## Geometry Unit 1 Teacher Calendar - Transformations in the Coordinate Plane Calendar: 8/7/2017-8/25/2016

| Standards | Essential Question | Date |  | In Class/Assignment* | Homework | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MGSE9-12.G.CO. 1 Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. <br> MGSE9-12.G.CO.4 Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments. | What key vocabulary do you need to know for this know? How do you move a figure using translation? | M | 8/9 | Syllabus and Vocabulary | Vocabulary HW | -Vocabulary Powerpoint <br> - Vocabulary Practice |
| MGSE9-12.G.CO. 2 Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). <br> MGSE9-12.G.CO. 3 Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself. <br> MGSE9-12.G.CO. 5 Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another. | How do you reflect a figure across the $x$-axis, $y$-axis, and $y=x$ ? | Tu | 8/10 | Translations | Translations HW | - Translations Guided Practice <br> - Translations Practice |
|  | Is there more than one way to rotate a geometric figure? | W | 8/11 | Reflections of geometric figures | Reflections HW | - Reflections Guided Practice <br> - Reflections Practice |
|  | How do you identify combinations of translations, reflections, and rotations? | Th | 8/12 | Rotations | Rotations HW | Rotations Guided Practice <br> - Rotations Practice <br> -Kahoot on <br> Transformations |
|  | How do you dilate a figure? | F | 8/13 | Dilations | Dilations | Dilations Guided Practice <br> Dilations Practice |
|  |  | M | 8/16 | Card Sort |  | Flex Day |


| How do you translate, reflect, rotate, and dilate a figure? | Tu | 8/17 | Mixed Practice | Mixed <br> Practice HW | -Differentiation Day; students will be placed in groups based on need for certain transformations |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | W | 8/18 | Quiz |  |  |
|  | Th | 8/19 | MAP Testing |  |  |
|  | F | 8/20 |  |  |  |
| How do you do transformations not about the origin? | M | 8/23 | Reflections \#2 | Reflections \#2 HW | - Reflections Guided Practice <br> - Reflections Practice |
|  | T | 8/24 | Rotations \#2 | Rotations \#2 HW | Rotations Guided Practice <br> - Rotations Practice |
|  | W | 8/25 | Practice/Review | Practice |  |
| How do you identify combinations of translations, reflections, and rotations? | Th | 8/26 | Combinations \#1 | Combinations \#1 HW | - Combinations Guided Practice <br> - Combinations Practice |
|  | F | 8/27 | Combinations \#2 | Combinations \#2 HW | - Combinations Guided Practice <br> - Combinations Practice -TOTD |
|  | M | 8/30 | BOS | Mixed Review | Flex Day |
| What do I need to know to exceed Unit 1 standards? | Tu | 8/31 | Review | Test Guide |  |
|  | W | 9/1 | Test | EOC Review |  |

