Jane Long Academy Lesson Plan Template with Unpacking the Standards

2015 – 2016

Course: Geometry

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| Teacher: Andrea Valencia-Hernandez | | | | | Lesson Plan Week of: WEEK #3 September 7-11 | | |
|  |  | **Monday** | **Tuesday** | **Wednesday** | | **Thursday** | **Friday** |
|  |  |  |  |  | |  |  |
| **Pre-Planning: Unpacking the Standards** | **TEKS:**  (R) - Readiness Standard  (S) -Supporting Standard | **LABOR DAY** | G.1G - Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication. Logical Argument and Constructions. | G.6A - Verify theorems about angles formed by the intersection of lines and line segments, including vertical angles, and angles formed by parallel lines cut by a transversal and prove equidistance between the endpoints of a segment and points on its perpendicular bisector and apply these relationships to solve problems. SG.5C - Use the constructions of congruent segments, congruent angles, angle bisectors, and perpendicular bisectors to make conjectures about geometric relationships | | RG.5A - Investigate patterns to make conjectures about geometric relationships, **including angles formed by parallel lines cut by a transversal**, criteria required for triangle congruence, special segments of triangles, diagonals of quadrilaterals, interior and exterior angles of polygons, and special segments and angles of circles choosing from a variety of tools  G.5B - Construct congruent segments, congruent angles, a segment bisector, an angle bisector, **perpendicular lines**, the perpendicular bisector of a line segment, and a line **parallel** to a given line through a point not on a line using a compass and a straightedge. | RG.6A - Verify theorems about angles formed by the intersection of lines and line segments, including vertical angles, and **angles formed by parallel lines cut by a transversal** and prove equidistance between the endpoints of a segment and points on its perpendicular bisector and apply these relationships to solve problems.  G.5C - Use the constructions of congruent segments, congruent angles, angle bisectors, and perpendicular bisectors to make conjectures about geometric relationships. |
| **Verb(s)**  - What verbs define the actions students will need to take when mastering this objective? |  | Distinguish, internalize, describe, narrate and explain. | Create, analyze, organize, calculate, explain, describe, narrate, communicate and verify | | Verify, investigate, construct, prove. | Create, analyze, organize, calculate, explain, describe, narrate, communicate and verify |
| **Concept**  -What am I teaching?  -What do the students need to know? |  | Which angles are congruent? | Is the converse true? | | How are pairs of lines determined to be parallel or perpendicular? | How do the physical constructs of a line correspond with the numeric attributes of parallel and perpendicular lines? |
| **Context**  ***Readiness:***   * Connections from previous grade level. * To what degree will this impact learning two years down the road?   ***Supporting:***   * What Readiness Standards or concepts from the Readiness Standards does it support? * How does it support the Readiness Standards? |  | The student is expected to use write and graph equations of lines.  I can prove theorems about perpendicular lines.  I can prove statements false using counterexamples. | The student is expected to recognize corresponding angles, alternate interior angles and alt. exterior angles.  I can prove statements about skew lines.  I can prove statements false using counterexamples | | The student uses constructions to validate statements.  The students is expected to derive and use formulas involving length, parallel and perpendicular lines.  The student is expected to write using newly acquired basic vocabulary and content based grade-level vocabulary. | The student uses constructions to validate statements.  The students is expected to derive and use formulas involving length, parallel and perpendicular lines.  The student is expected to write using newly acquired basic vocabulary and content based grade-level vocabulary. |
| **I will know my students have mastered this standard when they can….** |  | When my students communicate and determine angle relationships. | When my students communicate and determine special angles and parallel lines. | | When my students communicate and determine what it means | When my students communicate and explain what it means |
| **I will assess the standard by…..** |  | Check for Understanding:   * Fist to Five * Color Cards * Essential Questioning * Kahoot * Exit Ticket * Four Corners | Check for Understanding:   * Fist to Five * Color Cards * Essential Questioning * Kahoot * Exit Ticket * Four Corners | | Check for Understanding:   * Fist to Five * Color Cards * Essential Questioning * Kahoot * Exit Ticket * Four Corners | Check for Understanding:   * Fist to Five * Color Cards * Essential Questioning * Kahoot * Exit Ticket * Four Corners |
| **Vocabulary**  (Academic and Content) |  | Parallel lines, skew lines, transversal, corresponding angles, alternate interior angles, consecutive interior angles. | Parallel lines, skew lines, transversal, corresponding angles, alternate interior angles, consecutive interior angles. | | Parallel lines, skew lines, transversal, corresponding angles, alternate interior angles, consecutive interior angles | Parallel lines, skew lines, transversal, corresponding angles, alternate interior angles, consecutive interior angles |
| **Lesson Topic** (Content Objective) |  | I can calculate how to find an angle using the correct vocabulary. | I can calculate how to find an angle using the correct vocabulary. | | I can calculate a | I can calculate a segment’s length using the distance formula. |
| **ELPS** (Language Objective) |  | I can explain how to find an angle using the correct vocabulary.. | I can explain how to find an angle using the correct vocabulary.. | | I can explain how to find a segment’s length using correct vocabulary. | The student is expected to narrate, describe, and explain with increasing specificity and detail to fulfill content area writing needs as more English is acquired. |
| **Lesson Cycle** | **Engage:**  **Warm-Up/Opening (min)** |  | **Copying angles using patty paper.** | **Duplicating angles.** | | Patty paper perpendiculars. | Let’s prove it |
| **Explore:**  **INM/Review (min):** |  | Investigation | Investigation. | | Construction | Construction |
| **Explain:**  **Guided Practice (min):** |  | Vocabulary Diamond | Vocabulary Diamond | | Folded Notes. | Notes page |
| **Elaborate:**  **Independent Practice (min):** |  | True or false? | True or false? | | Round Robin: Applying the distance formula and Pythagorean Theorem. | Finding lengths, and midpoints. |
| **Evaluate:**  **Closing ( min.):** |  | Quiz | Quiz | | Think lines | Matching equations |
| **Reinforcement** | **Materials/ Resources:** |  | Region 4 book, copies, rulers, color pencils, pencils. | Region 4 book, copies, rulers, makers, color pencils, pencils. | | Region 4 book, copies, rulers, color pencils, pencils. | Region 4 book, copies, rulers, color pencils, pencils. |
| **Homework** |  | Practice | Practice | | Vocabulary review | Practice review |
| **MODIFICATIONS and/or ACCOMODATIONS:**  *-Gifted and Talented*  *-ELL/ ESL*  *-Special Education* |  |  |  | |  |  |