SASD Curriculum Map **Content Area: Mathematics** **Course: 8th Grade Algebra 1**

UNIT Title/Focus	**Operations with Real Numbers and Expressions / The Number System**	**TIME OF YEAR/LENGTH** *(E.G. Oct-Nov/3 weeks)*	**Sept-May / 34 Weeks (Study Island Rotations/Continuous Repetition)**
DRIVING QUESTION(S)	**How will you simplify expressions using operations with Real Numbers?**		
CONTENT VOCABULARY	**Decimal Expansion; GCF; Irrational Number; LCM; Monomial; Perfect Square; Rational Number; Real Number; Repeating Decimal; Square Root; Terminating Decimal.**		

TOPIC	ELIGIBLE CONTENT/ STANDARDS	OBJECTIVES	ASSESSMENT	RESOURCES
Compare and Order Numbers / Real Numbers/ Approximations of Irrational Numbers	**A1.1.1.1.1** Compare and/or order any real numbers. Note: Rational and irrational may be mixed. **M08.A-N.1.1.1** Determine whether a number is rational or irrational. For rational numbers, show that the decimal expansion terminates or repeats (limit repeating decimals to thousandths). **M08.A-N.1.1.2** Convert a terminating or repeating decimal to a rational number (limit repeating decimals to thousandths). **M08.A-N.1.1.3** Estimate the value of irrational numbers without a calculator (limit whole number radicand to less than 144).	Students will be able to compare and order **any** real numbers.	Repetition/practice Frequent checks for understanding	**Warm-up Openers** Study Island Calculator/Non-calculator "Peers" helping "Peers"

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	M08.A-N.1.1.4 Use rational approximations of irrational numbers to compare and order irrational numbers. **M08.A-N.1.1.5** Locate/identify rational and irrational numbers at their approximate locations on a number line.			
Simplify Square Roots	**A1.1.1.1.2** Simplify square roots (e.g., $\sqrt{24} = 2\sqrt{6}$).	Students will be able to simplify square roots, with and without using a calculator.		
GCF and LCM of Monomials	**A1.1.1.2.1** Find the Greatest Common Factor (GCF) and/or the Least Common Multiple (LCM) for sets of monomials.	Students will be able to find the Greatest Common Factor and Least Common Multiple for sets of two or three Monomials.		
Simplify and Evaluate	**A1.1.1.3.1** Simplify/evaluate expressions involving	Students will be able to Simplify and Evaluate Expressions, with and without using a calculator.		

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Expressions	properties/laws of exponents, roots, and/or absolute values to solve problems. Note: Exponents should be integers from -10 to 10.			