PCSD Lesson Planning Template

| Grade Level 9th Algebra I |  | Teacher/Room: S. Pinson/Room 182 | Week of: September 26-30, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Unit Vocabulary: see attached |  |  |  |  |
| Instructional Strategies Used: direct instruction, independent study, interactive instruction, partners |  |  |  |  |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| GSE/GPS Standard(s): <br> MGSE9-12.A.CED. 1 Create equations and inequalities in one variable and use them to solve problems. | GSE/GPS Standard(s): <br> MGSE9-12.A.CED. 1 Create equations and inequalities in one variable and use them to solve problems. | GSE/GPS Standard(s): <br> MCC9-12.N.Q. 3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. | GSE/GPS Standard(s): <br> All that we have covered so far. | GSE/GPS Standard(s): <br> MGSE9-12.A.CED. 2 Create <br> equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. |
| EQ Question: How can you create proportions and use them to solve problems? | EQ Question: How can you create proportions and use them to solve problems? | EQ Question: How can you choose appropriate levels of precision and accuracy when solving problems? | EQ Question: All that we have covered so far. | EQ Question: <br> How do I graph equations on coordinate axes with the correct labels and scales? |
| Mini Lesson: Solving Proportions <br> Activating Strategies: How much do these people make each week, knowing how long it takes them to make $\$ 1000$. | Mini Lesson: Error Analysis - <br> Solving Equations <br> Activating Strategies: <br> Anticipation Guide | Mini Lesson: Solving Proportions <br> Activating Strategies: Error <br> Analysis - Dimensional Analysis | Mini Lesson: Error Analysis - <br> Solving Formulas <br> Activating Strategies: Ask the teacher questions | Mini Lesson: Pre-test <br> Activating Strategies: How would you graph this? $x+y=8$ |
| Lesson: Applications of Proportions <br> 1. Powerpoint (Book 2-1 Rates...) with Cornell Notes <br> 2. Guided Practice Problems <br> 3. Assignment-Worksheets | Lesson: Applications of Proportions and Dimensional Analysis <br> 1. Finish Applications of Proportions (PPT Book 2-2 and Cornell Notes) <br> 2. Classwork: WS on Applications (Practice ADay10) <br> 3. Notes - Keeper 1, with Cornell Notes <br> 4. Guided Practice Problems <br> 5. Assignment-Worksheets | Lesson: Precision and Accuracy <br> 1. Finish Dimensional Analysis <br> 2. Classwork: More Practice on Dimensional Analysis (WS More Dimensional Analysis-Day 11) <br> 3. PPT - Precision and Accuracy (Book 2-3) <br> 4. Practice Problems <br> 5. Assignment - WS | Lesson: Review <br> 1. More Problems ppt <br> 2. Jeopardy (groups) https://jeopardylabs.com/play/co ordinate-algebra-unit-1 <br> 3. Quiz | Lesson: Graphing, by t-table method |
| Resource/Materials: Powerpoint, worksheets | Resource/Materials: Powerpoint, worksheets, Anticipations Guide | Resource/Materials: Powerpoint, <br> Worksheets | Resource/Materials: Review <br> Sheets, Power point, internet | Resource/Materials: Graphs, <br> Markers, Power Point, graphic organizers, worksheets |
| Differentiation: <br> Content/Process/Product: Activating Strategy (Content), Cornell Notes Grouping Strategy: Assessment: informal | Differentiation: <br> Content/Process/Product: Cornell Notes <br> Grouping Strategy: <br> Assessment: informal | Differentiation: <br> Content/Process/Product: <br> Grouping Strategy: <br> Assessment: | Differentiation: <br> Content/Process/Product: Grouping Strategy: Random Assessment: | Differentiation: <br> Content/Process/Product: graphic organizer, graphing boards Grouping Strategy: Assessment: |
| Assessment : <br> Formative: thumbs up/down Summative: | Assessment : <br> Formative: thumbs up/down Summative: | Assessment : <br> Formative: thumbs up/down Summative: | Assessment : <br> Formative: thumbs up/down Summative: | Assessment : <br> Formative: graph boards, ticket-out-the-door Summative: |
| Homework: WS Practice $A$ and $B$ | Homework: WS Dimensional | Homework: WS Levels of Accuracy | Homework: none | Homework: none |


| (Day 9) Rates Ratios Proportions | Analysis (Day 11) | and Define and Interpret Quantities |  |  |
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## PCSD Lesson Planning Template

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.

Binomial Expression: An algebraic expression with two unlike terms.
Capacity: The greatest volume that a container can hold.
Circumference: The distance around a circle.
Coefficient: A number multiplied by a variable.
Constant Term: A quantity that does not change its value.

Expression: A mathematical phrase involving at least one variable and sometimes numbers and operation symbols.
Factor: When two or more integers are multiplied, each integer is a factor of the product. "To factor" means to write the number or term as a product of its factors.

Integer: The set of numbers ...,-3,-2,-1,0,1,2,3,...
Irrational Number: A number whose decimal form is nonterminating and nonrepeating. Irrational numbers cannot be written in the form $a / b$, where $a \operatorname{and} b$ are integers (b cannot be zero). So all numbers that are not rational are irrational.

Monomial Expression: An algebraic expression with one term.
Perimeter: The sum of the lengths of the sides of a polygon.
Polynomial function: A polynomial function is defined as a function, $f(x)=a_{0} x^{n}+a_{1} x^{n-1}+a_{2} x^{n-2}+\ldots+a_{n-2} x^{2}+a_{n-1} x^{1}+a n$, where the coefficients are real numbers.

Pythagorean Theorem: It is a theorem that states a relationship that exists in any right triangle. If the lengths of the legs in the right triangle are a and $b$ and the length of the hypotenuse is $c$, we can write the theorem as the following equation: $a^{2}+b^{2}=c^{2}$.

Radical: The symbol, $\sqrt[b]{a}$, which is read "the $b^{\text {th }}$ root of $a$, " is called a radical.
Radicand: The number underneath the root symbol.
Rational Number: A number expressible in the form $a / b$ or $-a / b$ for some fraction $a / b$. The rational numbers include the integers.
Standard Form of a Polynomial: To express a polynomial by putting the terms in descending exponent order.
Term: A number, a variable, or a product of numbers and variables.

Trinomial: An algebraic expression with three unlike terms.
Variable: A letter or symbol used to represent a number.
Volume: The amount of space occupied by an object.
Whole numbers: The numbers $0,1,2,3, \ldots$.

