PCSD Lesson Planning Template

Grade Level 9th Algebra I	**Teacher/Room**: S. Pinson/Room 182	Week of: February 13-17, 2017
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 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 FOIL related to factoring trinomials?	**EQ Question**: How do you factor a trinomial?	**EQ Question:** How is FOIL related to factoring trinomials?	**EQ Question:** How is FOIL related to factoring trinomials?	**EQ Question:** How is multiplying polynomials related to factoring?
Mini Lesson: Factoring Quiz **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,	**Mini Lesson:** computer lab **Activating Strategies:** FOIL **Lesson:** Factoring Trinomials 1. Guided Practice 2. Assignment **Resource/Materials:** Powerpoint, Worksheets, logins	**Mini Lesson:** Factoring Quiz **Activating Strategies:** Video - http://www.showme.com/sh/?h=L90tiC0 **Lesson:** Factoring Trinomials a≠1 1. Quiz on Factoring Trinomials 2. Graphic Organizer in Interactive Notebook 3. Guided Practice – with white boards 4. Assignment 5. Ticket out the door **Resource/Materials:** Powerpoint, worksheets	**Mini Lesson:** computer lab **Activating Strategies:** Questions for Teacher **Lesson:** Mixture of factoring problems 1. Guided Practice- whiteboards 2. Assignment – Review Sheet **Resource/Materials:** Powerpoint, Worksheets, logins	**Mini Lesson:** **Activating Strategies:** Quick Review **Test:** Factoring - Part I **Resource/Materials:** Tests
Differentiation: *Content/Process/Product:* Guided Notes, White Boards, graphic organizer, USATestPrep *Grouping Strategy:* *Assessment:*	**Differentiation:** *Content/Process/Product:* Guided Practice *Grouping Strategy:* *Assessment:*	**Differentiation:** *Content/Process/Product:* Guided Notes, White Boards, graphic organizer *Grouping Strategy:* *Assessment:*	**Differentiation:** *Content/Process/Product:* Guided Notes, White Boards, graphic organizer *Grouping Strategy:* *Assessment:*	**Differentiation:** *Content/Process/Product:* Guided Notes, White Boards, graphic organizer *Grouping Strategy:* *Assessment*
Assessment: *Formative:* thumbs up/down, monitoring classwork, whiteboards *Summative:*	**Assessment:** *Formative:* thumbs up/down, monitoring classwork, quiz *Summative:*	**Assessment :** *Formative:* thumbs up/down, monitoring classwork, Whiteboards, Ticket out Door *Summative:*	**Assessment :** *Formative:* thumbs up/down, Whiteboards, quizzes *Summative:*	**Assessment :** *Formative:* *Summative:* Test
Homework: Day8 FactoringTrinomials (a=1) WS	**Homework**: KUTA WS	**Homework**: Problems from board	**Homework**: study	**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 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).