Agendas for the Week: *February 18th – February 22nd, 2013 Geometry Regular – 6th Period*

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|  | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
|  | No School ☺ | Objective(s):SWBAT  - Draw rotations using a protractor and compass.  **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  **SECTION 9.3 – Rotations** | Objective(s):SWBAT  -Draw glide reflections and other compositions of isometries in the coordinate plane.  - Draw compositions of reflections in parallel and intersecting lines.  **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**  Composition of transformations  **Citation:**  **SECTION 9.4 Composition of Transformations** | **Objective(s): SWBAT**  - Identify line and rotational symmetries in two-dimensional figures.  - Identify line and rotational symmetries in three-dimensional figures.  **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**  Symmetry  Line symmetry  Line of symmetry  Rotational symmetry  Center of symmetry  Order of symmetry  Magnitude of symmetry  Plane symmetry  Axis symmetry  **SECTION 9.5 Symmetry** | **Objective(s):** SWBAT  - Draw dilations.  - Draw dilations 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**  **SECTION 9.6 Dilations** |
| **P**  **L**  **A**  **N** | **Engage:**  Students will look at and discuss the picture of the Ferris wheel. While the teacher reads the article. What does it do? How much did it rotate from here to here? (teacher points)  http://www.kutasoftware.com/FreeWorksheets/GeoWorksheets/12-Rotations.pdf | **Engage:**  Students will look at the picture and share what happened to get from the pre image to the image. http://www.regentsprep.org/Regents/math/geometry/GT6/composition.htm | **Engage:**  Ask students to draw in lines of symmetry http://illuminations.nctm.org/lessons/3-5/geometryart/GeometryArt-AS-CreatingLines.pdf | **Engage:**  The teacher will show images of the same thing just different sizes and question students about it. |
| **Explore:**  The students will work on this sheet <http://www.kutasoftware.com/FreeWorksheets/GeoWorksheets/12-Rotations.pdf>  And the teacher will help them with compass and protractors to complete it.  **Explain:**  The students will take turns sharing what they got.  **Elaborate:**  Students will construct their own example and trade with a classmate who will rotate the figure. | **Explore:**  The students will combine directions from two problems and perform a composition of transformations. (e.g. directions for 1 and 2 applied to both figures in problems 1 and 2).  http://www.kutasoftware.com/FreeWorksheets/GeoWorksheets/12-All%20Transformations.pdf  **Explain:**  After each student has time to work on the sheet the students will share with the class.  **Elaborate:**  Students play with http://illuminations.nctm.org/LessonDetail.aspx?ID=L475 | **Explore:**  Have students find lines of symmetry using tracing paper.  **Explain:**  Discuss findings.  **Elaborate:**  Ask students what they can generalize about lines of symmetry and specific kinds of shapes. | **Explore:**  Students will work on the first half of the worksheet practicing dilations https://www.santarosa.k12.fl.us/wbm/smithba/dilations-translations.pdf  **Explain:**  After each student has time to work on the sheet the students will share with the class.  **Elaborate:**  Students make up their on problem, switch with a partner and draw the image. |
| **Evaluate and Summary:**  Exit Slip for formative assessment  Homework: WB pg. 115 all. | **Evaluate and Summary:**  Exit Slip for formative assessment  Homework: WB pg. 118 all. | **Evaluate and Summary:**  Exit Slip for formative assessment  Homework: WB pg. 120 all. | **Evaluate and Summary:**  Exit Slip for formative assessment  Homework: WB pg. 122 all. |
| **Resources:** | ELMO, Student Workbook, Student Worksheets, compass, protractor | ELMO, Student Workbook, Student Worksheets, compass, protractor | ELMO, Student Workbook, Student Worksheets | ELMO, Student Workbook, Student Worksheets |