



WESTSIDE HIGH SCHOOL

Level Up: *RISE* to Your Potential

24-25 Lesson Plan Template

Teacher: **Nkechi Chuke-Oweina**

Subject: **Geometry Prep**

| Week of: DATE | Monday February 24, 2025 | Tuesday February 25, 2025 | Wed./Thurs. February 26 & 27, 2025 | Friday February 28, 2025 |
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| TEKS | GEOM.12E | GEOM.12E | GEOM.12A | GEOM.12A |
| Learning Objective | SWBAT determine the equation for the graph of a circle with radius r and center (h, k) , $(x - h)^2 + (y - k)^2 = r^2$. | SWBAT determine the equation for the graph of a circle with radius r and center (h, k) , $(x - h)^2 + (y - k)^2 = r^2$. | SWBAT apply theorems about circles, including relationships among tangent lines, radii, chords, and arcs to solve non-contextual problems. | SWBAT apply theorems about circles, including relationships among inscribed angles, to solve non-contextual problems. |
| Higher Order Thinking Questions | What information is necessary when writing an equation of a circle with its center at (h,k) ? | What information is necessary when writing an equation of a circle with its center at (h,k) ? | In a circle, how are tangent lines, radii, chords, and arcs related to each other? | How do you describe the radian measure of an angle as it relates to the length of its intercepted arc and the radius of the circle? |
| Agenda | 1. Do Now 2. Lesson – Circle Equation with Center at (h,k) | 1. Do Now 2. Lesson – Circle Equation with Center at (h,k) | 1. Do Now 2. Lesson - Tangent lines, Radii, Chords, and Arcs - Tangent to a circle theorem - Tangent from a point theorem | 1. Do Now 2. Lesson – Inscribed Angles and Intercepted Arcs - Angle at the center theorem |

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| | <ul style="list-style-type: none"> - Explore the equation of a circle with center at (h,k) -Write equation of circles with center at (h,k). - Determine radius and center of circles. - Determine the location of points. <p>3. DOL- Independent Practice</p> | <ul style="list-style-type: none"> - Explore the equation of a circle with center at (h,k) -Write equation of circles with center at (h,k). - Determine radius and center of circles. - Determine the location of points. <p>3. DOL- Independent Practice</p> | <ul style="list-style-type: none"> - Tangent-tangent angle theorem - Tangent-chord angle theorem <p>3. DOL – Independent Practice</p> | <ul style="list-style-type: none"> - Angles in the same segment theorem - Angle inscribed in the semi-circle theorem - Angles in a cyclic quadrilateral theorem - Alternate segment theorem <p>3. DOL- Independent Practice</p> |
| Demonstration of Learning | Given 5 problems, students will correctly determine the equation for the graph of a circle with radius r and center (h, k), $(x - h)^2 + (y - k)^2 = r^2$ in 4 of 5 questions. | Given 5 problems, students will correctly determine the equation for the graph of a circle with radius r and center (h, k), $(x - h)^2 + (y - k)^2 = r^2$ in 4 of 5 questions. | Given 5 problems, students will correctly apply theorems about circles, including relationships among tangent lines, radii, chords, and arcs to solve 4 of 5 non- contextual problems. | Given 5 problems, students will correctly apply theorems about circles, including relationships among inscribed angles, to solve 4 of 5 non- contextual problems. |
| Intervention & Extension | Completed notes for the unit posted on canvas. Video notes posted on canvas. Activity to practice concepts learned during the class. | Completed notes for the unit posted on canvas. Video notes posted on canvas. Activity to practice concepts learned during the class. | Completed notes for the unit posted on canvas. Video notes posted on canvas. Activity to practice concepts learned during the class. | Completed notes for the unit posted on canvas. Video notes posted on canvas. Activity to practice concepts learned during the class. |
| Resources | straightedge, blank paper, whiteboard, response cards, slide deck, | straightedge, blank paper, whiteboard, response cards, slide deck, student activity pages | straightedge, blank paper, whiteboard, response cards, slide deck, student activity pages | straightedge, blank paper, whiteboard, response cards, slide deck, student activity pages |

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