

# PCSD Lesson Planning Template

<u>Grade Level</u> 9th Algebra I		<u>Teacher/Room</u> : S. Pinson/Room 182		Week of: October 3-7, 2016	
<b>Unit Vocabulary:</b> see attached					
<b>Instructional Strategies Used:</b> direct instruction, independent study, interactive instruction, partners					
<u>Day 1</u>		<u>Day 2</u>		<u>Day 3</u>	
<b>GSE/GPS Standard(s):</b> <b>MGSE9-12.A.CED.1</b> Create equations and inequalities in one variable and use them to solve problems.		<b>GSE/GPS Standard(s):</b> <b>MCC9-12.N.Q.3</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.		<b>GSE/GPS Standard(s):</b> All that we have covered so far.	
<b>EQ Question:</b> How can you create proportions and use them to solve problems?		<b>EQ Question:</b> How can you choose appropriate levels of precision and accuracy when solving problems?		<b>EQ Question:</b> All that we have covered so far.	
<b>Mini Lesson:</b> Error Analysis – Solving Equations <b>Activating Strategies:</b>  <b>Lesson: Applications of Proportions and Dimensional Analysis (continued)</b> 1. Go over Friday Quiz and homework 2. Guided Practice Problems 3. Assignment –Worksheets, including Friday WS  <b>Resource/Materials:</b> Powerpoint, worksheets		<b>Mini Lesson:</b> Computer Lab <b>Activating Strategies:</b> Error Analysis – Dimensional Analysis  <b>Lesson: Precision and Accuracy</b> 1. Computer Lab – USATestPrep 2. Finish Dimensional Analysis 3. Classwork: More Practice on Dimensional Analysis (WS More Dimensional Analysis-Day 11) 4. PPT – Precision and Accuracy (Book 2-3) 5. Practice Problems 6. Assignment – WS <b>Resource/Materials:</b> Powerpoint, Worksheets, logins		<b>Mini Lesson:</b> Error Analysis – Solving Formulas <b>Activating Strategies:</b> Ask the teacher questions  <b>Lesson:</b> Review 1. More Problems ppt 2. Jeopardy (groups) <a href="https://jeopardylabs.com/play/coordinate-algebra-unit-1">https://jeopardylabs.com/play/coordinate-algebra-unit-1</a> 3. Quiz  <b>Resource/Materials:</b> Review Sheets, Power point, internet	
<b>Differentiation:</b> <i>Content/Process/Product:</i> Guided Practice <i>Grouping Strategy:</i> <i>Assessment:</i> informal		<b>Differentiation:</b> <i>Content/Process/Product:</i> USATestPrep <i>Grouping Strategy:</i> <i>Assessment:</i>		<b>Differentiation:</b> <i>Content/Process/Product:</i> graphic organizer, graphing boards <i>Grouping Strategy:</i> <i>Assessment:</i>	
<b>Assessment :</b> <i>Formative:</i> thumbs up/down <i>Summative:</i>		<b>Assessment :</b> <i>Formative:</i> thumbs up/down <i>Summative:</i>		<b>Assessment :</b> <i>Formative:</i> graph boards, thumbs up/down <i>Summative:</i>	
<b>Homework:</b> WS Dimensional Analysis (Day 11)		<b>Homework:</b> WS Levels of Accuracy and Define and Interpret Quantities		<b>Homework:</b> none	
				<b>Homework:</b> worksheets	
				<b>Homework:</b> worksheets	

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- **Algebra.** The branch of mathematics that deals with relationships between numbers, utilizing letters and other symbols to represent specific sets of numbers, or to describe a pattern of relationships between numbers.
- **Arithmetic Sequence.** A sequence of numbers in which the difference between any two consecutive terms is the same.
- **Average Rate of Change.** The change in the value of a quantity by the elapsed time. For a function, this is the change in the y-value divided by the change in the x-value for two distinct points on the graph.
- **Coefficient.** A number multiplied by a variable in an algebraic expression.
- **Constant Rate of Change.** With respect to the variable  $x$  of a linear function  $y = f(x)$ , the constant rate of change is the slope of its graph.
- **Continuous.** Describes a connected set of numbers, such as an interval.
- **Discrete.** A set with elements that are disconnected.
- **Domain.** The set of x-coordinates of the set of points on a graph; the set of x-coordinates of a given set of ordered pairs. The value that is the input in a function or relation.
- **End Behaviors.** The appearance of a graph as it is followed farther and farther in either direction.
- **Equation.** A number sentence that contains an equals symbol.
- **Explicit Formula.** A formula that allows direct computation of any term for a sequence  $a_1, a_2, a_3, \dots, a_n, \dots$ .
- **Expression.** Any mathematical calculation or formula combining numbers and/or variables using sums, differences, products, quotients including fractions, exponents, roots, logarithms, functions, or other mathematical operations.
- **Factor.** For any number  $x$ , the numbers that can be evenly divided into  $x$  are called factors of  $x$ . For example, the number 20 has the factors 1, 2, 4, 5, 10, and 20.
- **Inequality.** Any mathematical sentence that contains the symbols  $>$  (greater than),  $<$  (less than),  $\leq$  (less than or equal to), or  $\geq$  (greater than or equal to).
- **Interval Notation.** A notation representing an interval as a pair of numbers. The numbers are the endpoints of the interval. Parentheses and/or brackets are used to show whether the endpoints are excluded or included.

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- **Linear Function.** A function with a constant rate of change and a straight line graph.
- **Linear Model.** A linear function representing real-world phenomena. The model also represents patterns found in graphs and/or data.
- **Ordered Pair.** A pair of numbers,  $(x, y)$ , that indicate the position of a point on a Cartesian plane.
- **Parameter.** The independent variable or variables in a system of equations with more than one dependent variable.
- **Range.** The set of all possible outputs of a function.
- **Recursive Formula.** A formula that requires the computation of all previous terms to find the value of an.
- **Slope.** The ratio of the vertical and horizontal changes between two points on a surface or a line.
- **Substitution.** To replace one element of a mathematical equation or expression with another.
- **Term.** A value in a sequence--the first value in a sequence is the 1st term, the second value is the 2nd term, and so on; a term is also any of the monomials that make up a polynomial.
- **Variable.** A letter or symbol used to represent a number.
- **X-intercept.** The point where a line meets or crosses the x-axis
- **Y-intercept.** The point where a line meets or crosses the y-axis