2	Identify the benefits and limitations of the use of scientific models.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	6-12	2
LAFS.7.SL.2.5	Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	2

Dam Design

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-12	4
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 7 Reading standards to literature (e.g., "Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history"). b. Apply grade 7 Reading standards to literary nonfiction (e.g. "Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims").	LA	Research to Build and Present Knowledge	Writing	6-12	3
SC.8.N.4.2	Explain how political, social, and economic concerns can affect science, and vice versa.	SC	Science and Society	Nature of Science	6-12	3
LAFS.8.SL.2.5	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	LA	Text Types and Purposes	Writing	6-12	4
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 8 Reading standards to literature (e.g., "Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new"). b. Apply grade 8 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced").	LA	Research to Build and Present Knowledge	Writing	6-12	3
SS.8.G.5.2	Describe the impact of human modifications on the physical environment and ecosystems of the United States throughout history.	SS	Understand how human actions can impact the environment.	Geography	6-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.W.1.2	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. a. Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language and domain-specific vocabulary to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	LA	Text Types and Purposes	Writing	6-12	4
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.WHST.1.1	Write arguments focused on *discipline-specific content.* a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns. c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from or supports the argument presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	4
LAFS.910.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grades 9–10 Reading standards to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]"). b. Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning").	LA	Research to Build and Present Knowledge	Writing	6-12	3
LAFS.910.WHST.3.9	Draw evidence from informational texts to support analysis, reflection, and research.	LA	Research to Build and Present Knowledge	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	3
SC.912.CS-CS.1.1	Analyze data and identify real-world patterns through modeling and simulation.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
SC.912.CS-CS.1.2	Formulate, refine, and test scientific hypotheses using models and simulations.	SC	Modeling and Simulation	Computer Science – Communication Systems and Computing	6-12	-

Dam Design

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.912.L.17.11	Evaluate the costs and benefits of renewable and nonrenewable resources, such as water, energy, fossil fuels, wildlife, and forests.	SC	Interdependence	Life Science	6-12	3
SC.912.L.17.12	Discuss the political, social, and environmental consequences of sustainable use of land.	SC	Interdependence	Life Science	6-12	3
SC.912.L.17.13	Discuss the need for adequate monitoring of environmental parameters when making policy decisions.	SC	Interdependence	Life Science	6-12	3
SC.912.L.17.15	Discuss the effects of technology on environmental quality.	SC	Interdependence	Life Science	6-12	2
SC.912.L.17.20	Predict the impact of individuals on environmental systems and examine how human lifestyles affect sustainability.	SC	Interdependence	Life Science	6-12	3
SC.912.L.17.18	Describe how human population size and resource use relate to environmental quality	SC	Interdependence	Life Science	6-12	2
SC.912.N.4.2	Weigh the merits of alternative strategies for solving a specific societal problem by comparing a number of different costs and benefits, such as human, economic, and environmental.	SC	Science and Society	Nature of Science	6-12	3
LAFS.1112.RST.3.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.	LA	Integration of Knowledge and Ideas	Reading Standards for Literacy in Science and Technical Subjects 6-12	6-12	3
LAFS.1112.RST.3.9	Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.	LA	Reading Standards for Literacy in Science and Technical Subjects 6-12	Reading Standards for Literacy in Science and Technical Subjects 6-12	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.W.1.2	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	LA	Text Types and Purposes	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2
LAFS.1112.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grades 11–12 Reading standards to literature (e.g., “Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics”). b. Apply grades 11–12 Reading standards to literary nonfiction (e.g., “Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning [e.g., in U.S. Supreme Court Case majority opinions and dissents] and the premises, purposes, and arguments in works of public advocacy [e.g., The Federalist, presidential addresses]”).	LA	Research to Build and Present Knowledge	Writing	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.WHST.1.1	Write arguments focused on *discipline-specific content.* a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from or supports the argument presented.	LA	Text Types and Purposes	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	4
LAFS.1112.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.WHST.3.9	Draw evidence from informational texts to support analysis, reflection, and research.	LA	Research to Build and Present Knowledge	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	3

Gone Fishing

Wildlife Management

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4
MAFS.K12.MP.4.1	**Model with mathematics.** Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.	MA	Model with Mathematics	Mathematics Practice	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.6.N.1.1	Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-12	3
SC.6.N.1.4	Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.	SC	The Practice of Science	Nature of Science	6-12	3
SC.6.N.1.5	Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.	SC	The Practice of Science	Nature of Science	6-12	2
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-12	4
MAFS.6.EE.3.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.*	MA	Represent and analyze quantitative relationships between dependent and independent variables.	Expressions and Equations	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.6.SP.1.1	Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. *For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.*	MA	Develop Understanding of Statistical Variability1	Statistics and Probability	6-12	1
MAFS.6.SP.2.5	Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations. b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	MA	Summarize and Describe Distributions	Statistics and Probability	6-12	3
SC.68.CS-CS.2.1	Create, modify, and use a database (e.g., define field formats, adding new records, manipulate data) to analyze data and propose solutions for a task/problem, individually and collaboratively.	SC	Problem Solving and Algorithms	Computer Science – Communication Systems and Computing	6-12	-
SC.68.CS-CP.3.3	Create an artifact (independently and collaboratively) that answers a research question and communicates results and conclusions.	SC	Programming Applications	Computer Science – Communication Systems and Computing	6-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-12	4
SC.7.N.1.1	Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-12	3
SC.7.N.1.3	Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation.	SC	The Practice of Science	Nature of Science	6-12	2
SC.7.N.1.4	Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment.	SC	The Practice of Science	Nature of Science	6-12	2
SC.7.N.1.6	Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based.	SC	The Practice of Science	Nature of Science	6-12	2
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.7.SP.1.2	Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*	MA	Use random sampling to draw inferences about a population	Statistics and Probability	6-12	3
SC.8.N.1.1	Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	SC	The Practice of Science	Nature of Science	6-12	3
SC.8.N.1.3	Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim.	SC	The Practice of Science	Nature of Science	6-12	2
SC.8.N.1.4	Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data.	SC	The Practice of Science	Nature of Science	6-12	3
SC.8.N.1.6	Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.	SC	The Practice of Science	Nature of Science	6-12	2
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
MAFS.8.SP.1.4	Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?*	MA	Investigate patterns of association in bivariate data.	Statistics and Probability	6-12	3
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4
LAFS.910.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4
SC.912.CS-CP.1.3	Analyze and manipulate data collected by a variety of data collection techniques to support a hypothesis.	SC	Data Analysis	Computer Science – Personal, Community, Global and Ethical Impact	6-12	-

Gone Fishing

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.912.N.1.1	Define a problem based on a specific body of knowledge, for example: biology, chemistry, physics, and earth/space science, and do the following: 1. **Pose questions about the natural world,** (Articulate the purpose of the investigation and identify the relevant scientific concepts). 2. **Conduct systematic observations,** (Write procedures that are clear and replicable. Identify observables and examine relationships between test (independent) variable and outcome (dependent) variable. Employ appropriate methods for accurate and consistent observations; conduct and record measurements at appropriate levels of precision. Follow safety guidelines). 3. **Examine books and other sources of information to see what is already known,** 4. **Review what is known in light of empirical evidence,** (Examine whether available empirical evidence can be interpreted in terms of existing knowledge and models, and if not, modify or develop new models). 5. **Plan investigations,** (Design and evaluate a scientific investigation).	SC	The Practice of Science	Nature of Science	6-12	3
SC.912.N.1.7	Recognize the role of creativity in constructing scientific questions, methods and explanations.	SC	The Practice of Science	Nature of Science	6-12	1
MAFS.912.S-IC.2.4	Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.	MA	Make inferences and justify conclusions from sample surveys, experiments, and observational studies	Statistics & Probability: Making Inferences & Justifying Conclusions	6-12	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2
LAFS.1112.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4

Kelp Help

Responsible Action and Service

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.R.1.2	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.	LA	Key Ideas and Details	Reading	3-5	2
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	3-5	2
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	3-5	4
LAFS.K12.	Draw evidence from literary or informational texts to support analysis, reflection, and research.	LA	Research to Build and Present Knowledge	Writing	3-5	3
SC.3.L.14.1	Describe structures in plants and their roles in food production, support, water and nutrient transport, and reproduction.	SC	Organization and Development of Living Organisms	Life Science	3-5	2
LAFS.3.W.3.7	Conduct short research projects that build knowledge about a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	4
SC.35.CS-CS.3.2	Create an artifact (independently and collaboratively) that answers a research question clearly communicating thoughts and ideas.	SC	Digital Tools	Computer Science – Communication Systems and Computing	3-5	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.35.CS-CP.1.3	Identify, research, and collect a data set on a topic, issue, problem, or question using age-appropriate technologies.	SC	Data Analysis	Computer Science – Communication Systems and Computing	3-5	-
LAFS.4.RI.1.2	Determine the main idea of a text and explain how it is supported by key details; summarize the text.	LA	Key Ideas and Details	Reading Standards for Informational Text	3-5	2
LAFS.4.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within categories of information using words and phrases (e.g., *another, for example, also, because*). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	LA	Text Types and Purposes	Writing	3-5	2
LAFS.4.W.3.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	4

Kelp Help

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.4.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 4 Reading standards to literature (e.g., "Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions]."). b. Apply grade 4 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").	LA	Research to Build and Present Knowledge	Writing	3-5	3
SC.5.L.17.1	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	SC	Interdependence	Life Science	3-5	2
LAFS.5.W.1.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	LA	Text Types and Purposes	Writing	3-5	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.W.3.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	LA	Research to Build and Present Knowledge	Writing	3-5	2
LAFS.5.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 5 Reading standards to literature (e.g., "Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]"). b. Apply grade 5 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]").	LA	Research to Build and Present Knowledge	Writing	3-5	3

Kelp Help

Dragonfly Pond

Responsible Action and Service

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.1.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	LA	Comprehension and Collaboration	Speaking and Listening	3-8	2
LAFS.K12.W.1.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	LA	Text Types and Purposes	Writing	3-8	2
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3
SC.3.N.3.3	Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.3.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 *topics and texts*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion.	LA	Comprehension and Collaboration	Speaking and Listening	3-8	3
LAFS.3.W.2.4	With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose.	LA	Production and Distribution of Writing	Writing	3-8	3
SC.35.CS-CS.1.2	Describe how models and simulations can be used to solve real-world issues in science and engineering.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-
SC.35.CS-CS.1.4	Create a simple model of a system (e.g., flower or solar system) and explain what the model shows and does not show.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.4.L.17.4	Recognize ways plants and animals, including humans, can impact the environment.	SC	Interdependence	Life Science	3-8	3
LAFS.4.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade *4 topics and texts*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.	LA	Comprehension and Collaboration	Speaking and Listening	3-8	3
LAFS.4.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3
SS.4.C.2.2	Identify ways citizens work together to influence government and help solve community and state problems.	SS	Civics and Political Participation	Civics and Government	3-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.5.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 5 topics and texts*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.	LA	Comprehension and Collaboration	Speaking and Listening	3-8	3
LAFS.5.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3
SC.6.N.3.4	Identify the role of models in the context of the sixth grade science benchmarks.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2

Dragonfly Pond

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.6.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	LA	Comprehension and Collaboration	Speaking and Listening	3-8	3
LAFS.6.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	2
SC.68.CS-CS.1.2	Create or modify and use a simulation to analyze and illustrate a concept in depth (i.e., use a simulation to illustrate a genetic variation), individually and collaboratively.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-
SC.68.CS-CS.1.3	Evaluate what kinds of real-world problems can be solved using modeling and simulation.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	3-8	-
LAFS.68.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	3-8	3
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	SC	Earth Structures	Earth and Space Science	3-8	2
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	3-8	3
SC.7.N.3.2	Identify the benefits and limitations of the use of scientific models.	SC	The Role of Theories, Laws, Hypotheses, and Models	Nature of Science	3-8	2

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.7.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.	LA	Comprehension and Collaboration	Speaking and Listening	3-8	3
LAFS.7.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3
SS.7.C.4.2	Recognize government and citizen participation in international organizations.	SS	Demonstrate an understanding of contemporary issues in world affairs, and evaluate the role and impact of United States foreign policy.	Civics and Government	3-8	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.8.N.4.1	Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels.	SC	Science and Society	Nature of Science	3-8	2
LAFS.8.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	LA	Comprehension and Collaboration	Speaking and Listening	3-8	3
LAFS.8.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	3-8	3

Conservation Messaging — Responsible Action and Service

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-12	3
LAFS.K12.W.2.5	Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.	LA	Production and Distribution of Writing	Writing	6-12	2
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2
LAFS.6.SL.2.5	Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	2
LAFS.6.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-12	2
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-12	4
LAFS.68.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	6-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing Standards for Literacy in History/ Social Studies, Science and Technical Subjects	6-12	4
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	SC	Interdependence	Life Science	3-8	3
LAFS.7.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-12	3
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-12	2
SS.7.C.2.14	Conduct a service project to further the public good.	SS	Evaluate the roles, rights, and responsibilities of United States citizens and determine methods of active participation in society, government, and the political system.	Civics and Government	6-12	-

Conservation Messaging

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.8.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	6-12	3
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-12	4
LAFS.910.SL.2.5	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	3
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4
LAFS.910.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science and Technical Subjects	6-12	3
LAFS.910.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4

Conservation Messaging

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SC.912.CS-CC.1.5	Communicate and publish key ideas and details to a variety of audiences using digital tools and media-rich resources.	SC	Communication and Collaboration	Computer Science – Communication and Collaboration	6-12	-
SC.912.L.17.1	Discuss the characteristics of populations, such as number of individuals, age structure, density, and pattern of distribution.	SC	Interdependence	Life Science	6-12	2
SC.912.L.17.5	Analyze how population size is determined by births, deaths, immigration, emigration, and limiting factors (biotic and abiotic) that determine carrying capacity.	SC	Interdependence	Life Science	6-12	3
SC.912.L.17.8	Recognize the consequences of the losses of biodiversity due to catastrophic events, climate changes, human activity, and the introduction of invasive, non-native species.	SC	Interdependence	Life Science	6-12	3
SC.912.L.17.13	Discuss the need for adequate monitoring of environmental parameters when making policy decisions.	SC	Interdependence	Life Science	6-12	3
SC.912.L.17.16	Discuss the large-scale environmental impacts resulting from human activity, including waste spills, oil spills, runoff, greenhouse gases, ozone depletion, and surface and groundwater pollution.	SC	Interdependence	Life Science	6-12	3
SS.912.C.2.5	Conduct a service project to further the public good.	SS	Evaluate the roles, rights, and responsibilities of United States citizens and determine methods of active participation in society, government, and the political system.	Civics and Government	6-12	-

Conservation Messaging

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.SL.2.5	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	6-12	2
LAFS.1112.W.2.5	Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.	LA	Production and Distribution of Writing	Writing	6-12	3
LAFS.1112.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2
LAFS.1112.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science and Technical Subjects	6-12	3
LAFS.1112.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	6-12	4

Conservation Messaging

Living Research: Aquatic Heroes and Heroines

Responsible Action and Service

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.SL.2.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	9-12	2
LAFS.K12.SL.2.5	Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	9-12	2
LAFS.K12.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	9-12	3
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build Knowledge	Writing	9-12	2
LAFS.910.SL.2.4	Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	9-12	3
LAFS.910.SL.2.5	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	9-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	9-12	4
LAFS.910.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	9-12	3
LAFS.910.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science and Technical Subjects	9-12	3
LAFS.910.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	9-12	4
SC.912.CS-PC.3.3	Conduct research using peer reviewed articles, newspapers, magazine articles, and online books.	SC	Evaluation of Digital Information Resources	Computer Science – Communication Systems and Computing	9-12	-

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.SL.2.4	Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	9-12	3
LAFS.1112.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	9-12	2
LAFS.1112.W.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing	9-12	3
LAFS.1112.SL.2.5	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	LA	Presentation of Knowledge and Ideas	Speaking and Listening	9-12	2
LAFS.1112.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	LA	Production and Distribution of Writing	Writing Standards for Literacy in History/Social Studies, Science and Technical Subjects	9-12	3

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.1112.WHST.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects	Writing	9-12	4

Working for Wildlife

Responsible Action and Service

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
LAFS.K12.W.3.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	LA	Research to Build Knowledge	Writing	6-12	2
LAFS.6.W.3.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	LA	Research to Build Knowledge	Writing	6-12	4
SC.68.CS-CS.1.2	Create or modify and use a simulation to analyze and illustrate a concept in depth (i.e., use a simulation to illustrate a genetic variation), individually and collaboratively.	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
SC.68.CS-CS.1.4	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).	SC	Modeling and Simulations	Computer Science – Communication Systems and Computing	6-12	-
LAFS.7.W.3.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	LA	Research to Build Knowledge	Writing	6-12	2
LAFS.8.W.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	LA	Research to Build Knowledge	Writing	6-12	4

Benchmark	Description	Subject	Idea/Cluster/ Standard	Body Of Knowledge/ Strand/ Domain	Target Grades	Level of Complexity
SS.8.FL.1.1	Explain that careers are based on working at jobs in the same occupation or profession for many years. Describe the different types of education and training required by various careers.	SS	Earning Income	Financial Literacy	6-12	-
SS.8.FL.1.2	Identify the many decisions people must make over a lifetime about their education, jobs, and careers that affect their incomes and job opportunities.	SS	Earning Income	Financial Literacy	6-12	-
LAFS.910.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	4
SS.912.FL.1.1	Discuss that people choose jobs or careers for which they are qualified based on non-income factors, such as job satisfaction, independence, risk, family, or location.	SS	Earning Income	Financial Literacy	6-12	-
LAFS.1112.W.3.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	LA	Research to Build and Present Knowledge	Writing	6-12	2