

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

TEACHER: Ashleigh Richardson

SUBJECT: Mathematics

DATE: December 18-22, 2023

GRADE: 8th

CCSS: Common Core Learning Standard(s) Addressed:

MATH

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.4-Explain that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them. (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.

ALGEBRA 1

A1.A-REI.D.11-Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, piecewise linear (to include absolute value), and exponential functions.

A1.F-IF.B.4-For linear, piecewise linear (to include absolute value), quadratic, and exponential functions that model a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; and end behavior.

A1.F-IF.C.9-Compare properties of two functions (linear, quadratic, piecewise linear [to include absolute value] or exponential) each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).

Danielson, 1c

Monday 12/18/23

Algebra I

- Bellringer: Transform Linear Equations from Point-Slope Form to Slope-Intercept Form
- We Will: Graph piecewise linear functions.
- Eureka Math² Module 3: Lesson 14: Piecewise Linear Functions
- I Will: Write equations of piecewise linear functions from a graph.

Regular Math

- Bellringer: Study for Quiz
- We Will: Review and discuss questions from the Study Guide
- Eureka Math² Module 3: Topic C Quiz
- I Will: Take the Eureka Math² Module 3: Topic C Quiz

Tuesday 12/19/23

Algebra I

- Bellringer: Solve Absolute Value Equations
- We Will: Rewrite equations of functions of the form $f(x) = a|bx - c| + d$ as piecewise linear functions and graph them.
- Eureka Math² Module 3: Lesson 15: The Absolute Value Function
- I Will: Compare graphs of different piecewise linear functions.

Regular Math

- Bellringer: Solve Proportions
- We Will: Use properties of similar figures to find unknown side lengths.
- Eureka Math² Module 3: Lesson 14: Using Similar Figures to Find Unknown Side Lengths
- I Will: conclude that using proportions to find unknown measures can only be used if the figures are similar.

Wednesday 12/20/23

Algebra I

- CHRISTMAS BREAK!!

Regular Math

- CHRISTMAS BREAK!!

Thursday 12/21/23

Algebra I

- CHRISTMAS BREAK!!

Regular Math

- CHRISTMAS BREAK!!

Friday 12/22/23

Algebra I

- CHRISTMAS BREAK!!

Regular Math

- CHRISTMAS BREAK!!

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