

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

TEACHER: Ashleigh Richardson

SUBJECT: Mathematics

DATE: September 25-29, 2023

GRADE: 8<sup>th</sup>

CCSS: Common Core Learning Standard(s) Addressed:

**MATH**

8.NS.A.1 - Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers, show that the decimal expansion repeats eventually. Convert a decimal expansion that repeats eventually into a rational number by analyzing repeating patterns.

8.NS.A.2 - Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g.,  $\pi^2$ ).

For example, by truncating the decimal expansion of  $\sqrt{2}$ , show that  $\sqrt{2}$  is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations to the hundredths place.

8.EE.A.2 - Use square root and cube root symbols to represent solutions to equations of the form  $x^2 = p$  and  $x^3 = p$ , where  $p$  is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that  $\sqrt{2}$  is irrational.

**ALGEBRA 1**

S-ID.A.2 - Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.

S-ID.A.3 - Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).

A-CED.A.1 - Create equations and inequalities in one variable and use them to solve problems.

Include equations arising from linear, quadratic, and exponential functions.

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

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

*Danielson, 1c*

**Monday 9/25/23**

Algebra I

- Bellringer: Find Range and Interquartile Range
- We Will: Estimate and compare variation in data distributions represented by histograms.
- Eureka Math<sup>2</sup> Module 1: Lesson 22: Estimating Variability in Data Distributions
- I Will: Use the interquartile range to compare the variation in data distributions represented by box plots and dot plots.

Regular Math

- Bellringer: Students guess and check the value of the square root of 2.
- We Will: Find the approximate locations of less familiar numbers by using rational number benchmarks such as perfect squares and cubes.
- Eureka Math<sup>2</sup> Module 1: Lesson 21: Approximating Values of Roots and  $\pi^2$
- I Will: Approximate values of square roots, cube roots, and  $\pi^2$ .

**Tuesday 9/26/23**

Algebra I

- Bellringer: Analyze Distributions with Appropriate Vocabulary
- We Will: Compare two or more data sets by using shape, center, and variability.
- Eureka Math<sup>2</sup> Module 1: Lesson 23: Comparing Distributions of Univariate Data
- I Will: Interpret differences in data distributions in context.

Regular Math

- Bellringer: Students identify the next decimal digit for repeating and nonrepeating decimal forms of numbers.
- We Will: Learn to define two new types of numbers based on how we classified the numbers in problems 1 through 7.
- Eureka Math<sup>2</sup> Module 1: Lesson 22: Familiar and Not So Familiar Numbers
- I Will: Write decimals as fractions to prepare to categorize numbers.

### Wednesday 9/27/23

#### Algebra I

- Bellringer: Study for Test
- We Will: Go over instructions and the Study Guide for the Eureka Math<sup>2</sup> Module 1 Test
- I Will: Take notes and ask question for the Eureka Math<sup>2</sup> Module 1 Test

#### Regular Math

- Bellringer: Evaluate Roots
- We Will: Order irrational numbers.
- Eureka Math<sup>2</sup> Module 1: Lesson 23: Ordering Irrational Numbers
- I Will: Approximate the value of expressions with irrational numbers

### Thursday 9/28/23

#### Algebra I

- Bellringer: Study for Test
- We Will: Go over instructions for the Eureka Math<sup>2</sup> Module 1 Test
- I Will: Take the Eureka Math<sup>2</sup> Module 1 Test

#### Regular Math

- Bellringer: Rational or Irrational
- We Will: Solve equations of the forms  $x^2 = p$  and  $x^3 = p$ , where  $p$  is a rational number and the solutions are real numbers.
- Eureka Math<sup>2</sup> Module 1: Lesson 24: Revisiting Equations with Squares and Cubes
- I Will: Analyze others' work, correct errors, and clarify the meaning of solutions to equations.

### Friday 9/29/23

#### Algebra I

- Bellringer: Study for Test
- We Will: Go over instructions for the Eureka Math<sup>2</sup> Module 1 Test
- I Will: Take the Eureka Math<sup>2</sup> Module 1 Test

#### Regular Math

- Bellringer: Study for Test
- We Will: Go over instructions and the Study Guide for the Eureka Math<sup>2</sup> Module 1 Test
- I Will: Take notes and ask question for the Eureka Math<sup>2</sup> Module 1 Test

*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*