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| **DAILY LESSON PLAN**  **ADDITIONAL MATHEMATICS FORM 5** | | | |
| **CLASS** |  | **DAY** | Choose an item. |
| **WEEK** | Choose an item. | **TIME** |  |
| **DATE** | Click or tap to enter a date. | **DURATION (minutes)** |  |
| **LEARNING AREA** | Geometry | | |
| **UNIT/TOPIC** | Circular Measure | | |
| **CONTENT**  **STANDARDS** | 1.1 Radians | **LEARNING STANDARDS** | 1.1.1 until |
| **LEARNING OBJECTIVES** | **At the end of learning, students will be able to:**   * Relate angle measurement in radian and degree. | | |
| **ACTIVITY** | **Starter:**  Teacher gives a link as below:  <https://www.desmos.com/calculator/m4ivij0tfy>  **Activity:**  1. Divide students into several groups.  2. Each group is required to do the following activities:  • Drag the slider *a* so that the arc lengths, *s*, are each equal to the radius of the circles *j*, 2*j*, 3*j* until it goes through one complete rotation.  3. Define an angle that measures 1 radian.  4. Teacher discusses together with the students to estimate the angle of 1 radian in degrees and also the angle of 1° in radians.  **Closure:**   1. Teacher gives lesson conclusions to students. 2. Teacher gives exercises to the students to do at home. | | |
| **REFLECTION** | Students were able to achieve the learning objectives successfully.  Students were able to achieve the learning objectives with guidance.  Students were not able to achieve the learning objectives. | | |

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| **CLASS** |  | **DAY** | Choose an item. |
| **WEEK** | Choose an item. | **TIME** |  |
| **DATE** | Click or tap to enter a date. | **DURATION (minutes)** |  |
| **LEARNING AREA** | Geometry | | |
| **UNIT/TOPIC** | Circular Measure | | |
| **CONTENT**  **STANDARDS** | 1.2 Arc Length of a Circle | **LEARNING STANDARDS** | 1.2.1, 1.2.2, 1.2.3 |
| **LEARNING OBJECTIVES** | **At the end of learning, students will be able to:**   * Determine the arc length, radius, and the angle subtended at the centre of a circle. * Determine perimeter of segment of a circle. * Solve problems involving arc length. | | |
| **ACTIVITY** | **Starter:**  Teacher gives a link as below:  <https://www.geogebra.org/m/ecuneh4d>  **Activity:**  1. Divide students into several groups.  2. Each group is required to do the following activities:  (i) Move point *A* or point *B* on the circumference of the circle to change the arc length of *AB*.  (ii) Drag the *L* slider to resize the circle.  3. Derive the formula to find the length of the minor arc of a circle.  4. Students record all observations.  **Closure:**  1. Each group makes a presentation in front of the class.  2. Teacher gives lesson conclusions to the activities that are done by the students. | | |
| **REFLECTION** | Students were able to achieve the learning objectives successfully.  Students were able to achieve the learning objectives with guidance.  Students were not able to achieve the learning objectives. | | |

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| **CLASS** |  | **DAY** | Choose an item. |
| **WEEK** | Choose an item. | **TIME** |  |
| **DATE** | Click or tap to enter a date. | **DURATION (minutes)** |  |
| **LEARNING AREA** | Geometry | | |
| **UNIT/TOPIC** | Circular Measure | | |
| **CONTENT**  **STANDARDS** | 1.3 Area of Sector of a Circle | **LEARNING STANDARDS** | 1.3.1, 1.3.2, 1.3.3 |
| **LEARNING OBJECTIVES** | **At the end of learning, students will be able to:**   * Determine the area of sector, radius and the angle subtended at the centre of a circle. * Determine the area of segment of a circle. * Solve problems involving areas of sectors. | | |
| **ACTIVITY** | **Starter:**  Teacher gives a link as below:  <https://www.geogebra.org/m/kvwsaz9f>  **Activity:**   1. Divide students into several groups. 2. Each group is required to do the following activities:   (i) Move point *A* and point *B* on the circumference of a circle to change the area of the  minor sector *AOB.*  (ii) Drag the *L* slider to resize the circle.   1. Derive the formula to find the area of the minor sector of a circle. 2. Students record all observations.   **Closure:**  1. Each group makes a presentation in front of the class.  2. Member of the other groups responded to the presentation. | | |
| **REFLECTION** | Students were able to achieve the learning objectives successfully.  Students were able to achieve the learning objectives with guidance.  Students were not able to achieve the learning objectives. | | |

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| **DAILY LESSON PLAN**  **ADDITIONAL MATHEMATICS FORM 5** | | | |
| **CLASS** |  | **DAY** | Choose an item. |
| **WEEK** | Choose an item. | **TIME** |  |
| **DATE** | Click or tap to enter a date. | **DURATION (minutes)** |  |
| **LEARNING AREA** | Geometry | | |
| **UNIT/TOPIC** | Circular Measure | | |
| **CONTENT**  **STANDARDS** | 1.4 Aplication of Circular Measures | **LEARNING STANDARDS** | 1.4.1 |
| **LEARNING OBJECTIVES** | **At the end of learning, students will be able to:**   * Solve problems involving circular measure. | | |
| **ACTIVITY** | **Starter:**  Teacher poses questions to team members.  **Activity:**  1. Students are divided into several groups.  2. Students are required to determine the perimeter and area of the given segment using at least two different methods.  **Closure:**  1. Each student is given time to think and discuss with other group members.  2. All groups share their answers with each other  3. Teacher gives lesson conclusions to the students. | | |
| **REFLECTION** | Students were able to achieve the learning objectives successfully.  Students were able to achieve the learning objectives with guidance.  Students were not able to achieve the learning objectives. | | |