



EOSD MATHEMATICS SUMMER LEARNING ACTIVITIES

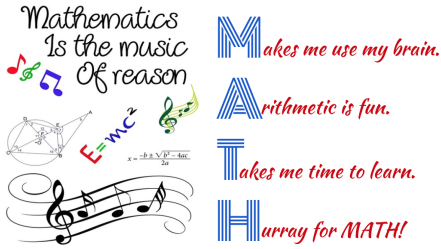


Directions for Summer Choice Board:

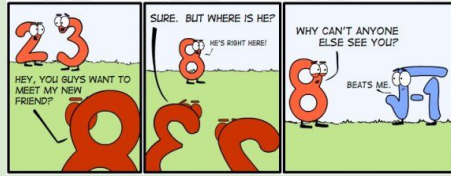
	<u>Elementary (Grades K-5)</u>	<u>Secondary (Grades 6-12)</u>
1.	You must complete Tic-Tac-Toe in two different ways/ directions. Note: a Minimum of 5 tiles from the Activity Board must be completed.	You must complete Tic-Tac-Toe in three different ways/ directions. Note: a Minimum of 6 tiles from the Activity Board must be completed.
2.	All students must complete the section highlighted in blue.	
3.	Students must choose from the list of topics assigned to their Rising Grade Level (Ex. Current Grade 6 is Rising Grade 7)	
4.	No topic can be showcased more than once.	
5.	You can complete the work in one of two ways: <ol style="list-style-type: none"> a. Create a folder (Paper folder or binder) that contains all activities b. Complete a Google Slides Presentation with one or more slides for each activity (Go to https://bit.ly/3wvpdqh for a Template) 	
6.	You can submit your work in any of the following ways: <ol style="list-style-type: none"> a. Bring your paper folder/ binder to school in September, and submit directly to your teacher b. Submit your Google Slides Presentation via Schoology <ol style="list-style-type: none"> i. For Secondary Courses Codes: Go to https://bit.ly/3wv3mze c. Share your Google Slides Presentation directly with your teacher in September 	
7.	Assignment Expectations: <ol style="list-style-type: none"> a. Either method (above) will require the following information: <ol style="list-style-type: none"> i. Name and Grade ii. Topic being showcased iii. Brief Description of the Activity iv. Extra Points if the NJSL Standard is identified and explained! 	

Please choose from the Activities Below:

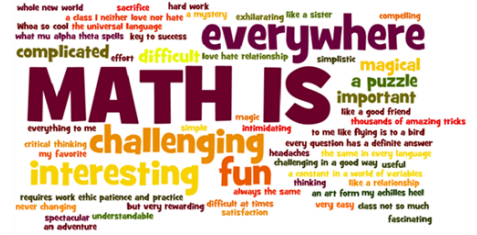
Create a Song or Poem



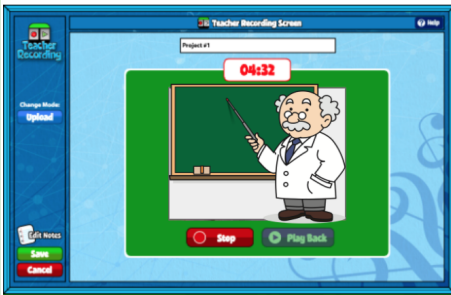
Create a Comic Strip



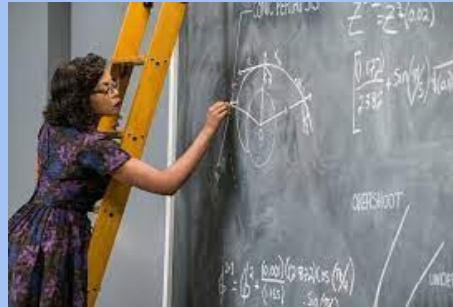
Create Word Art or a Word Cloud



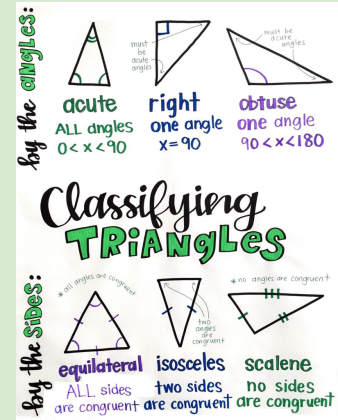
Create a Teaching Video



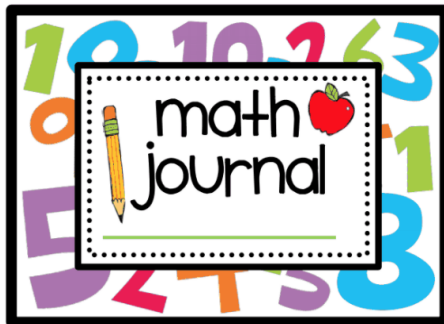
Perform the Marshmallow Challenge OR Watch a Math Movie and Write a Summary



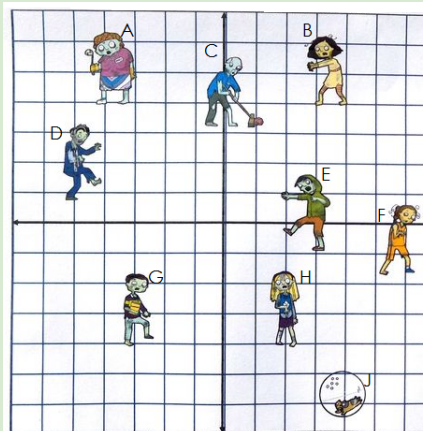
Create an Anchor Chart or Graphic Organizer



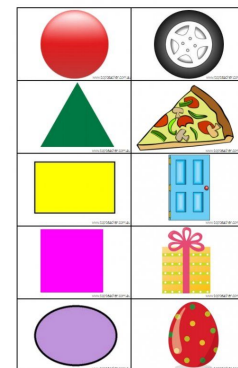
Create a Math Journal Entry



Create a Game or Puzzle



Create a Collage of Images that Connect to the Real-World



Scoring Rubric for EACH Topic:

For Teacher Use and Student Review

	3	2	1	0
Explanation of Topic	<p>The student shows full understanding of the topic as evidenced by the activity creation/presentation.</p> <p>Main points are very clear, organized, and detailed.</p>	<p>The student shows some understanding of the topic as evidenced by the activity creation/presentation.</p> <p>Main points are somewhat clear and organized, but could use more detail.</p>	<p>The student shows very little understanding of the topic as evidenced by the activity creation/presentation.</p> <p>Activity documents and/or presentation lacks main points, organization, and related details.</p>	<p>The student shows no evidence of understanding of the topic OR does not complete and/or turn in the activity.</p> <p>Activity documents exhibit no main points or details, OR the activity has not been completed or turned in.</p>
	3	2	1	0
Aesthetics	<p>Activity document is clear, well constructed, accurate and shows attention to detail.</p> <p>Visual aids are very creative, clear, and easy to read.</p>	<p>Activity document shows a general attention to detail and accuracy.</p> <p>Visual aids are reasonably creative, clear, and easy to read.</p>	<p>Activity document may have some errors and show some detail.</p> <p>Visual aids have limited creativity or clarity or are sometimes difficult to read.</p>	<p>Activity document has numerous errors and lacks detail OR the activity has not been completed or turned in.</p> <p>Visual aids demonstrate no creativity or clarity and are often difficult to read, OR the activity has not been completed or turned in.</p>
Total Points			/6	

Note: K-5 students can score up to 30 (5 topics @ 6 points each) points, while 6-12 students can score up to 36 (6 topics @ 6 points each) points!

Activity	Description
Create a Song or Poem	Create a song or a poem that exemplifies the topic you have selected. By reading this poem or singing this song, the listener should be able to understand the topic you have chosen.
Create a Comic Strip	Create a comic strip to showcase your topic! The comic strip can be serious or humorous, but must convey the meaning of your topic. Go to www.makebeliefscomix.com or www.storyboardthat.com to create your comic strip!
Create Word Art or a Word Cloud	Take the definition and/or description of your topic and create word art or a word cloud! You can hand draw this word art/ cloud OR you can use the following sites: www.wordart.com or www.edwordle.net
Create a Teaching Video	Be the teacher!!! Use Tik-Tok, FlipGrid or Instagram to create a video to explain your topic to your “students.” If completing a Google Slides Presentation, embed your video. If creating a folder, make sure to have the link ready to share with your teacher!
Perform the Marshmallow Challenge	Build the tallest free-standing structure in just 18 minutes using no more than 20 sticks of spaghetti, one yard of tape, one yard of string, and one marshmallow. The marshmallow must be on top and cannot be deformed to hold it in place. The structure has to stand firmly on its own; it cannot be propped up, held, or suspended from the ceiling. Go to: https://bit.ly/3pXV54a
Watch a Math Movie and Write a Summary	Watch one of the following movies and write a brief summary. Make sure to identify some key terms that you have encountered in your previous math classes! Go to https://bit.ly/2TzKOiz for a list of Math Movies!
Create an Anchor Chart or Graphic Organizer	Create a colorful/ eye-catching anchor chart to explain your topic, or create a graphic organizer to explain your topic. Make sure to provide a few worked-out examples! Go to https://bit.ly/3guV0ln to view Frayer Model Graphic Organizers.
Create a Math Journal (One- Two week(s))	Grades K-5: Select 2 cities and record the HIGH temperature for each day for 7 days. Create a bar graph to compare the temperatures for the 2 cities. Be sure that your graph includes all the key features (axis labels, key, scale, title). Write a paragraph to summarize your findings. Grades 6-12: Choose two companies to follow in the stock market. Record the starting price of the stocks for 10 days (Mon-Fri for 2 weeks). Create a bar or line graph to depict each company's starting price over the 10 days. Write a brief summary of your findings.
Create a Game or Puzzle	Many games and puzzles require some type of math literacy. Create your own math game or puzzle to reflect one of the topics you selected from the list.
Create a Collage	Using one of the topics you selected, collect pictures from magazines, newspapers, the internet, etc. to create a collage of how your topic connects to the real world.

Choose from the Topics Below (For your upcoming Grade Level)

Elementary Mathematics

Rising Grade 1 <i>(Current Kindergarten)</i>	Rising Grade 2 <i>(Current Grade 1)</i>
<ul style="list-style-type: none">• Adding Numbers within 20• Modeling Addition Using Pictures• Subtracting Numbers within 20• Modeling Subtraction Using Pictures• Adding 3 Numbers• Modeling Adding 3 Numbers Using Pictures	<ul style="list-style-type: none">• Place Value: Ones, Tens, Hundreds• Even and Odd Numbers• Addition Facts (#1-20)• Counting Patterns w/ 10s, 100s, and 1,000s• Modeling 3 Digit Numbers
Rising Grade 3 <i>(Current Grade 2)</i>	Rising Grade 4 <i>(Current Grade 3)</i>
<ul style="list-style-type: none">• Multiplication Facts• Modeling Multiplication (Arrays, Number Lines, Bar Models)• Properties of Multiplication (Commutative, Distributive, Associative)• Modeling Division (Equal Groups, Arrays, Bar Models)• Modeling Area of Rectangles	<ul style="list-style-type: none">• Multiplication Facts• Place Value to Compare and Round Numbers• Perimeter and Area of Rectangles• Prime and Composite Numbers• Generating and Analyzing Patterns
Rising Grade 5 <i>(Current Grade 4)</i>	Rising Grade 6 <i>(Current Grade 5)</i>
<ul style="list-style-type: none">• Multiplication Facts• Powers of 10 and Exponents• Volume of 3-D Figures• Writing, Interpreting, and Evaluating Numerical Expressions• Dividing with 2-digit Divisors	<ul style="list-style-type: none">• Divide Multi-digit Whole Numbers• Add, subtract, multiply, and divide decimals• Find the greatest common factors of two whole numbers• Find the least common multiple of two whole numbers• Multiply a fraction or whole number by a fraction• Divide a fraction or whole number by a fraction• Facts about Integers• Ordering Integers• Opposites• Absolute Value

Choose from the Topics Below (For your upcoming Grade Level)

Secondary Mathematics

Rising Grade 7 <i>(Current Grade 6)</i>	Rising Grade 8 <i>(Current Grade 7)</i>
<ul style="list-style-type: none">• Facts about Integers• Ordering Integers• Adding Integers• Subtracting Integers• Multiplying Integers• Dividing Integers• Facts about Rational Numbers• Adding Rational Numbers• Subtracting Rational Numbers	<ul style="list-style-type: none">• Facts about Real Numbers• Rational Numbers• Irrational Numbers• Square Roots and Perfect Squares• Ordering Real Numbers• Powers and Exponents• Writing Expressions• Solving One-Step Equations• Solving Two-Step Equations
Rising Algebra 1 <i>(Current Grade 8)</i>	Rising Geometry <i>(Current Algebra 1)</i>
<ul style="list-style-type: none">• Solving One- and Two-Step Equations• Solving One- and Two-Step Inequalities• Solving Multi-Step Equations• Function vs. Not a Function• Linear vs. Nonlinear• Function Notation• Evaluating a Function• Graphs of Linear Functions• Slope of a Line• Slope-Intercept Form	<ul style="list-style-type: none">• Classifying and Naming Angles• Classifying and Naming Lines, Segments, and Rays• Classifying Angle Pairs• Classifying and Naming Polygons• Similar Polygons• Classifying Triangles• Transformations of Polygons• Pythagorean Theorem• Distance Formula
Rising Algebra 2 <i>(Current Geometry)</i>	Rising Pre-Calculus <i>(Current Algebra 2)</i>
<ul style="list-style-type: none">• Parent Functions• Quadratic Functions in Vertex Form• Quadratic Functions in Standard Form• Quadratic Functions in Factored Form• Finding the Vertex of a Quadratic Function• Finding Solutions of a Quadratic Function on a Graph• Finding Solutions of a Quadratic Function Using The Quadratic Formula• Finding Solutions of a Quadratic Function by Completing the Square• Finding Solutions of a Quadratic Function by Factoring Quadratic Functions	<ul style="list-style-type: none">• Finding a Missing Angle Measure Using Sine, Cosine and Tangent• Finding a Missing Side Length Using Sine, Cosine and Tangent• Graphing Sine and Cosine Functions• 45-45-90 Triangles• 30-60-90 Triangles• Pythagorean Theorem• Simplifying Radicals• Converting between Radians and Degrees• Drawing Terminal and Coterminal Angles• Solving Rational Equations