

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

TEACHER: Ashleigh Richardson

SUBJECT: Mathematics

DATE: August 21-25, 2023

GRADE: 8th

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 3×10^8 and the population of the world as 7×10^9 , 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-SSE.A.2 – Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$.

HSA-APR.A.1 – Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

HSA-REI.B.3 – Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

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.

Danielson, 1c

Monday 8/21/23

Algebra I

- Bellringer: Write equivalent expressions
- We Will: Explore how to use addition and subtraction to rewrite polynomial expressions.
- Eureka Math² Module 1: Lesson 4: Adding and Subtracting Polynomial Expressions
- I will: Add and subtract polynomial expressions.

Regular Math

- Bellringer: write numbers in scientific notation
- We Will: Extend the concept of adding/subtracting like terms to adding/subtracting numbers written in scientific notation.
- Eureka Math² Module 1: Lesson 4: Adding and Subtracting Numbers Written in Scientific Notation
- I will: Add and subtract numbers written in scientific notation.

Tuesday 8/22/23

Algebra I

- Bellringer: Apply the distributive property
- We Will: Multiply polynomial expressions.
- Eureka Math² Module 1 Lesson 5: Multiplying Polynomial Expressions
- I Will: Explain the advantages and disadvantages of using the tabular model and the algebraic method.

Regular Math

- Bellringer: Practice Questions M1:L4 #6 & #7
- We Will: Go over and ask questions from the Module 1: Topic A Study Guide
- Eureka Math² Module 1: Topic A Review (Lesson 1-4)
- I will: Ask questions and take notes from the Eureka Math² Module 1: Topic A review.

Wednesday 8/23/23

Algebra I

- Bellringer: Multiply polynomial expressions
- We Will: Continue to practice multiplying polynomial expressions.
- Eureka Math² Module 1 Lesson 6: Polynomial Identities
- I will: Explain the term “identity”.

Regular Math

- Bellringer: Study for Quiz
- We Will: Ask Questions from the Module 1: Topic A Study Guide
- Eureka Math² Module 1: Topic A Quiz (Lesson 1-4)
- I will: Take the Eureka Math² Module 1: Topic A Quiz

Thursday 8/24/23

Algebra I

- Bellringer: Practice Questions 1, 2, 3, & 4 from Module 1 Lesson 6
- We Will: Go over study guide for Eureka Math² Module 1 Topic A (Lesson 1-6) Review
- Eureka Math² Module 1 Topic A Lesson 1-6 Review
- I Will: Take notes, ask questions about Module 1 Topic A Review

Regular Math

- Bellringer: Write expression by using exponents
- Introduce Topic B: Properties and Definitions of Exponents
- We Will: Find a more efficient way to write the product of powers with like bases.
- Eureka Math² Module 1 Lesson 5: Products of Exponential Expressions with Whole-Number Exponents
- I Will: Be able to determine that $x^m \times x^n$ is equal to x^{m+n} .

Friday 8/25/23

Algebra I

- Bellringer: Study for Quiz
- We Will: Take Eureka Math² Module 1 Topic A (Lesson 1-6) Quiz
- Take Eureka Math² Module 1 Topic A Lesson 1-6 Quiz
- I Will: Take notes, ask questions, and complete Module 1 Topic A Quiz

Regular Math

- Bellringer: Expand powers as a product of the bases
- We Will: Watch a video about a student, Vic, and a mustard spot (discuss).
- Eureka Math² Module 1 Lesson 6: More Properties of Exponents
- I Will: Be able to write equivalent expressions for $(x^m)^n$, $(xy)^n$, and $\left(\frac{x}{y}\right)^n$.

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