

Maths - Year 5

Geometry 1: Measuring angles

Key Vocabulary

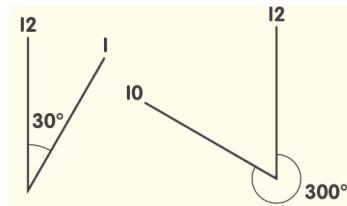
Angle	An amount of turn or rotation.
Turn	Refers to the size of a turn e.g. full turn, half turn, quarter turn etc.
Vertex	A point where two sides meet in a flat shape, or a point where three or more edges meet in a 3D shape.
Degrees	Unit of measurement for the size of an angle.
Acute angle	An angle smaller than a right angle.
Right angle	An angle of exactly 90 degrees.
Obtuse angle	An angle bigger than a right angle.
Straight angle	An angle of 180 degrees.
Reflex angle	An angle between 180 degrees and 360 degrees.
Protractor	An instrument used to measure the size of an angle.

Mathematical Skills

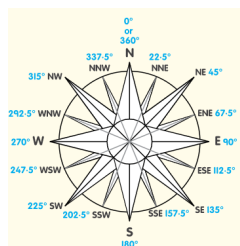
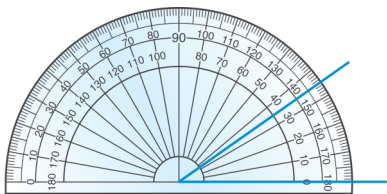
- Explain that an angle is an amount of turn or a measure of change in direction and is measured in degrees.
- Know that a full turn or full circle is 360° , and know or can work out the size of other fractions of a full turn or circle, e.g. that a quarter turn or right angle is 90° .
- Classify an angle as acute, right, obtuse, straight or reflex, and use this understanding to give a reasonable estimate of its size.
- Use a protractor to measure and draw angles.
- Calculate missing angles at a point and at a point on a straight line by subtracting from 360° and 180° , respectively.

Mathematical Methods

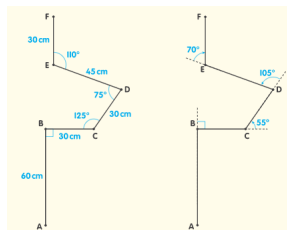
- Introducing degrees, by visualising the hands of a clock.



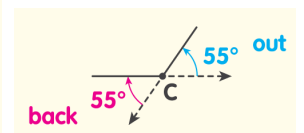
- Measuring angles with a protractor and linking angles to a compass.



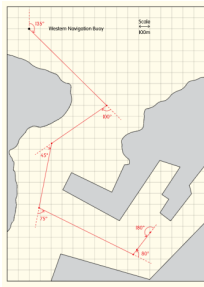
- Measuring angles and planning a route?



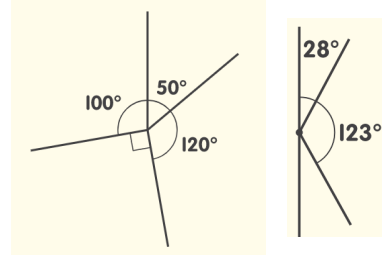
- forward 60 cm
- clockwise 90°
- forward 30 cm
- anti-clockwise 55°
- forward 30 cm
- anti-clockwise 105°
- forward 45 cm
- clockwise 70°
- forward 30 cm



- Drawing angles and plotting a route.



- Finding missing angles at a point and on a straight line.

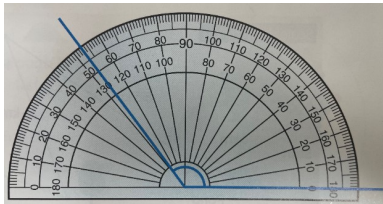


Can you..?

- Estimate the size of the angle.



- What is the angle shown in degrees?



- Find the missing angles.

