Agendas for the Week: *February 11th – February 15th, 2013 Geometry Regular – 6th Period*

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|  | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
|  | **Objective(s):** SWBAT  \*draw reflections.  \*draw reflections in the coordinate plane.  **NGSSS:**  **MA.912.G.2.4** Apply transformations (translations, reflections, rotations, dilations, and scale factors) to polygons to determine congruence, similarity, and symmetry. Know that images formed by translations, reflections, and rotations are congruent to the original Shape. Create and verify tessellations of the plane using polygons. **High**  **New Vocabulary**  **Line of Reflection**  **Citation:**  Li, F. (2011). Unit 6 transformational geometry. Unpublished raw data, , Available from BetterLesson. Retrieved from http://betterlesson.com/unit/16567/6-transformational-geometry  **SECTION 9.1- Reflections** | Objective(s):SWBAT  \*draw translations.  \*draw translations in the coordinate plane.  **NGSSS:**  **MA.912.G.2.4** Apply transformations (translations, reflections, rotations, dilations, and scale factors) to polygons to determine congruence, similarity, and symmetry. Know that images formed by translations, reflections, and rotations are congruent to the original Shape. Create and verify tessellations of the plane using polygons. **High**  **New Vocabulary**  **Translation vector**  **Citation:**  Li, F. (2011). Unit 6 transformational geometry. Unpublished raw data, , Available from BetterLesson. Retrieved from http://betterlesson.com/unit/16567/6-transformational-geometry  **SECTION 9.2 - Translations** | Objective(s):SWBAT  \*draw rotations.  \*draw rotations in the coordinate plane.  **NGSSS:**  **MA.912.G.2.4** Apply transformations (translations, reflections, rotations, dilations, and scale factors) to polygons to determine congruence, similarity, and symmetry. Know that images formed by translations, reflections, and rotations are congruent to the original Shape. Create and verify tessellations of the plane using polygons. **High**  **New Vocabulary**  **Center of rotation**  **Angle of rotation**  **Citation:**  Li, F. (2011). Unit 6 transformational geometry. Unpublished raw data, , Available from BetterLesson. Retrieved from http://betterlesson.com/unit/16567/6-transformational-geometry  **SECTION 9.3 - Rotations** | **Objective(s): SWBAT**  \*demonstrate their understanding of 9.1 – 9.3.  **NGSSS:**  **MA.912.G.2.4** Apply transformations (translations, reflections, rotations, dilations, and scale factors) to polygons to determine congruence, similarity, and symmetry. Know that images formed by translations, reflections, and rotations are congruent to the original Shape. Create and verify tessellations of the plane using polygons. **High**  **QUIZ sections 9.1-9.3.** | **No School** |
| **P**  **L**  **A**  **N** | **Engage:**  Begin by discussing what students know about the word reflect or reflection. Distinguish the different between everyday meanings and the meaning in math (to flip).  Play the “Mirror Game”  With two students facing one another they must act as the mirror image of the other (Their reflection.). (i.e. if student A raises his or her left hand, student B raises his or her right hand.) Students will continue this until someone makes a mistake. Then other students can have a turn.  Students should pick up that while the reflection looks the same, it is actually opposite in its direction.  With two new students, have them take steps forward and backwards (to explore the line of reflection). If one student takes a step back, the other student takes a step back.  Students should pick up that the distance from the figure to the line of reflection is the same as the distance from the reflection to the line of reflection. | **Engage:**  Begin by discussing what students know about the word translate/ translation. Distinguish the different between everyday meanings and the meaning in math (to slide).  Show the class transformation images, Optimus Prime, Weight loss, etc. Discuss which is the original image. | **Engage:**  Begin by discussing what students know about the word rotate/rotation. Distinguish the different between everyday meanings and the meaning in math (to turn). | **Engage:**  Students will consider an example that includes all three, reflections, translations, and rotations. |
| **Explore:**  The teacher will show students example 1. The students will work in groups on “You Try 1”  The teacher will show students example 2. The students will work in groups on “You Try 2”  This pattern will continue with whole class explanation after each “You Try”.  **Explain:**  After each student has time to work on the “You Try” we will discuss the “You Try” as a class.  **Elaborate:**  Students consider the quadrants of a coordinate grid and how they will know which quadrant their image should be in depending on where their line of reflection is. | **Explore:**  The teacher will show students example 1. The students will work in groups on “You Try 1”  The teacher will show students example 2. The students will work in groups on “You Try 2”  This pattern will continue with whole class explanation after each “You Try”.  **Explain:**  After each student has time to work on the “You Try” we will discuss the “You Try” as a class, using personal traits of group members (longest hair, shortest, etc.)  **Elaborate:**  Students consider the quadrants of a coordinate grid and how they will know which quadrant their image should be in depending on where their line of reflection is. | **Explore:**  The teacher will show students example 1. The students will work in groups on “You Try 1”  The teacher will show students example 2. The students will work in groups on “You Try 2”  This pattern will continue with whole class explanation after each “You Try”.  **Explain:**  After each student has time to work on the “You Try” we will discuss the “You Try” as a class, using a spinner.  **Elaborate:**  Students consider the quadrants of a coordinate grid and how they will know which quadrant their image should be in depending on where their line of reflection is. | Quiz 9.1 – 9.3  (The teacher will make the quiz using the random test generator. Therefore it is not created yet.) |
| **Evaluate and Summary:**  “Independent Practice” #1-6 for CW  Exit Slip for Formative assessment  Homework: WB pg. 112 all  Extra Credit Assignment assigned. Due Tuesday 02/18/13. | **Evaluate and Summary:**  CW – “Independent Practice”  Exit Slip for formative assessment  Homework: WB pg. 114 all. | **Evaluate and Summary:**  CW – “Independent Practice”  Exit Slip for formative assessment  Homework: WB pg. 116 all. | **Evaluate and Summary:**  (Quiz )  Homework: To complete extra credit that is offered after finished with quiz. |
| **Resources:** | ELMO, Student Workbook, Student Worksheets | ELMO, Student Workbook, Student Worksheets | ELMO, Student Workbook, Student Worksheets, spinner | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |