

BIOME DIORAMA

As we begin our exciting structured inquiry into biomes, here are some guiding questions:

- *What is a biome?*
- *How can we do in-depth, quality research on biomes?*
- *What are the most important things to know about each biome?*
- *How can we differentiate one biome from another?*
- *How can we creatively share our learning about biomes with others?*



For this assignment, you will work with a partner to do the following in order...

- (1.) Choose a biome to **research in-depth** using multiple sources (*books, magazines, internet sources, experts, observations, etc.*).
- (2.) Complete a **diorama booklet** (with bibliography) to provide an overview of your research.
- (3.) Design and create a **3D diorama** that faithfully represents key features of your biome.
- (4.) Give a **presentation** to the class to teach others about your biome and showcase your diorama.

DIORAMA BOOKLETS: You will be provided with a “diorama booklet” for you to complete with your partner. This booklet will guide your research and provide a template for key information to investigate.

DIORAMA BOXES: You can use any kind of container for your diorama display. In our class, each partner group will be provided with a wooden box with a plexiglass window. If you choose to do this project on your own, you will need to supply your own container.

DIORAMA DESIGN: In class we will look at examples of dioramas online and discuss techniques for creating “realistic” diorama features.

ACCURACY: Everything in your diorama should help to accurately represent your biome in order to demonstrate your understanding and teach others. (*So don't put a polar bear in your desert biome just because you like polar bears!*) As well, for accuracy, you should make an effort to create things “to scale”—try to make the sizes of items in your diorama appropriate in relation to one another.

RESOURCEFULNESS: You do NOT need to buy anything to create an excellent diorama. Your diorama box is provided free, and there are ample paints, papers, recyclables, and naturally found items around our school grounds that provide all you need. You are encouraged to be resourceful by thinking of *free* and *innovative ways* you can repurpose everyday items to create the features of your diorama. Consider collecting rocks, twigs, dried foliage, magazine images, fabric scraps, etc. You may draw or print photos of animals for your biome and position them on cardboard backing to make them stand out.

ASSESSMENT: Your work will be scored out of 40. Please review the attached rubric for more details about the scoring criteria for this assignment.

BIOME PRESENTATION

Scientists need to be able to effectively communicate their research. Prepare a presentation to teach the class about your chosen biome and showcase your diorama. The total time of your presentation should be **3-5 minutes** plus 3 more minutes for answering audience questions.

PRESENTATION ORGANIZATION: Your presentation should be organized as follows...

- **1. INTRODUCTION**
 - Begin with an attention-getting **opening line** (a question or an interesting fact).
 - Clearly state **which biome you chose** to research, and **why** you chose it.
- **2. KEY FEATURES**
 - What are the **key features** of this biome and **how did you show this** in your diorama?
 - What are some **interesting facts** about this biome? *(Be sure to cover location, climate (temperature and precipitation), soil, canopy, flora and fauna.)*
- **3. THE CREATIVE PROCESS**
 - **How** did you create your biome diorama? *(What steps did you take?)*
 - What **materials** did you use?
 - **Where** did you get your ideas?
- **4. SUCCESSES & CHALLENGES:**
 - What are you **proud** of about your project? *(Be specific)*
 - What **challenges** did you face in creating this diorama, and how did you **overcome** them?
 - What would you **do differently** next time?
- **5. THANK YOU & Q./A.**
 - **Thank** your audience.
 - Take time to **invite and answer questions** about your research and diorama project.

SHARED SPEAKING TIME: If your biome project was created with a partner, you should share about equal speaking time. If you did your diorama project solo, remember that you are still required to cover all the same information.

SCRIPTS & CUE CARDS: It is recommended (but not required) that you write out a script to help organize your thinking. You may use a script to prompt you during your presentation; however, please do not simply *read* your script—try to look up, be an *engaging* speaker, and demonstrate that you are an expert on your biome! Instead of a full script, you may want to just put a few notes onto cue cards to help you. *(We will also have these presentation headings listed on the board to help prompt you.)*

SCORING: This assignment is out of possible score of 10. You will be assessed on the following:

CONTENT: *Quality and depth of information shared; overall educational value for the audience (/4)*

ORGANIZATION & PREPARATION: *Clarity and flow of information; preparedness (/4)*

PRESENTATION SKILLS: *Energy, engagement, and speaking skills (/2)*

Please review example script template below and the attached rubric for more details about the scoring criteria for this presentation assignment.

- EXAMPLE OF A BIOME PRESENTATION -

1. INTRODUCTION *(Partner A speaks):*

Did you know that _____ *(interesting fact about the biome)* _____? We chose to research the _____ *(name of biome)* _____ for three reasons: (1.) _____, (2.) _____, and (3.) _____. Here is the diorama we created. My partner will walk around the room now to show it to you up close, while I start to describe some of the key features of this biome and our diorama.

2. KEY FEATURES *(Partner B speaks):*

The _____ biome is located in _____. The climate can be described as _____. The temperature typically ranges from _____ to _____, and the average rainfall is _____. The soil is _____ and the plants are typically _____. Some of the animal life you would find in this biome include _____. One animal that is particularly well adapted to this biome is the _____ because it has this unique feature of _____ which helps it to _____. When you look at our diorama, you can see that we have included _____. Another interesting feature of our diorama is _____.

3. THE CREATIVE PROCESS *(Partner A speaks):*

In order to create this diorama, we took the following steps in order. First, we _____. Secondly, we _____. Thirdly, we _____. Then, we _____. And finally, we _____. We made use of the following materials: _____. We got a lot of inspiration for creating this diorama from various sources including Ms. Poirier's examples, photos from the internet, pictures in books, and by talking things over together. One of our best ideas we got from _____.

4. SUCCESSES & CHALLENGES *(Partner B speaks):*

There are a lot of aspects we are proud of about our work in this project. Specifically, we are proud of (1.) _____ because _____, (2.) _____ because _____, and (3.) _____ because _____. We also faced some challenges in creating this diorama. For example, it was really hard to _____, but we overcame this challenge when we got the idea to _____. Another challenge we faced was _____. However, we overcame this challenge by _____. Overall, we are really happy with our project; yet, if we had the opportunity to do another biome diorama, there are two things we would do differently next time. First of all, we would _____. Secondly, we would _____.

5. THANK YOU & Q./A. *(Both partners answer questions):*

Thank you very much for exploring the _____ biome with us today. We now invite you to ask questions about this biome and our diorama.

BIOME PRESENTATION

	Not Yet Meeting Expectations	Approaching Expectations	Meeting Expectations	Exceeding Expectations
<p style="text-align: center;">Content</p> <p style="text-align: center;"><i>Quality and depth of information shared; overall educational value for the audience</i></p> <p style="text-align: center; font-size: 1.5em;">/4</p>	<ul style="list-style-type: none"> - Ideas are not well developed - Lots of biome information is missing - Few explanations and details - Unable to answer questions meaningfully 	<ul style="list-style-type: none"> - Ideas are minimally developed - Some biome information is missing - Some explanations and details - Able to answer some questions 	<ul style="list-style-type: none"> - Good development of ideas - Includes most key biome information - Good explanations and details - Able to answer most questions 	<ul style="list-style-type: none"> - Excellent development of ideas - Excellent coverage of all key biome information - Excellent explanations and details - Able to answer most questions meaningfully with confidence
<p style="text-align: center;">Organization & Preparation</p> <p style="text-align: center;"><i>Clarity and flow of information; preparedness</i></p> <p style="text-align: center; font-size: 1.5em;">/4</p>	<ul style="list-style-type: none"> - Disorganized information and/or presentation materials - Almost no evidence of practice 	<ul style="list-style-type: none"> - Loosely organized information and/or presentation materials - Minimal evidence of practice 	<ul style="list-style-type: none"> - Well-organized information and presentation materials; good flow - Good evidence of practice 	<ul style="list-style-type: none"> - Highly organized information and presentation materials; excellent, natural flow - Excellent evidence of practice
<p style="text-align: center;">Presentation Skills</p> <p style="text-align: center;"><i>Energy, engagement, and speaking skills</i></p> <p style="text-align: center; font-size: 1.5em;">/2</p>	<ul style="list-style-type: none"> - Low energy - Difficult to hear - Appears disinterested - Inappropriate pacing of information (too quick or too slow) 	<ul style="list-style-type: none"> - Some energy - Minimal volume - Somewhat engaging - Fair pacing of information 	<ul style="list-style-type: none"> - Good energy - Appropriate volume - Engaging - Good pacing of information 	<ul style="list-style-type: none"> - Excellent enthusiasm and energy - Appropriate volume; natural communication style - Highly engaging - Excellent pacing of information
TOTAL SCORE:				/10

NAME(S): _____ DATE: _____

BIOME DIORAMA

	Not Yet Meeting Expectations	Approaching Expectations	Meeting Expectations	Exceeding Expectations
<p>Content</p> <p><i>Quality, accuracy, and depth of research shared; overall educational value for viewers</i></p> <p>/20</p>	<ul style="list-style-type: none"> - Lots of biome booklet information is missing - Few details and examples - Many inaccuracies; lack of understanding <p><i>(0-4 points)</i></p>	<ul style="list-style-type: none"> - Some biome booklet information is missing - Some details and examples - Some understanding, but also a few inaccuracies <p><i>(5-10 points)</i></p>	<ul style="list-style-type: none"> - Includes most key biome booklet information - Good details and examples - Good understanding; mostly accurate information <p><i>(10-15 points)</i></p>	<ul style="list-style-type: none"> - Includes all key biome booklet information - Excellent details and examples - Evidence of in-depth research - Excellent understanding; accurate information <p><i>(15-20 points)</i></p>
<p>Organization</p> <p><i>Following of instructions, attention to detail, and neatness</i></p> <p>/10</p>	<ul style="list-style-type: none"> - Disorganized information and display - Did not follow numerous directions - Missing bibliography information <p><i>(0-1 point)</i></p>	<ul style="list-style-type: none"> - Loosely organized information and display - Followed some directions and ignored others - Some bibliography information included <p><i>(2-4 points)</i></p>	<ul style="list-style-type: none"> - Well-organized information and display - Followed most or all directions - Included a complete bibliography with at least 3 sources <p><i>(5-8 points)</i></p>	<ul style="list-style-type: none"> - Highly organized and neatly presented information and display - Followed all directions - Showed exceptional attention to detail - Included a complete bibliography with 4+ sources <p><i>(8-10 points)</i></p>
<p>Creativity, Resourcefulness & Overall Effort</p> <p><i>Aesthetic appeal; innovation in design and problem solving</i></p> <p>/10</p>	<ul style="list-style-type: none"> - Display does not meet the criteria - No evidence of planning, and/or lots of "short cuts" taken - Almost no evidence of effort <p><i>(0-1 point)</i></p>	<ul style="list-style-type: none"> - Display meets minimal criteria - Some evidence of planning, but lots of "short cuts" taken - Some evidence of effort <p><i>(2-4 points)</i></p>	<ul style="list-style-type: none"> - Good display - Good evidence of planning, creativity and innovation - Good overall effort <p><i>(5-8 points)</i></p>	<ul style="list-style-type: none"> - Exceptional display (highly attractive, detailed and interesting) - Excellent evidence of planning, creativity and innovation - Excellent overall effort <p><i>(8-10 points)</i></p>
<p>TOTAL SCORE:</p>				<p>/40</p>

NAME(S): _____ DATE: _____

CREATE YOUR OWN QUIZ

Topic: biomes

Create a 10-question “multiple choice” and “true or false” quiz to demonstrate your knowledge gained during our unit of study on biomes. Make sure your questions are logically written and answerable, but also challenging. Your work on this assignment demonstrates both your depth of understanding of biomes and your critical thinking skills.

You must also include a correct “Answer Key”. (*Use this handout, or write or type your own quiz—but please make sure it is neat and easy to read.*) Have fun!

(1.)

Circle the best answer...

True

False

(2.)

Circle the best answer...

(a.) _____

(c.) _____

(b.) _____

(d.) _____

(3.)

Circle the best answer...

(a.) _____ (c.) _____
(b.) _____ (d.) _____

(4.)

Circle the best answer...

(a.) _____ (c.) _____
(b.) _____ (d.) _____

(5.)

Circle the best answer...

(a.) _____ (c.) _____
(b.) _____ (d.) _____

(6.)

Circle the best answer...

(a.) _____ (c.) _____
(b.) _____ (d.) _____

(7.)

Circle the best answer...

True

False

(8.)

Circle the best answer...

(a.) _____

(c.) _____

(b.) _____

(d.) _____

(9.)

Circle the best answer...

(a.) _____

(c.) _____

(b.) _____

(d.) _____

(10.)

Circle the best answer...

True

False



Quiz Answer Key:

Indicate the correct answer to each question by writing the CORRECT CORROSPONDING LETTER or either "True" or "False".

(1.) _____

(2.) _____

(3.) _____

(4.) _____

(5.) _____

(6.) _____

(7.) _____

(8.) _____

(9.) _____

(10.) _____