

S. P. ARNETT MIDDLE SCHOOL  
COMMON CORE ALIGNED LESSON PLAN TEMPLATE

TEACHER: Ashleigh Richardson

SUBJECT: Mathematics

DATE: November 13-17 2023

GRADE: 8<sup>th</sup>

CCSS: Common Core Learning Standard(s) Addressed:

**MATH**

8.G.A.1-Verify experimentally the properties of rotations, reflections, and translations:

8.G.A.1.a-Lines are taken to lines, and line segments to line segments of the same length.

8.G.A.1.b-Angles are taken to angles of the same measure.

8.G.A.1.c-Parallel lines are taken to parallel lines.

8.G.A.2-Explain that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them. (Rotations are only about the origin and reflections are only over the y-axis and x-axis in Grade 8.)

8.G.A.3-Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. (Rotations are only about the origin, dilations only use the origin as the center of dilation, and reflections are only over the y-axis and x-axis in Grade 8.)

8.G.A.5-Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.

8.G.B.6-Explain a proof of the Pythagorean Theorem and its converse using the area of squares.

8.G.B.7-Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.

8.G.B.8-Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.

**ALGEBRA 1**

HSS-ID.B.5-Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.

HSS-ID.B.6-Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.

HSS-ID.B.6.a-Fit a function to the data; use functions fitted to data to solve problems in the context of the data.

Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.

HSS-ID.B.6.b-Informally assess the fit of a function by plotting and analyzing residuals.

HSS-ID.B.6.c-Fit a linear function for a scatter plot that suggests a linear association.

HSS-ID.C.7-Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.

HSS-ID.C.8-Compute (using technology) and interpret the correlation coefficient of a linear fit.

HSS-ID.C.9-Distinguish between correlation and causation.

HSA-CED.A.2-Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

HSA-CED.A.3-Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context.

HSA-REI.C.5-Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.

HSA-REI.C.6-Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

HSA-REI.D.10-Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).

HSA-REI.D.12-Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.

*Danielson, 1c*

**Monday 11/13/23**

Algebra I

- Bellringer: Interpret a Two-Way Frequency Table
- We Will: Represent bivariate categorical data by using two-way frequency tables and relative frequency tables.
- Eureka Math<sup>2</sup> Module 2: Lesson 22: Summarizing Bivariate Categorical Data with Two-Way Tables
- I will: Interpret marginal and joint frequencies in context.

Regular Math

- Bellringer: Find Hypotenuse Lengths
- We Will: Learn how to determine which two points are the farthest apart without using any additional tools beyond the diagram.
- Eureka Math<sup>2</sup> Module 2: Lesson 20: Distance in the Coordinate Plane
- I Will: Find the distance between two points in the coordinate plane by using the Pythagorean Theorem.

**Tuesday 11/14/23**

## Algebra I

- Bellringer: Find Percents
- We Will: Analyze data by using a new type of table.
- Eureka Math<sup>2</sup> Module 2: Lesson 23: Bivariate Categorical Data and Conditional Relative Frequency Tables
- Eureka Math<sup>2</sup> Module 2: Lesson 24: Conditional Relative Frequencies and Association
- I Will: Identify trends in bivariate categorical data from two-way relative frequency tables.

## Regular Math

- Bellringer: Find Side Lengths
- We Will: Get better at calculating unknown lengths by using the Pythagorean Theorem in real-world and mathematical problems.
- Eureka Math<sup>2</sup> Module 2: Lesson 21: Applying the Pythagorean Theorem
- I Will: Evaluate square roots.

## Wednesday 11/15/23

### Algebra I

- Bellringer: Problems from Module 2
- We Will: Review as a class information from Eureka Math<sup>2</sup> Module 2
- Review Eureka Math<sup>2</sup> Module 2
- I Will: Take notes, ask questions, prepare for Eureka Math<sup>2</sup> Module 2 Test

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## Thursday 11/16/23

### Algebra I

- Bellringer: Study for Eureka Math<sup>2</sup> Module 2 Test
- We Will: Go over directions and expectations for the Eureka Math<sup>2</sup> Module 2 Test
- Take Eureka Math<sup>2</sup> Module 2 Test
- I Will: Take the Eureka Math<sup>2</sup> Module 2 Test

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## Friday 11/17/23

### Algebra I

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*Danielson, 2c, 3b, 3c,*

Resources/Materials: (What texts, digital resources, & materials will be used for this lesson?)

1. Bellringer PDF
2. Other materials embedded in daily lesson/activity plan

*Danielson, 2c, 3c*

