Year 7 *Maths*
Topic 7 *Angles and Polygons*

Students are learning about Angles and Polygons at this point in Year 7 because they need a strong knowledge of shape and angles in order to progress to more difficult geometrical topics in the years beyond. We also need to asses the geometrical knowledge they have from Primary School.

Previous topic: Solving Equations

Next topic: Percentages
Next Geometry topic: Area, Perimeter & Volume (Year 8)

Core knowledge/skills/concepts

- Naming 2D shapes
- Estimating, measuring and drawing angles
- Classifying types of angle (acute, obtuse, reflex)
- Understand angle notation
- Classifying triangles & quadrilaterals
- Regular, irregular, convex & concave shapes
- Angles on a straight line
- Angles around a point
- Angles in a triangle

Essential vocabulary

acute angle
Angle notation
degree (°)
equilateral triangle
horizontal
intersect
isosceles triangle
obtuse angle
parallel
perpendicular
reflex angle
right angle
right-angled triangle
scalene triangle
vertical

Threshold concepts

- Naming 2D shapes
- Understand angle notation
- Classifying triangles & quadrilaterals
- Regular shapes
- Angles on a straight line
- Angles around a point
- Angles in a triangle

Opportunities for reading

How and when will the core learning be assessed?

Mid-topic Assessment, End of topic Assessment, Assessment 3 (May)

Links to other topics/subjects

Shapes are all around us, so there is a strong real-life link. Of course, any design or engineering job will require a good understanding of angles.

This topic will also provides students a chance to practise their Solving Equations by solving equations in the context of angles.

Students will Further develop their knowledge of angles and polygons in Year 10.

Geometry topics in Year 8 include: Area, Perimeter & Volume; Transformations and Pythagoras' theorem.