

PCSD Lesson Planning Template

<u>Grade Level</u> 9th Algebra I		<u>Teacher/Room:</u> S. Pinson/Room 182		Week of: February 6-10, 2017	
Unit Vocabulary: see attached					
Instructional Strategies Used: direct instruction, independent study, interactive instruction, partners					
<u>Day 1</u>	<u>Day 2</u>	<u>Day 3</u>	<u>Day 4</u>	<u>Day 5</u>	
GSE Standard(s): MGSE9-12.A.SSE.3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.	GSE Standard(s): MGSE9-12.A.SSE.3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.	GSE Standard(s): MGSE9-12.A.SSE.3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.	GSE Standard(s): MGSE9-12.A.SSE.3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.	GSE Standard(s): MGSE9-12.A.SSE.3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression	
EQ Question: How is factoring GCF related to Distributive Property?	EQ Question: How is factoring GCF related to Distributive Property?	EQ Question: How is FOIL related to factoring a difference of 2 squares?	EQ Question: How is FOIL related to factoring trinomials?	EQ Question: How do you factor a trinomial?	
Mini Lesson: notes glued in interactive notebooks Activating Strategies: Multiply Polynomials by Distributive Property Lesson: Factoring GCF 1. Go over Friday’s quiz 2. Guided Notes 3. Guided Practice 4. Assignment Resource/Materials: Powerpoint, Worksheets	Mini Lesson: computer lab Activating Strategies: GCF Error Analysis Lesson: Factoring GCF (continued) 1. Graphic Organizer in Interactive Notebook 2. Guided Practice – with white boards 3. Assignment 4. Ticket out the door Resource/Materials: Powerpoint, worksheets, logins	Mini Lesson: Person Puzzle – Jaime Escalante (PBIS) Activating Strategies: FOIL Lesson: Factoring Differences of Two Squares 1. Guided Notes on DOTS Method 2. Guided Practice with White Boards 3. Assignment Resource/Materials: Powerpoint, guided notes, worksheets	Mini Lesson: Computer lab Activating Strategies: Diamond Math Lesson: Factoring Trinomials a=1 1. Guided Notes on Trial and Error Method 2. Guided Practice with White Boards 3. Assignment Resource/Materials: Powerpoint, worksheets, logins	Mini Lesson: computer lab Activating Strategies: FOIL Lesson: Factoring Trinomials 1. Guided Practice 2. Assignment 3. Quiz – over Weekly Review Sheet Resource/Materials: Powerpoint, Worksheets, quiz	
Differentiation: <i>Content/Process/Product:</i> guided notes, interactive notebook notes <i>Grouping Strategy:</i> <i>Assessment:</i> teacher observation	Differentiation: <i>Content/Process/Product:</i> Guided Notes, White Boards, graphic organizer, USATestPrep <i>Grouping Strategy:</i> <i>Assessment:</i>	Differentiation: <i>Content/Process/Product:</i> Guided Notes, White Boards, graphic organizer <i>Grouping Strategy:</i> <i>Assessment:</i>	Differentiation: <i>Content/Process/Product:</i> Guided Notes, White Boards, graphic organizer, USATestPrep <i>Grouping Strategy:</i> <i>Assessment:</i>	Differentiation: <i>Content/Process/Product:</i> Guided Practice <i>Grouping Strategy:</i> <i>Assessment:</i> teacher observation	
Assessment: <i>Formative:</i> thumbs up/down, monitoring classwork, quiz <i>Summative:</i>	Assessment: <i>Formative:</i> thumbs up/down, monitoring classwork, Whiteboards, Ticket out Door <i>Summative:</i>	Assessment: <i>Formative:</i> thumbs up/down, monitoring classwork, whiteboards <i>Summative:</i>	Assessment: <i>Formative:</i> thumbs up/down, monitoring classwork, whiteboards <i>Summative:</i>	Assessment: <i>Formative:</i> thumbs up/down, monitoring classwork, quiz <i>Summative:</i>	
Homework: Factoring GCF WS, Weekly Review WS	Homework: Patterned WS - GCF	Homework: Factoring DOTS Gridword WS	Homework: Day8 FactoringTrinomials (a=1) WS	Homework: none	

- **Complete factorization over the integers.** Writing a polynomial as a product of polynomials so that none of the factors is the number 1, there is at most one factor of degree zero, each polynomial factor has degree less than or equal to the degree of the product polynomial, each polynomial factor has all integer coefficients, and none of the factor polynomial can be written as such a product.
- **Completing the square.** Completing the Square is the process of converting a quadratic equation into a perfect square trinomial by adding or subtracting terms on both sides.
- **Difference of two squares.** A squared (multiplied by itself) number subtracted from another squared number. It refers to the identity $a^2 - b^2 = (a + b)(a - b)$ in elementary algebra.
- **Discriminant of a quadratic equation.** The discriminant of a quadratic equation of the form $ax^2 + bx + c = 0$, $a \neq 0$, is the number $b^2 - 4ac$.
- **Horizontal shift.** A rigid transformation of a graph in a horizontal direction, either left or right.
- **Perfect square trinomial.** A trinomial that factors into two identical binomial factors.
- **Quadratic equation.** An equation of degree 2, which has at most two solutions.
- **Quadratic function.** A function of degree 2 which has a graph that “turns around” once, resembling an umbrella-like curve that faces either right-side up or upside down. This graph is called a parabola.
- **Root.** The x-values where the function has a value of zero.
- **Standard form of a quadratic function.** $ax^2 + bx + c$
- **Vertex.** The maximum or minimum value of a parabola, either in terms of y if the parabola is opening up or down, or in terms of x if the parabola is opening left or right.
- **Vertex form of a quadratic function.** A formula for a quadratic equation of the form $f(x) = a(x - h)^2 + k$, where a is a nonzero constant and the vertex of the graph is the point (h, k) .