

**ABRAHAM LINCOLN AMERICAN ACADEMY**

**FIRST QUARTER SYLLABUS**

**TEACHER:** **UCHE STANLEY ONYEKACHI**

**SUBJECT AND GRADE:** **MATH, GRADE 8**

**DATE:** **12<sup>TH</sup> SEPTEMBER 2022 – 11<sup>TH</sup> NOVEMBER 2022**

Topics

Number Systems

Objectives

Scientific Notation

Rational And Irrational Numbers

Absolute Value

Comparing Numbers with and Operations in Scientific Notation

Objectives

Compare Large Numbers in Scientific Notation

Comparing Small Numbers In Scientific Notation

Adding and Subtracting Numbers in Scientific Notation

Using Scientific Notation with Technology

Real Numbers

Objectives

Repeating Decimals to Fractions

Roots

Using Roots to Solve Equations

Real Numbers

Objectives

Compare and Order

Estimation

Properties

Real Number Operations

Number Theory

Objectives

Divisibility Rules

Multiple Representations

Prime and Composite

Ratio, Proportion and Percent

Objectives

Rate of Change  
 Proportions  
 Percent  
 Comparing Two Proportional Relationships

Real World Computations  
 Objectives  
 Operations  
 Real World Problems  
 Multi-Step Problems

Expressions and Equations  
 Objectives  
 Expressions  
 Expressions with Exponents  
 Expressions and Equations  
 Expressions, Equations, and Inequalities

Expressions and Equations  
 Objectives  
 Real World Expressions  
 Simplify  
 Substitution  
 Inequalities

First Quarter Syllabus: Grade 8 Math			
Week	Day	Topic	Learning Objectives: At the end of the lesson, the students should be able to;
<b>Week 1</b> 12/09 – 16/09	Mon	Scientific Notation	Express numbers between zero and one in scientific notation
	Tue	Scientific Notation	Express numbers between zero and one in scientific notation
	Wed	Rational And Irrational Numbers	Identify rational and irrational numbers and describe meanings

	Thu	Introduction to Absolute Value	Identify and explain absolute value
	Fri	Absolute Value	Identify and explain absolute value
<b>Week 2</b> 19/09 – 23/09	Mon	Compare Large Numbers in Scientific Notation	Compare large numbers in scientific notation
	Tue	Comparing Small Numbers In Scientific Notation	Compare small numbers in scientific notation
	Wed	Comparing Large and Small Numbers In Scientific Notation	Compare large and small numbers in scientific notation
	Thu	Adding and Subtracting Numbers in Scientific Notation	Add and subtract numbers in scientific notation
	Fri	Using Scientific Notation with Technology	Use scientific notation with technology
<b>Week 3</b> 26/09 – 30/09	Mon	Repeating Decimals to Fractions	Convert repeating decimals to fractions
	Tue	Repeating Decimals to Fractions	Convert repeating decimals to fractions
	Wed	Roots	Calculate and approximate principal square roots

	Thu	Roots	Calculate and approximate principal square roots
	Fri	Using Roots to Solve Equations	Use roots to solve equations
<b>Week 4</b> 10/03 – 10/07	Mon	Compare and Order	Compare and order numbers in many forms including: fractions, decimals, scientific notation, absolute value, and radicals
	Tue	Estimation	Use estimation for situations using real numbers
	Wed	Activities on comparing and ordering, and estimation	
	Thu	Properties	Apply properties to solve problems with real numbers.
	Fri	Real Number Operations	Simplify numerical expressions with real numbers
<b>Week 5</b> 10/10 – 10/14	Mon	Divisibility Rules	Use divisibility rules to solve problems
	Tue	Multiple Representations	Represent numbers in base ten in other bases (two, five, and eight) and vice versa
	Wed	Fun Activities on Divisibility Rules	Use divisibility rules to solve more problems
	Thu	Prime and Composite	Identify numbers as relatively prime

	Fri	Fun Activities on Prime and Composite	Identify more numbers as relatively prime
<b>Week 6</b> 10/17 – 10/21	Mon	Rate of Change	Describe and use rate of change to solve problems
	Tue	Proportions	Use proportional relationships to find measures of length, weight or mass, and capacity or volume
	Wed	Activities on Proportions and Percent	Solve real world problems involving percent greater than 100, and problems on proportions
	Thu	Comparing Two Proportional Relationships	Compare two proportional relationships
	Fri	Comparing Two Proportional Relationships	Compare two proportional relationships
<b>Week 7</b> 10/24 – 10/28	Mon	Operations	Solve real world problems with rational numbers (including integers and decimals)
	Tue	Operations	Solve real world problems with rational numbers (including decimals and fractions)
	Wed	Real World Problems	Solve real world problems with ratios, rates and proportions
	Thu		Solve real world problems with percent

	Fri	Multi-Step Problems	Solve real world two- or three- step problems with integers, decimals, fractions, ratios, rates, proportions, and percent
<b>Week 8</b> 10/31 – 11/04	Mon	Expressions	Substitute rational numbers into expressions and evaluate
	Tue	Expressions with Exponents	Substitute rational numbers into expressions with exponents and radicals
	Wed	Expressions and Equations	Translate word expressions and equations into algebraic expressions and equations (including one or more variables and exponents)
	Thu	Further Activities on Expressions and Equations	Translate word expressions and equations into algebraic expressions and equations (including one or more variables and exponents)
	Fri	Expressions, Equations, and Inequalities	Translate verbal expressions and sentences into algebraic inequalities and vice versa
<b>Week 9</b> 11/07 – 11/11	Mon	Real World Expressions	Use variables to represent unknown quantities in real world situations
	Tue	Simplify	Combine and simplify algebraic expressions

			with a maximum of two variables
	Wed	Substitution	Evaluate algebraic expressions and equations by substituting integral values for variables and simplifying
	Thu	Inequalities	Solve linear inequalities in one variable algebraically
	Fri	Inequalities	Solve linear inequalities in one variable algebraically