## Maths - Year 5

Geometry 3: Exploring angles

| Key Vocabulary |  |
| :--- | :--- |
| Angle | An amount of turn or rotation. |
| Turn | Refers to the size of a turn e.g. full turn, half turn, <br> quarter turn etc. |
| vertex | A point where two sides meet in a flat shape, or a point <br> where three or more edges meet in a 3D shape. |
| Degrees | Unit of measurement for the size of an angle. |
| Acute angle | An angle less than a right angle. |
| Right angle | An angle of exactly 90 degrees. |
| Obtuse angle | An angle greater 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. |
| Polygon | A flat geometric shape with straight sides. |
| parallel | Lines that remain the same distance apart and never <br> touch. |

## Mathematical Skills

- Describe the relationship between the interior and exterior angles of any polygon.
- Use conventional symbols for parallel lines.
- Identify and draw diagonals in polygons.
- Use angle sum facts to work out missing angles.
- Reason to generalise findings.


## Mathematical Methods

- Exploring exterior angles.


Exploring exterior and interior angles.


Providing the sum of the interior angles of a triangle.


Exploring angles in triangles.


Exploring angles in quadrilaterals.


| Number of <br> sides | Name | Sum of interior <br> angles |
| :---: | :---: | :---: |
| 3 | triangle | $180^{\circ}$ |
| 4 | quadrilateral | $360^{\circ}$ |
| 5 | pentagon | $540^{\circ}$ |
| 6 | hexagon | $720^{\circ}$ |
| 7 | heptagon | $900^{\circ}$ |

## Can you..?

- Find angles A and D.

- $\quad$ Find the missing angles in the quadrilateral.


