

Booragul Public School NSW Syllabus for the Australian Curriculum – Measurement and Geometry

Sub Strand – Angles 1			
Outcome	Teaching and Learning Activities	Notes/ Future Directions/Evaluation	Date
Stage 2 A student: <ul style="list-style-type: none"> › uses appropriate terminology to describe, and symbols to represent, mathematical ideas MA2-1WM › identifies, describes, compares and classifies angles MA2-16MG 	Language Students should be able to communicate using the following language: angle, amount of turning, arm, vertex, perpendicular, right angle.		
<h2 style="margin: 0;"><u>Ignition Activities</u></h2> <p>Angle Features Demonstrate the features of an angle with two strips of cardboard joined with a fastener. Explain movement of arms to make angles. Students make their own angle tester and then find angles in room. Students draw objects and mark angles they have tested.</p>			
<h2 style="margin: 0;"><u>Explicit Mathematical Teaching</u></h2> <p>Identify angles as measures of turn and compare angle sizes in everyday situations (ACMMG064)</p> <ul style="list-style-type: none"> • identify 'angles' with two arms in practical situations, eg the angle between the arms of a clock • identify the 'arms' and 'vertex' of an angle • describe informally an angle as the 'amount of turning' between two arms ▮ recognise that the length of the arms does not affect the size of the angle (Reasoning) • compare angles directly by placing one angle on top of another and aligning one arm • identify 'perpendicular' lines in pictures, designs and the environment • use the term 'right angle' to describe the angle formed when perpendicular lines meet ▮ describe examples of right angles in the environment (Communicating, Problem Solving) ▮ identify right angles in two-dimensional shapes and three-dimensional objects (Communicating) 			
<h2 style="margin: 0;"><u>Whole Class Teaching Activities</u></h2> <p>Teaching Space and Geometry CD ROM –Stage One –Unit-Lines Lesson one: Investigating lines creating and investigating lines creating and</p>			

investigating lines.

Lesson two: Lines and Angles – creating and comparing angles.

Whole Class Teaching and Guided Group Activities

Using Maths Tracks-Stage two-Angles

Student activities include identifying and naming perpendicular lines; identifying angles with two arms in practical situations; identifying the arms and vertex of the angle in an opening, a slope and a turn where one arm is visible; comparing angles using informal means such as an angle tester; describing angles using everyday language and the term 'right' to describe the angle formed when perpendicular lines meet; drawing angles of various sizes by tracing around the adjacent sides of shapes and describing the angle drawn. Meets BoS outcomes SGS2.2b, WMS2.2, WMS2.3, WMS2.5. Includes teacher notes.

Many activities suitable to project onto screen or whiteboard

http://lrr.dlr.det.nsw.edu.au/LRRDownloads/8198/1/44338_2B_u51_Print.pdf

Please refer to the DET resource book '**Teaching About Angles –Stage 2**' for the in depth lesson for each of the following activities. Choose from the activities the ones that would be most suitable for your class of children to develop their understanding.

Square corners-Lesson Three pg 16

Students look for right angles in their classroom. They make drawings of the angles and use different methods to measure and compare the angle of the object and the drawn angle.

Drawing two-line angles-Lesson Ten pg 30

Students draw diagrams that can represent angles in any situation. They also investigate the similarity between two-line angles in different locations.

Clocks- Lesson 14 pg 38

Students identify and describe the angles made by a turning clock hand.

Drawing two-line and one-line angles- Lesson 15 pg 40

Students match two-line and one-line angles in different situations and explain the main features of an angle.

Computer Learning Object

Digital Geoboard

Using Learning Objects To Teach Mathematics CD ROM or TaLE-Two Dimensional Space

Previous NAPLAN Questions

Year 3 2008

9 Which pair of scissors has its blades opened to the largest angle?

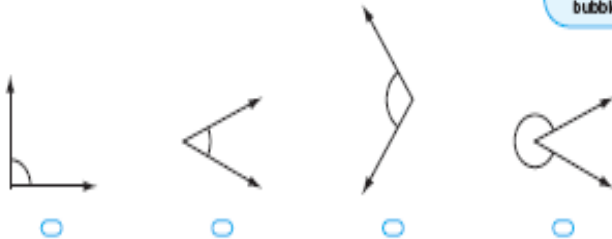
Shade one bubble.



Year 5 2009

11 Which shows a reflex angle?

Shade one bubble.



Pre Assessment

- Give students a picture of a polygon.
- Colour a corner in blue.
- Colour an angle in red.
- Put a cross in two corners that are the same size.

Post Assessment

Two Line Angle Tasks pg 54-57

These tasks are designed to assess students' current knowledge and understanding of angles. Teachers may find it helpful to use these questions with a small number of individual students before or after the implementation of a sequence of angles lessons. An analysis of students' responses may assist in planning an appropriate program of lessons.