High School Weekly Lesson Plan Template Algebra 1 Yearlong Unit 0

Unit 0 Prerequisites for Algebra 1 curriculum	**Course Name: Algebra I** **Modeling Unit Functions**
Day 1	Day One - High Engagement Icebreaker Activity - Standards Aligned Lesson/Activity: Central Park is designed to help students make the transition from arithmetic to algebra. Arithmetic is for computation. Algebra makes the structure of our computations clear.
Day 2	Map Test
Day 3	Topic: The Real Number System LT: ● I can classify real numbers. SC: ● I can classify natural, whole, integer, rational, and irrational numbers.
Day 4	Topic: Add and Subtract Positive and Negative Numbers LT: ● I can add and subtract rational numbers. SC: ● I know that if you have two positive numbers and you add them you get more positive. ● I know that if you have two negative numbers and you add them you get more negative. ● I know that if you add a positive and a negative number you are really subtracting and keeping the sign of the number of larger absolute value. ● I can add and subtract without using a calculator.

Day 5	Topic: Multiply and Divide Positive and Negative Numbers

	LT: ● I can multiply and divide rational numbers . SC: ● I know that when you multiply two positives the answer is positive. ● I know that when you multiply a positive and a negative the answer is negative. ● I can multiply integers without using a calculator. ● I can correctly use the order of operations to add, subtract, multiply and divide integers.

Day 6	Topic: Simplifying Radicals LT: ● I can simplify square roots. SC: ● I can do the prime factorization of integers. ● I can find matching pairs of factors ● I can take the number (of the pair) outside the radical and leave the leftover factor ● I can memorize perfect squares. ● I can simplify non-perfect square radicals.
Day 7	Topic: Simplifying Radicals LT: ● I can simplify square roots that involve variables. SC: ● I can do the prime factorization of integers. ● I can find matching pairs of factors ● I can take the number (of the pair) outside the radical and leave the leftover factor ● I understand that to simplify the variables under the square root I must divide by two and take the whole number of the variable outside the root and leave the remainder under the root. ● I can memorize perfect squares. ● I can simplify non-perfect squares.

Day 8 **Day 9**	Topic: Adding and Subtracting Radicals LT: ● I can add and subtract radical expressions. SC: ● I can simplify radicals ● I know that you can only add and subtract radicals that have like radicands. ● I know that when you add radicals you only change the coefficient of the radicals. Never inside!! ● I can add and subtract radicals with like radicands. ● I can add and subtract radicals with unlike radicands. Topic: Adding and Subtracting Radicals LT: ● I can add and subtract radical expressions. SC: ● I can simplify radicals ● I know that you can only add and subtract radicals that have like radicands. ● I know that when you add radicals you only change the coefficient of the radicals. Never inside!! ● I can add and subtract radicals with like radicands. ● I can add and subtract radicals with unlike radicands.
Day 10	Topic: Multiplying Radicals LT: ● I can multiply radical expressions. SC: ● I can simplify radical expressions. ● I know that when multiplying radicals you multiply the coefficients together and you multiply together what is under the

	radical. ● I can multiply and simplify radical expressions.
Day 11 **Day 12** **Day 13**	Topic: Multiplying Radicals LT: ● I can multiply radical expressions. SC: ● I can simplify radical expressions. ● I know that when multiplying radicals you multiply the coefficients together and you multiply together what is under the radical. **QUIZ** **Real Number System, add/sub rational numbers, multiply rational numbers, PEMDAS, simplifying radicals, rational/irrational numbers** Topic: Combining Like Terms LT: ● I can identify the parts of an algebraic expression. SC: ● I can identify coefficients, variables, operations, constants. ● I can understand that like terms have the same power. ● I can write an expression in mathematical terms given a situation.
Day 14	Topic: Combining Like Terms LT: ● I can perform mathematical operations on polynomial expressions.

	SC: ● I can identify like terms. ● I know that you can only add or subtract like terms. ● I can add and subtract polynomial expressions.
Day 15 **Day 16**	Topic: Combining Like Terms LT: ● I can perform mathematical operations on polynomial expressions. SC: ● I can identify like terms. ● I know that you can only add or subtract like terms. ● I can add and subtract polynomial expressions. Topic: Multiplying Expressions LT: ● I can multiply polynomial expressions. SC: ● I can set up the box and multiply on the diagonals ● I can use my exponent rules to add exponents when I multiply like bases. ● I can determine which terms get added together ● I can multiply polynomial expressions.

Day 17	Topic: Multiplying Expressions LT: ● I can multiply polynomial expressions. SC: ● I can set up the box and multiply on the diagonals ● I can use my exponent rules to add exponents when I multiply like bases.

	● I can determine which terms get added together ● I can multiply polynomial expressions.
Day 18	Review for test
Day 19	Test