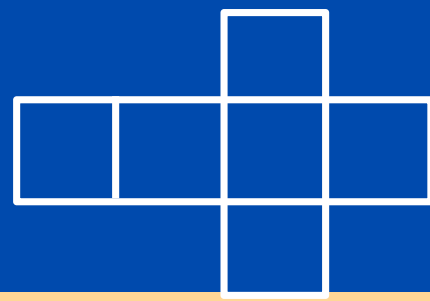# MATHS- SHAPE YEAR 6
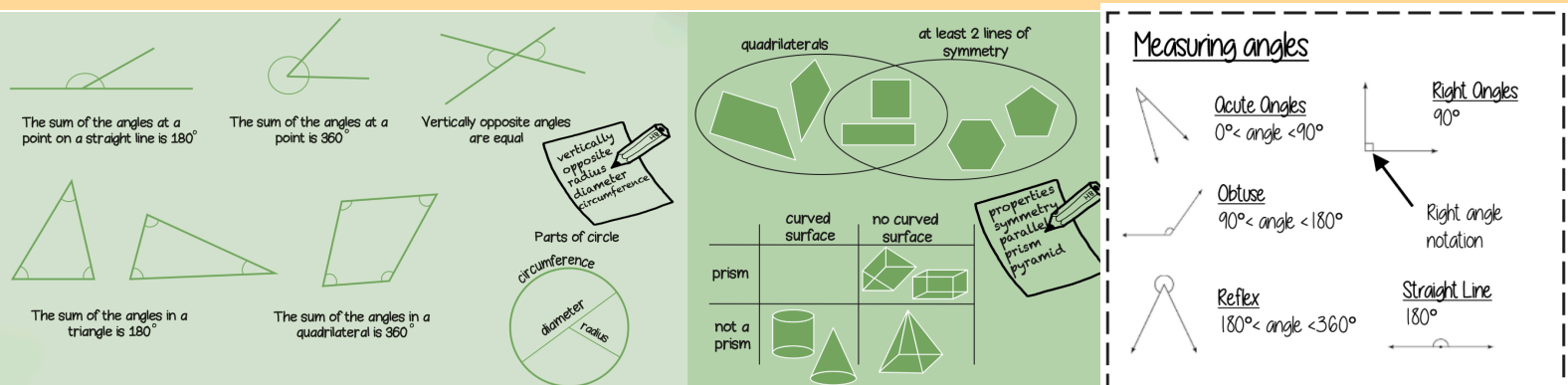
RECAP

- A protractor is used to measure angles.
- A regular shape is a 2D shape with all sides being the same length and all angles being the same size.
- There are three types of triangle; a scalene, isoceles and equilateral triangle.

CRUCIAL KNOWLEDGE

- There are 180 in a straight line.
- The interior angles of a triangle add up to 180.
- The interior angles of a quadrilateral add up to 360.
- There are four types of angle: acute, right, obtuse and reflex.
- There are 360 in a circle.
- A net is a 2d plan that you can fold to make a 3D shape.
- 3-D shapes have 3 dimensions: height, width and depth. They have faces, vertices and edges.
- A circle is A 2d SHAPE. The perimeter of a circle is called the circumferenceThe distance across the circle when passing through the centre is the diameter and the distance from the centre of the circle to the circumference is called the radius.

Measuring angles

Acute Angles
0°< angle <90°

Right Angles
90°

Obtuse
90°< angle <180°

Right angle notation

Reflex
180°< angle <360°

Straight Line
180°

The sum of the angles at a point on a straight line is 180°

The sum of the angles at a point is 360°

Vertically opposite angles are equal

The sum of the angles in a triangle is 180°

The sum of the angles in a quadrilateral is 360°

Parts of circle

circumference

diameter   radius

quadrilaterals

at least 2 lines of symmetry

	curved surface	no curved surface
prism		
not a prism		

KEY VOCABULARY

Diameter
The distance from one side of the circle to the other travelling through the centre.

Translation
Moving a shape from one point on a grid to another.

Quadrant
One of four grids around the 0 origin that shows the location of a point.

Origin
The zero point on the co-ordinates grid.

Circumference
The distance around the outside of a circle.

Rectilinear
A shape with straight sides that all meet at right angles.

Prism
A 3D shape with a cross-section of a polygon all the way along its length.

Radius
The distance from the centre of a circle to the circumference.

Perpendicular
Lines that are at a right angle to each other where they meet.

Cube
A 3D shape with six square faces.

Reflex
An angle greater than 180° and less than 360°.

Regular
A shape where sides and angles are all equal.

Vertically Opposite
The angles formed when two straight lines cross over.

Cuboid
A 3D shape with six rectangular faces.

Polygon
A shape with straight sides.

Irregular
A shape where sides and angles are not all equal.