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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.
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| **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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| **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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| **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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| **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 other3. 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. |