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| **Mathematics** | **Topic: Geometry** |
| **SACE Stage 1** | **Term 2 2018** |

**Lesson Plan**

**Week : 5 Monday ( 50 mins)**

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| **Topic Details:**  Introduction to Properties of Angles in Circles. | **Previous lesson (prior knowledge):**  New topic, but will draw on some previous knowledge including the properties of isosceles triangles in the proofs. |

**Learning Intentions**

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| Students will:   * Know some properties of Angles in Circles (Angles at the circumference subtended by the same arc are equal, the angle subtended at the centre is twice the angle subtended at the circumference by the same arc). * Have some experience playing with angles in circles using GeoGebra, and be able to form hypotheses about properties these angles might have based on such experimentation. * \_ |

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| **Time (mins)** | **Teacher Activity** | **Student Activity** | **Resources** |
| 5min | Greeting individual students, then calling for attention. | Gradually settling down, eventually falling silent and paying attention to the front. | None |
| 10min | Introduce new topic, give overview.  Introduce the terms “Arc” and “Subtend”. | Watching, Listening | Whiteboard. Or, I if there is a projector the first diagram in the GeoGebra worksheet could be used to demonstrate. |
| 10min | Walking around, giving encouragement and feedback. | Playing with Geogebra, forming hypotheses, (on task) discussion amongst each other encouraged. | GeoGebra: https://ggbm.at/kpREkaRQ |
| 10min | Directing Discussion | Guessing properties of angles in circles. |  |
| 15min | Go through how to prove the angle at the centre property (using isoceles triangles and sum of angles).  Then explain why this also explains the angles at the circumference property. | Listening, Watching. Copying the proof. | Whiteboard. |

**Evaluation/Assessment**

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