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| **Unit Information** | | |
| **Teacher** | Cutler | |
| **Grade/Subject:** | 7 | |
| **Length of Unit** | 3 ½ weeks | |
| **Unit Level Concept Map**  cid:1812014202135306660128553  **Concept Arcs**  *Use your concept map to identify the overarching concept and the concept arcs within the unit.*   |  | | --- | | **Overarching Concept:** | | **Lesson Cycle #1: Circles** | **Lesson Cycle #2: shapes and figures** | | How do we determine area and circumference of circles? | *How do we solve for areas and volumes?* | | Students will understand how to solve for area, circumference, radii, diameter in circles. | Students will understand how to solve for area and volume of various shapes and figures. | | *7.G.B.4*    *SWBAT determine area and circumference of a circle*  *MP 1,4,7, 8* | *7.G.A.3*  *7.G.B.6*  *SWBAT determine volume and area of a given shape or figure*  *SWBAT solve real world problems using shapes*  *MP1,2,4,6* | | **Lesson Cycle #3: angles** | **Lesson Cycle #4: Triangles** | | *How do we determine missing angles?* | *How will we determine what creates a triangle?* | | Student will be able to identify a missing angle given sides or other angles | Students will understand how to create a triangle given angles or sides. | | *7.G.B.5*  *SWBAT determine missing angles*  *MP 1, 2,3, 5,6* | *7.G.A.2*  *SWBAT create triangles*  *MP1,4,5,6,8* |   **Alignment with Student Goals** | |
| **Key Academic Outcomes** | | |
| *How are students developing skills that build towards the key academic outcomes in your course? Include information about students’ current progress and describe how students’ work within this unit will build upon these skills.*  Problem-solving: Students will be using their knowledge of fractions, decimals, positive and negative integers, and using their knowledge of graphs in order to break down problems around relationships. Students will also use knowledge of inequalities on graphs.  Computational Fluency: Solve problems following order of operations, including exponents, fractions, and decimals.  Discourse: Students will discuss problems during group work time and through classroom discussions of new content. Students will be able to share ideas and mathematical steps.  Mathematical Practices:MP1, 2,3,4,5,6,7,8 | | |

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| **Instructional Strategies** |
| **Differentiation** |
| *How will you differentiate instruction for students in need of additional support? Include specific details for accommodations and modifications related to each key academic outcome. How will you extend and accelerate the learning of students performing at or above grade level?*  Students will have visual drawings who need visual math aids, students will have multiplication charts, sentence starters for EL students, and calculators for some of the calculations. |

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| **Summative Assessment** |
| **Performance-Based Assessment** |
| *What will you use as the summative assessment for Performance-Based Assessment in this unit? What Unit-Level Questions will this assessment develop? Include an overview of the assignment, including standards alignment, major components of the grade, and the tool you will use for grading. Also note if the writing output will be used as or as part of the PBA for this unit.*  **Aligned Standards: 7.G.B.3, 7.G.A.2, 7.G.B.4, 7.G.B.5, 7.G.B.6**  **8.G.A.3, 8.G.B.6, 8.G.B.5**  **Unit-Level Questions:**  **Major Components:**  Scale, similar, congruent, polygons, triangle, quadrilateral, rectangle, square, pentagon, hexagon, two-dimensional and three-dimensional figures, formulas, angle, interior and exterior angles, supplementary, complementary, vertical, and adjacent angles, cubes, prisms, pyramids  **Grading Tool:** Formative Assessments each LC, IP class work and Exit tickets, SA |

**End-of-Unit Summative Assessment**

Include the following items as attachments along with submission of the Unit Plan here:

1. *Summative unit assessment*
2. *Answer key for summative assessment including exemplar responses for writing assessments and rubrics*
3. *Within-unit skills tracker*

Please include the following in the Unit Calendar:

1. Type of Lesson: Direct Instruction, Inquiry, Discourse, Collaborative Problem Solving, Modeling
2. Skill or Objective
3. Plan for remediation and re-teaching
4. Plan for assessment and tracking of skills within the unit, including assessment of problem-solving skills
5. Plan for investment

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| **Unit Calendar: February** | | | | |
| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| 28 | 29 | 30  Lesson Cycle: GB4  SWBAT find the circumference of a circle  SWBAT find the area of a circle  *How do you find the circumference of a circle?*  **Identify diameter, radius, center, circumference with a drawing**  Pg.350,351  *How do you find the area of a circle?*  **Compare circumference and area equations**  Pg. 356, 357  **Reteach: NS2d,NS3** | 31  Lesson Cycle: GB4  SWBAT find the circumference of a circle  SWBAT find the area of a circle  *How do we find the circumference and are of a circle?*  Solve problems using both equations  **Reteach: NS2d,NS3** | 1  Lesson Cycle: GB4 LCFA 1  SWBAT find the circumference of a circle  SWBAT find the area of a circle  **Reteach: NS2d,NS3**  Q2 Incentive Day  Review SA |
| 4  GB4 activity  **Unit 3 Retake** | 5  **GB3**  **Unit 3 Retake** | 6  Lesson Cycle:2  GB3/GB6  *How do you find the area of composite figures?*  SWBAT solve real world problems with figures and shapes  SWBAT use grids to solve for area and perimeter  Pg. 361-366  **Reteach: RP1,RP3,RP2** | 7  Lesson Cycle:2  GB3/GB6  *How do you identify cross sections of three-dimensional figures?*  SWBAT determine shapes that make up 3-d figures  Pg.367-368  **Reteach: RP1,RP3,RP2** | 8  Lesson Cycle:2  GB3/GB6  *How do you find the volume of a figure made up of cubes and prisms?*  SWBAT determine volume given equations for various figures  Pg. 371-374  **Reteach: RP1,RP3,RP2** |
| 11  Lesson Cycle:2 GB3/GB6  *How do you find the surface area of a figure made of prisms?*  SWBAT determine surface area of various figures  Pg.377-379  **RP1,RP3,RP2** | 12  Lesson Cycle:2 LCFA  GB3/GB6  SWBAT determine volume given equations for various figures  SWBAT determine surface area of various figures  **RP1,RP3,RP2** | 13  Lesson Cycle 3: GB 5  *How can you use angle pairs to solve problems?*  SWBAT identify missing angles  SWBAT solve problems using angles  **Congruent angles, complimentary, supplementary, adjacent,vertical**  Pg.315-317, 321-322  **Reteach: EE3** | 14  Lesson Cycle 3: GB 5 LCFA  *How can you use angle pairs to solve problems?*  SWBAT identify missing angles  SWBAT solve problems using angles  **Reteach: EE3** | 15  Lesson Cycle 4: GB 2  *How do we determine a triangle given coordinates and angles?*  SWBAT determine triangles given angles and coordinates  **Reteach:EE4a/4b** |
| 18  No School | 19  Lesson Cycle 4: GB 2  *How do we determine a triangle given coordinates and angles?*  SWBAT determine triangles given angles and coordinates  Smaller FA  **Reteach:EE4a/4b** | 20  Unit 4 Review  Pg.383  Pg.389-390 | 21  Unit 4 SA | 22  Unit 4 SA |