Progressive Capacity Matrix/Continuum - Mathematics - Angles

			LEARNING						GOING FURTHER	
Capacity	Capacity Breakdown (Content Descriptor and Standard)	Explanation (Elaboration - AusVELS) THIS WOULD BE HIDDEN	Information (I have heard of this)	Knowledge (I understand and can explain this) Possible Student Tutorial (I.e. Using Doceri)	Know-how (I can do this on my own)	EVIDENCE Sample 1 Pre-test?	EVIDENCE Sample 2 Student Work	EVIDENCE Sample 3 Post-test?	Wisdom (I can teach others)	Evidence of Wisdom (I have taught others) Student Name or Hyperlink to Student Tutorial (I.e. Using Doceri)
Angle Knowledge, Skills and Abilities	**Identify angles as measures of turn and compare angle sizes in everyday situations** (ACMMG064)	* Opening doors partially and fully and comparing the size of the angles created * Recognising that analogue clocks use the turning of arms to indicate time, and comparing the size of angles between the arms for familiar times								
	They use angle size as a measure of turn in **real** situations.									
	Compare angles and **classify them as equal to, greater than or less than a right angle** (ACMMG089)	* Creating angles and comparing them to a right angle using digital technologies								
	They classify angles in relation to a right angle.									
	Estimate, measure and compare angles **using degrees.** **Construct angles using a protractor** (ACMMG112)	* Measuring and constructing angles using both 180° and 360° protractors * Recognising that angles have arms and a vertex, and that size is the amount of turn required for one arm to coincide with the other								
	They estimate angles, and use protractors and **digital technology** to construct and measure different angles.									
	Investigate, with and without digital technologies, angles on a straight line, angles at a point and vertically opposite angles. **Use results to find unknown angles** (ACMMG141)	* Identifying the size of a right angle as 90° and defining acute, obtuse, straight and reflex angles * Measuring, estimating and comparing angles in degrees and classifying angles according to their sizes * Investigating the use of rotation and symmetry in the diagrammatic representations of kinship relationships of Central and Western Desert people * Recognising and using the two alternate conventions for naming angles								
	They solve problems using the properties of angles									
	Investigate conditions for two lines to be parallel and solve simple numerical problems using reasoning (ACMMG164)	* Constructing parallel and perpendicular lines using their properties, a pair of compasses and a ruler, and dynamic geometry software * Defining and identifying the relationships between alternate, corresponding and co-interior angles for a pair of parallel lines cut by a transversal								
	Demonstrate that the angle sum of a triangle is 180° and use this to find the angle sum of a quadrilateral (ACMMG166)	* Using concrete materials and digital technologies to investigate the angle sum of a triangle and quadrilateral								
	Classify triangles according to their side and angle properties and describe quadrilaterals (ACMMG165)	* Identifying side and angle properties of scalene, isosceles, right-angled and obtuse-angled triangles * Describing squares, rectangles, rhombuses, parallelograms, kites and trapeziums								
	Identify **corresponding, alternate and co-interior angles when two straight lines are crossed by a transversal** (ACMMG163)	* Defining and classifying pairs of angles as complementary, supplementary, adjacent and vertically opposite								
	Students name the types of angles formed by a transversal crossing parallel lines and solve simple numerical problems involving these lines and angles.									