

## Activity:

The aim of this activity is for children to practise calculating angles in polygons. There are three questions to complete. The first two questions allow children to practise the skill, while the third question extends them as they have to problem solve and explain their answer.

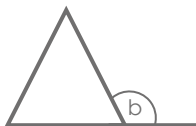
## Vocabulary:

**Polygons** are 2D shapes with straight sides. A polygon can have any number of sides.

**Interior angles** are inside a shape at the vertex (corner or point). For example,  $a$  is an interior angle below:



**Exterior angles** are angles between any side of a shape and a line extended from the next side. For example,  $b$  is an exterior angle below:



## Supporting resources:

You can watch a video tutorial about calculating angles in polygons on [kids.classroomsecrets.co.uk](https://kids.classroomsecrets.co.uk) >> Year 6 >> Maths >> Properties of Shape >> Video Tutorials.

## Other resources:

If your child enjoyed this activity and wants to try more activities linked to this learning, you can sign up for £4.83 per month on [classroomsecrets.co.uk/membership](https://classroomsecrets.co.uk/membership).

Check out our daily timetable for Year 6 home learning activities on [kids.classroomsecrets.co.uk](https://kids.classroomsecrets.co.uk) >> Home Learning Timetable.

## Angles in Polygons

1. A is a hexagon =  $720^\circ$ , B is an octagon =  $1,080^\circ$ , C is a rectangle =  $360^\circ$
2. B equals  $108^\circ$  and is the odd one out (A and C both equal  $114^\circ$ ).
3. Sophie is correct. She has divided the shape into triangles correctly; each triangle has interior angles which add up to  $180^\circ$ , so the interior angles in a heptagon will add up to  $900^\circ$ .