Year 4 Maths: Geometry: Shape



What should I already know?

- Draw 2D shapes and make 3D shapes using modelling materials.
- Recognise 3D shapes in different orientations and describe them.
- Recognise angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.
- Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
- Identify a vertical line of symmetry in 2D shapes (Year 2). (See reverse for previously learnt vocabulary to describe properties).
- Vocabulary I should already know: 2D shape, 3D shape, side, edge, vertex, vertices, face, curved.

Key Knowledge

Identify lines of symmetry in 2D shapes presented in different orientations.



A square has 4 lines of symmetry.



An equilateral triangle has 3 lines of symmetry.



An isosceles triangle has 1 line of symmetry.

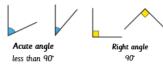


A rhombus has 2 lines of symmetry.

Complete a simple symmetric figure with respect to a specific line of symmetry.



Identify acute and obtuse angles and compare and order angles up to two right angles by size.



Obtuse angle greater than 90 less than 180

Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.

Quadrilaterals



A square has 4 equal sides and 4 right angles. It is also a rhombus, rectangle and parallelogram.



A parallelogram has 2 pairs of parallel, equal sides and opposite equal angles.



A rhombus has 4 equal sides and opposite equal angles it is also a parallelogram.



A rectangle has 2 pairs of parallel, equal sides and 4 right angles. It is also a parallelogram.

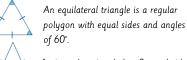


A kite has 2 pairs of adjacent, equal sides and 1 pair of opposite equal angles.



A trapezium only has 1 pair of opposite equal sides.

Triangles



An isosceles triangle has 2 equal sides and angles.

A right-angled triangle always has 1 90° angle. It can be isosceles or scalene.

A scalene triangle has no equal sides or angles.

Key Vocabulary and definitions

	J J
line of	A line that splits a shape into 2 equal
symmetry	parts. If you were to put a mirror on
	the line, the reflection looks exactly the
	same. Lines of symmetry can be
	vertical, horizontal and diagonal.
symmetric	One side that is the same as the other
figure	like matching halves.
	3
angles	When two straight lines meet at a
	point (r ight angle, acute angle,
	obtuse angle).
quadrilaterals	A four-sided shape.
polygon	Any 2D shape formed with straight
polygon	sides.
	States.
vertical line	A line that goes straight up e.g.,
	people stand up straight in a vertical
	position.
horizontal	A line that goes across e.g., an
line	aeroplane glides through the sky in a
	horizontal position.
intersect	Cross e.g., when two or more lines
	cross or lie across each other.
parallel lines	Lines that never intersect e.g., run
paratici tines	along next to each other like tracks of
	a train.
nornandicular	Lines that intersect one and other at
perpendicular	
lines	90° (right angle).
	1