

# Teacher/Lesson Information

This open-ended task can be used at the introduction of the topic, during explicit teaching or as an assessment item at the end of the teaching/learning cycle.

**Learning Task:** Students are required to construct a shape that has at least one angle measuring  $100^\circ$ .

**The open-ended lesson is generally broken into the below format:**

- As a whole class spend five minutes introducing the task (read through the question/problem and identify important information, discuss time for completing the task and how to work in the zone of confusion/get out of the pit).
- Students work for 5 minutes independently in the 'zone of confusion' (tackling the task by themselves, using 'tools' to get out of the 'pit').
- Students can seek 'four before me' and workshop ideas with peers whilst working for a further 15 minutes on the task.
- During students' working time, the teacher moves around the room offering support and posing questions to students to gain a deeper understanding of their knowledge of the topic being covered.
- The class are then brought back together where some students' work is projected on the whiteboard and discussed (with the use of a visualiser/camera/interactive whiteboard or drawn on the board by the student). Student samples are carefully chosen to demonstrate growth in learning and a variety of possible methods to complete the problem. Students are given the opportunity to explain their patterns.

Students will complete the above task without the use of technology. Students will include all angle sizes.

## Answer:

This will differ from student to student.

Students are required to have a completed 2D shape with at least one angle measuring  $100^\circ$ .

Students are required to use a protractor to measure and record the sizes of all of the shapes angles.

All angle sizes are to be recorded.

# Drawing Angles

I can construct angles using a protractor. (ACMMG112)

Sam started to draw a shape but became distracted and only completed the first two lines! The lines that he has drawn make an angle size of  $100^\circ$ .

Draw the angle that Sam started with and then draw the rest of the shape.

Measure and record the sizes of all of the shapes angles.

