

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

TEACHER: Ashleigh Richardson  
DATE: August 28 – September 1, 2023

SUBJECT: Mathematics  
GRADE: 8<sup>th</sup>

CCSS: Common Core Learning Standard(s) Addressed:

**MATH**

8.EE.A.3 – Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. For example, estimate the population of the United States as  $3 \times 10^8$  and the population of the world as  $7 \times 10^9$ , and determine that the world population is more than 20 times larger. 8.EE.A.4 - Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.

8.EE.A.1 – Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example,  $3^2 \times (3^{-3}) = 1/3^3 = 1/27$ .

**ALGEBRA 1**

HSA-CED.A.1 – Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.

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. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.

HSA-CED.A.4 - Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law  $V = IR$  to highlight resistance  $R$ .

HSA-REI.A.1 - Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.

*Danielson, 1c*

**Monday 8/28/23**

Algebra I

- Bellringer: Write algebraic expressions
- Introduce Topic B: Solving Equations and Inequalities in One Variable
- We Will: Solve a problem related to the use of modern printing presses.
- Eureka Math<sup>2</sup> Module 1 Lesson 7: Printing Press
- I Will: Explain how writing an equation is helpful in solving a problem.

Regular Math

- Bellringer: Apply properties of exponents
- We Will: Define  $x^0$  and use it to write equivalent expressions.
- Eureka Math<sup>2</sup> Module 1 Lesson 7: Making sense of the Exponent of 0
- I will: Evaluate powers with an exponent of 0.

**Tuesday 8/29/23**

Algebra I

- Bellringer: Substitute Values to Determine Truth Values
- We Will: Explore solutions to equations and inequalities and how the solutions are represented.
- Eureka Math<sup>2</sup> Module 1: Lesson 8: Solution Sets for Equations and Inequalities in One Variable
- I Will: Describe a solution set in words, in set notation, and on a graph.

Regular Math

- Bellringer: Find the Multiplicative Inverse
- We Will: Explore and develop an understanding of negative exponents.
- Eureka Math<sup>2</sup> Module 1: Lesson 8: Making Sense of Integer Exponents.
- I Will: Write equivalent expressions given an expression of the form  $\frac{x^m}{y^n}$ ...

### Wednesday 8/30/23

#### Algebra I

- Bellringer: Solve One- and Two- Step Equations.
- We Will: Continue to explore how to use properties and operations to solve equations.
- Eureka Math<sup>2</sup> Module 1: Lesson 9: Solving Linear Equations in One Variable
- I will: Use properties and operations to solve equations and justify the solution path.

#### Regular Math

- Bellringer: Write Expressions by Using a Negative Exponent.
- We Will: Write equivalent expressions by using all the properties and definitions of exponents.
- Eureka Math<sup>2</sup> Module 1: Lesson 9: Writing Equivalent Expressions
- I Will: Be able to explain what the characteristics are of a simplified expression involving exponents.

### Thursday 8/31/23

#### Algebra I

- Bellringer: Solve Equations by Inspection
- We Will: Explore some actions that produce equations with solutions sets that are different from the solutions set for the original equation.
- Eureka Math<sup>2</sup> Module 1: Lesson 10: Some Potential Dangers When Solving Equations
- I Will: Explore the effects of squaring, multiplying, and dividing both sides of an equation by a variable expression.

#### Regular Math

- Bellringer: Evaluate Each Expression
- We Will: Add to the strategies we have to evaluate and simplify numerical expressions with exponents.
- Eureka Math<sup>2</sup> Module 1: Lesson 10: Evaluating Numerical Expressions by Using Properties of Exponents
- I Will: Be able to explain the difference between evaluating and simplifying a numerical expression.

### Friday 9/1/23

#### Algebra I

- Bellringer: Solve Multi-Step Equations
- We Will: Create and solve equations for given contexts.
- Eureka Math<sup>2</sup> Module 1: Lesson 11: Writing and Solving Equations in One Variable
- I Will: Visualize connections between a given context and the algebraic equation written to represent it.

#### Regular Math

- Bellringer: Practice Problems 1, 3, & 5 from Module 1: Lesson 10
- We Will: Go over Eureka Math<sup>2</sup> Module 1 Topic B (Lesson 5-10) Study Guide
- Review Eureka Math<sup>2</sup> Module 1 Topic B Study Guide
- I Will: Take Notes, ask questions, and discuss Module 1 Topic B Study Guide

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

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

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

*Danielson, 2c, 3c*