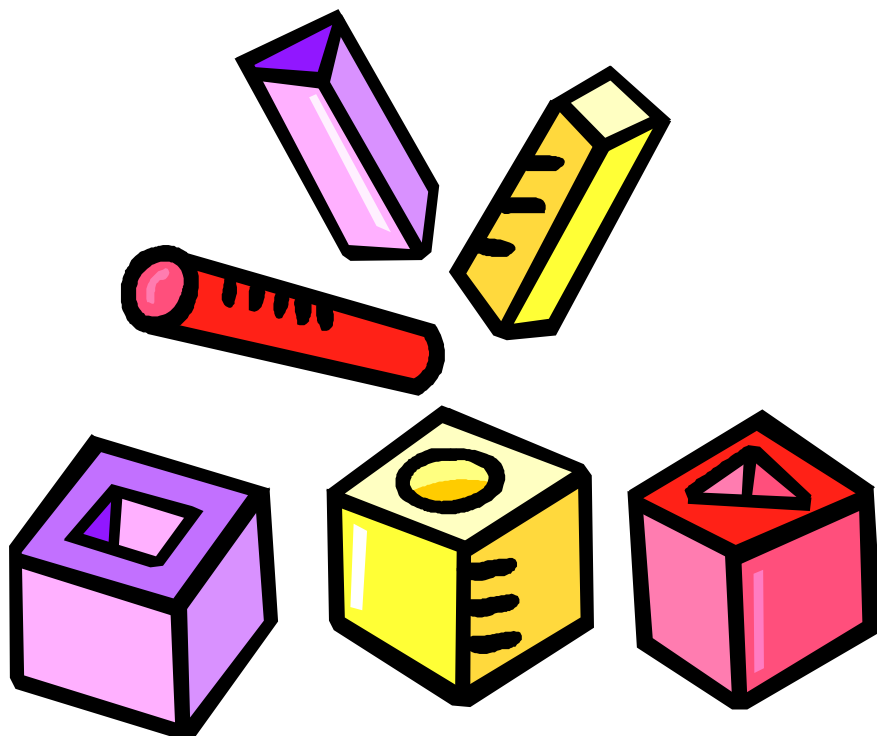


# Shape Dictionary

## YR to Y6



## Guidance Notes

The terms in this dictionary are taken from the booklet 'Mathematical Vocabulary' produced by the National Numeracy Strategy.

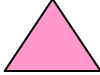

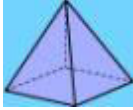
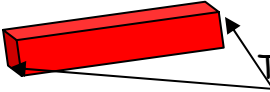






Children need to understand and use these words if they are to make good progress in understanding shape and space.



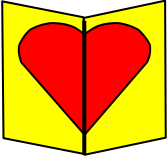
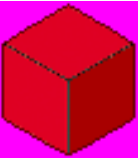
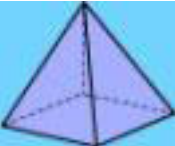








The vocabulary for shape and space has been separated into three sections:


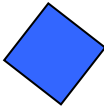

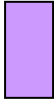



- 2D shape
- 3D shape
- properties of shape



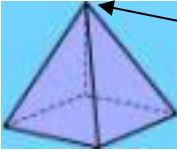
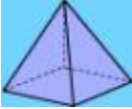
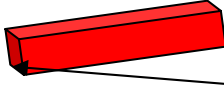




The properties of shape section also draws on vocabulary from the sections on patterns and symmetry and position, direction and movement, where these will further support children's understanding.



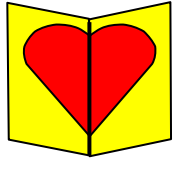
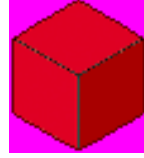
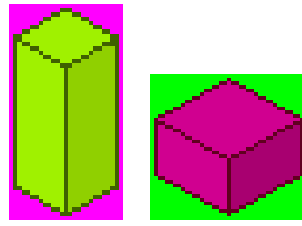
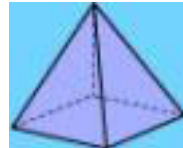



The words listed for each year include vocabulary from the previous year, with new words for the year printed in red from Year 1 onwards.

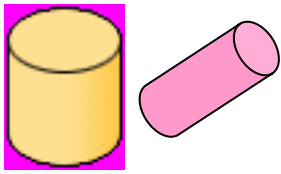





Year	Vocabulary	Definition
<b>Reception</b>	<b>Properties of Shape</b>	
	<b>shape</b>	The shape of an object is its outline.
	<b>flat</b>	A flat object has a level surface with no ups or downs.
	<b>curved</b>	A line that is not straight or an object that is not flat.
	<b>straight</b>	A line or edge which has no curves is straight.
	<b>round</b>	A round object is shaped like a circle or a ball.
	<b>hollow</b>	A hollow shape has a space inside it.
	<b>solid</b>	A solid shape has no space inside it.
	<b>corner</b>	Two or more edges or sides meet at a corner.  <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>This triangle has 3 corners. This box has 8 corners.</p>
	<b>face</b>	A face is one of the surfaces of a 3D shape.   <p>This pyramid has 5 faces.</p>
	<b>side</b>	A line in a 2D shape is called a side.
	<b>edge</b>	An edge is where 2 faces meet in a 3D shape.
	<b>end</b>	The outer parts of a 3D shape are called the ends.   <p>This rod has 2 ends.</p>
	<b>bigger</b>	Comparing the size of two objects.  <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>The dog is bigger than the cat.</p>
<b>larger</b>	Comparing the size of two objects.  <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>The butterfly is larger than the ant.</p>	
<b>smaller</b>	Comparing the size of two objects.  <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>The bike is smaller than the car.</p>	

Reception	<b>symmetrical</b>	<p>A shape is symmetrical if we can fold it so that one half covers the other half exactly.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>		
	<b>match</b>	<p>When you fold a shape and one half covers the other exactly, the two halves match.</p> <div style="display: flex; justify-content: space-around; align-items: center;">  <p>The two halves of this shape match.</p> </div>		
	<b>3D shapes</b>			
	<b>cube</b>		<p>A cube has 6 square faces all the same size. It also has 8 corners and 12 edges.</p>	
	<b>pyramid</b>		<p>There are two types of pyramids:</p> <p>square based pyramid (1 square face and 4 triangular faces)</p>	
			<p>triangular based pyramid (4 triangular faces) also called a tetrahedron</p>	
	<b>sphere</b>			<p>A sphere has only one curved face.</p>
	<b>cone</b>		<p>A cone has a circle as its base, a curved face and a point.</p>	
	<b>2D shapes</b>			
	<b>circle</b>		<p>A circle is a shape where it is always the same distance from the edge to the centre.</p>	
<b>triangle</b>	<p>A triangle has 3 straight sides and 3 corners.</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div> <p>Ensure that children see triangles in a variety of forms.</p>			


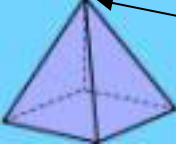
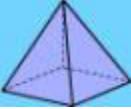
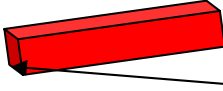


<b>Reception</b>	<b>square</b>	<p>A square is a special type of rectangle. It has 4 straight sides of the same lengths and 4 right angles.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>Ensure that children see squares in various rotations.</p>
	<b>rectangle</b>	<p>A rectangle has 4 straight sides. Pairs of opposite sides are the same length.</p> <div style="display: flex; justify-content: center; align-items: center; gap: 20px;">   </div>
	<b>star</b>	<p>A star has points coming out of the centre.</p> <div style="display: flex; justify-content: center; align-items: center; gap: 20px;">    </div>




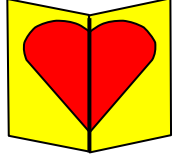
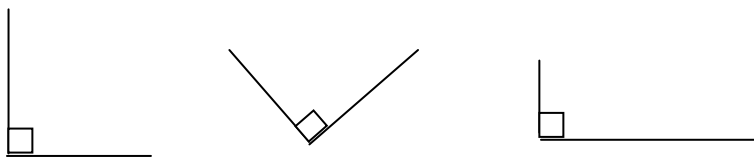
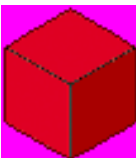
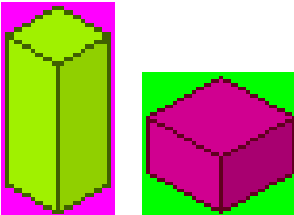
Year	Vocabulary	Definition
Year 1	<b>Properties of Shape</b>	
	shape	The shape of an object is its outline.
	flat	A flat object has a level surface with no ups or downs.
	curved	A line that is not straight or an object that is not flat.
	straight	A line or edge which has no curves is straight.
	round	A round object is shaped like a circle or a ball.
	hollow	A hollow shape has a space inside it.
	solid	A solid shape has no space inside it.
	corner	Two or more edges or sides meet at a corner.  <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>This triangle has 3 corners. This box has 8 corners.</p>
	point, pointed	A sharp part of a shape is a point.  <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>point</p> <p>The pyramid is pointed.</p> </div> </div>
	face	A face is one of the surfaces of a 3D shape.  <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>This pyramid has 5 faces.</p> </div> </div>
	side	A line in a 2D shape is called a side.
	edge	An edge is where 2 faces meet in a 3D shape.
	end	The outer parts of a 3D shape are called the ends.  <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>This rod has 2 ends.</p> </div> </div>
bigger	Comparing the size of two objects.  <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>The dog is bigger than the cat.</p>	
larger	Comparing the size of two objects.  <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>The butterfly is larger than the ant.</p>	

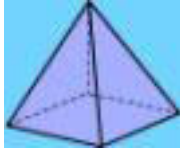











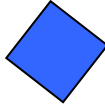


<b>Year 1</b>	<b>smaller</b>	<p>Comparing the size of two objects.</p>  <p>The bike is smaller than the car.</p>
	<b>symmetrical</b>	<p>A shape is symmetrical if we can fold it so that one half covers the other half exactly.</p> 
	<b>match</b>	<p>When you fold a shape and one half covers the other exactly, the two halves match.</p>  <p>The two halves of this shape match.</p>
	<b>3D shapes</b>	
	<b>cube</b>	 <p>A cube has 6 square faces all the same size. It also has 8 corners and 12 edges.</p>
	<b>cuboid</b>	 <p>A cuboid has 6 rectangular faces.</p>
	<b>pyramid</b>	<p>There are two types of pyramids:</p>  <p>square based pyramid (1 square face and 4 triangular faces)</p>  <p>triangular based pyramid (4 triangular faces) also called a tetrahedron</p>
	<b>sphere</b>	 <p>A sphere has only one curved face.</p>
	<b>cone</b>	 <p>A cone has a circle as its base, a curved face and a point.</p>



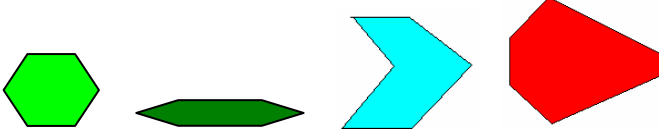
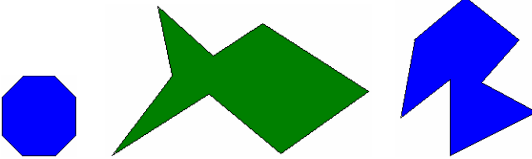
<b>Year 1</b>	<b>cylinder</b>	 <p>A cylinder has circular faces at each end and a curved face.</p>
	<b>2D shapes</b>	
	<b>circle</b>	 <p>A circle is a shape where it is always the same distance from the edge to the centre.</p>
	<b>triangle</b>	<p>A triangle has 3 straight sides and 3 corners.</p>  <p>Ensure that children see triangles in a variety of forms.</p>
	<b>square</b>	<p>A square is a special type of rectangle. It has 4 straight sides of the same lengths and 4 right angles.</p>  <p>Ensure that children see squares in various rotations.</p>
	<b>rectangle</b>	<p>A rectangle has 4 straight sides. Pairs of opposite sides are the same length.</p> 
	<b>star</b>	<p>A star has points coming out of the centre.</p> 



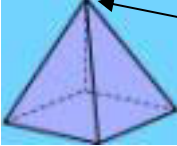

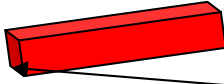









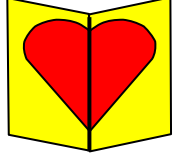

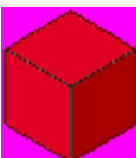
Year	Vocabulary	Definition
Year 2	<b>Properties of Shape</b>	
	shape	The shape of an object is its outline.
	flat	A flat object has a level surface with no ups or downs.
	curved	A line that is not straight or an object that is not flat.
	straight	A line or edge which has no curves is straight.
	round	A round object is shaped like a circle or a ball.
	hollow	A hollow shape has a space inside it.
	solid	A solid shape has no space inside it.
	corner	Two or more edges or sides meet at a corner.  This triangle has 3 corners. This cube has 8 corners.
	point, pointed	A sharp part of a shape is a point.  point The pyramid is pointed.
	face	A face is one of the surfaces of a 3D shape.  This pyramid has 5 faces.
	side	A line in a 2D shape is called a side.
	edge	An edge is where 2 faces meet in a 3D shape.
	end	The outer parts of a 3D shape are called the ends.  This rod has 2 ends.
surface	A surface is the 2D boundary of a 3D object. Face can be used instead.	
bigger	Comparing the size of two objects.  The dog is bigger than the cat.	
larger	Comparing the size of two objects.  The butterfly is larger than the ant.	

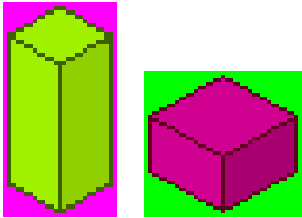
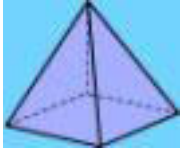
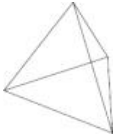

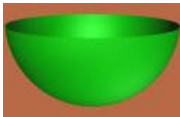

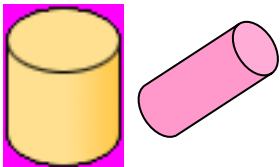


Year 2	<b>smaller</b>	<p>Comparing the size of two objects.</p>  <p>The bike is smaller than the car.</p>	
	<b>symmetrical</b>	<p>A shape is symmetrical if we can fold it so that one half covers the other half exactly.</p> 	
	<b>line of symmetry</b>	<p>The line of symmetry divides a shape into symmetrical parts.</p>  <p>The blue line is the line of symmetry.</p>	
	<b>fold</b>	<p>Bend so that one part covers another.</p>	
	<b>match</b>	<p>When you fold a shape and one half covers the other exactly, the two halves match.</p>  <p>The two halves of this shape match.</p>	
	<b>mirror line</b>	<p>The mirror line is another way of saying line of symmetry.</p>	
	<b>reflection</b>	<p>A mirror view.</p>	
	<b>right-angled</b>	<p>A right angle is <math>\frac{1}{4}</math> of a full turn or <math>90^\circ</math>.</p> 	
	<b>3D shapes</b>		
	<b>cube</b>	 <p>A cube has 6 square faces all the same size. It also has 8 corners and 12 edges.</p>	
<b>cuboid</b>	 <p>A cuboid has 6 rectangular faces.</p>		

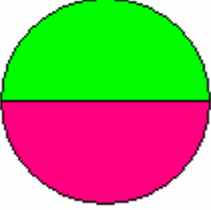





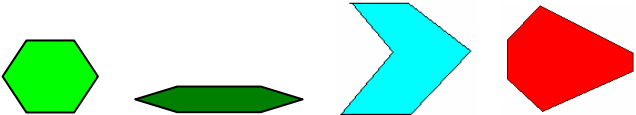
<b>Year 2</b>	<b>pyramid</b>	<p>There are two types of pyramids:</p>  <p>square based pyramid (1 square face and 4 triangular faces)</p>  <p>triangular based pyramid (4 triangular faces) also called a tetrahedron</p>
	<b>sphere</b>	  <p>A sphere has only one curved face.</p>
	<b>cone</b>	 <p>A cone has a circle as its base, a curved face and a point.</p>
	<b>cylinder</b>	  <p>A cylinder has circular faces at each end and a curved face.</p>
	<b>2D shapes</b>	
	<b>circle</b>	 <p>A circle is a shape where it is always the same distance from the edge to the centre.</p>
	<b>circular</b>	<p>Something is circular if it has the same shape as a circle.</p>
	<b>triangle</b>	<p>A triangle has 3 straight sides and 3 corners.</p>    <p>Ensure that children see triangles in a variety of forms.</p>
	<b>triangular</b>	<p>Something is triangular if it has the same shape as a triangle.</p>
	<b>square</b>	<p>A square is a special type of rectangle. It has 4 straight sides of the same lengths and 4 right angles.</p>   <p>Ensure that children see squares in various rotations.</p>
<b>rectangle</b>	<p>A rectangle has 4 straight sides. Pairs of opposite sides are the same length.</p>  	
<b>rectangular</b>	<p>Something is rectangular if it has the same shape as a rectangle.</p>	

<b>Year 2</b>	<b>star</b>	<p>A star has points coming out of the centre.</p> 
	<b>pentagon</b>	<p>A pentagon has 5 straight sides and 5 corners.</p>  <p>Ensure that children see pentagons in a variety of forms.</p>
	<b>hexagon</b>	<p>A hexagon has 6 straight sides and 6 corners.</p>  <p>Ensure that children see hexagons in a variety of forms.</p>
	<b>octagon</b>	<p>An octagon has 8 straight sides and 8 corners.</p>  <p>Ensure that children see octagons in a variety of forms.</p>

Year	Vocabulary	Definition
Year 3	<b>Properties of Shape</b>	
	<b>shape</b>	The shape of an object is its outline.
	<b>flat</b>	A flat object has a level surface with no ups or downs.
	<b>curved</b>	A line that is not straight or an object that is not flat.
	<b>straight</b>	A line or edge which has no curves is straight.
	<b>round</b>	A round object is shaped like a circle or a ball.
	<b>hollow</b>	A hollow shape has a space inside it.
	<b>solid</b>	A solid shape has no space inside it.
	<b>corner</b>	Two or more edges or sides meet at a corner.  <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>This triangle has 3 corners. This cube has 8 corners.</p>
	<b>point, pointed</b>	A sharp part of a shape is a point.  <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>point</p> <p>The pyramid is pointed.</p> </div> </div>
	<b>face</b>	A face is one of the surfaces of a 3D shape.  <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>This pyramid has 5 faces.</p> </div> </div>
	<b>side</b>	A line in a 2D shape is called a side.
	<b>edge</b>	An edge is where 2 faces meet in a 3D shape.
	<b>end</b>	The outer parts of a 3D shape are called the ends.  <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>This rod has 2 ends.</p> </div> </div>
	<b>surface</b>	A surface is the 2D boundary of a 3D object.
<b>bigger</b>	Comparing the size of two objects.  <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>The dog is bigger than the cat.</p>	
<b>larger</b>	Comparing the size of two objects.  <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>The butterfly is larger than the ant.</p>	

<b>Year 3</b>	<b>smaller</b>	<p>Comparing the size of two objects.</p>  <p>The bike is smaller than the car.</p>
	<b>symmetrical</b>	<p>A shape is symmetrical if we can fold it so that one half covers the other half exactly.</p> 
	<b>line of symmetry</b>	<p>The line of symmetry divides a shape into symmetrical parts.</p>  <p>The blue line is the line of symmetry.</p>
	<b>fold</b>	<p>Bend so that one part covers another.</p>
	<b>match</b>	<p>When you fold a shape and one half covers the other exactly, the two halves match.</p>  <p>The two halves of this shape match.</p>
	<b>mirror line</b>	<p>The mirror line is another way of saying line of symmetry.</p>
	<b>reflection</b>	<p>A mirror view.</p>
	<b>right-angled</b>	<p>A right angle is the angle made by a quarter turn or 90°.</p> 
	<b>vertex</b>	<p>A vertex of a shape is a point at which 2 or more edges meet. It is more commonly referred to as a 'corner'.</p>
	<b>vertices</b>	<p>More than one vertex.</p>
	<b>3D shapes</b>	
	<b>cube</b>	 <p>A cube has 6 square faces all the same size. It also has 8 corners and 12 edges.</p>

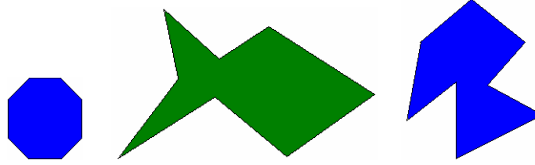
<b>Year 3</b>	<b>cuboid</b>		A cuboid has 6 rectangular faces.	
	<b>pyramid</b>	<p>There are two types of pyramids:</p>  <p>square based pyramid (1 square face and 4 triangular faces)</p>  <p>triangular based pyramid (4 triangular faces) also called a tetrahedron</p>		
	<b>sphere</b>		A sphere has only one curved face.	
	<b>hemisphere</b>		A hemisphere is half a sphere. It is made by cutting through the centre of a sphere, e.g. when the earth is cut in two it creates the northern hemisphere and the southern hemisphere.	
	<b>cone</b>		A cone has a circle as its base, a curved face and a point.	
	<b>cylinder</b>		A cylinder has circular faces at each end and a curved face.	
	<b>prism</b>	<p>A prism is a solid shape with matching ends. A prism has the same cross-section all across its length (like Blackpool rock!)</p> 		
	<b>2D shapes</b>			
	<b>circle</b>		A circle is a shape where it is always the same distance from the edge to the centre.	
	<b>circular</b>	Something is circular if it has the same shape as a circle.		

<b>Year 3</b>	<b>semicircle</b>	 <p>A semicircle is one half of a circle made by cutting along a line that goes from side to side through the middle of the circle.</p>
	<b>triangle</b>	<p>A triangle has 3 straight sides and 3 corners.</p>  <p>Ensure that children see triangles in a variety of forms.</p>
	<b>triangular</b>	<p>Something is triangular if it has the same shape as a triangle.</p>
	<b>square</b>	<p>A square is a special type of rectangle. It has 4 straight sides of the same lengths and 4 right angles.</p>  <p>Ensure that children see squares in various rotations.</p>
	<b>rectangle</b>	<p>A rectangle has 4 straight sides. Pairs of opposite sides are the same length.</p> 
	<b>rectangular</b>	<p>Something is rectangular if it has the same shape as a rectangle.</p>
	<b>star</b>	<p>A star has points coming out of the centre.</p> 
	<b>pentagon</b>	<p>A pentagon has 5 straight sides and 5 corners.</p>  <p>Ensure that children see pentagons in a variety of forms.</p>
	<b>pentagonal</b>	<p>Something is pentagonal if it has the same shape as a pentagon.</p>
	<b>hexagon</b>	<p>A hexagon has 6 straight sides and 6 corners.</p>  <p>Ensure that children see hexagons in a variety of forms.</p>
<b>hexagonal</b>	<p>Something is hexagonal if it has the same shape as a hexagon.</p>	



**octagon**

An octagon has 8 straight sides and 8 corners.



Ensure that children see octagons in a variety of forms.


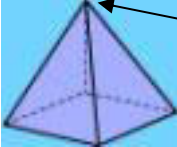

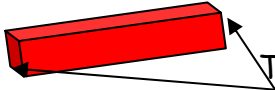


**octagonal**




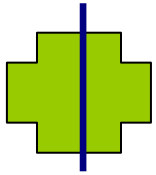
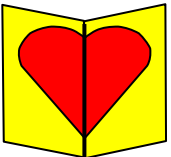
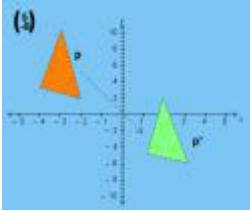
Something is octagonal if it has the same shape as an octagon.

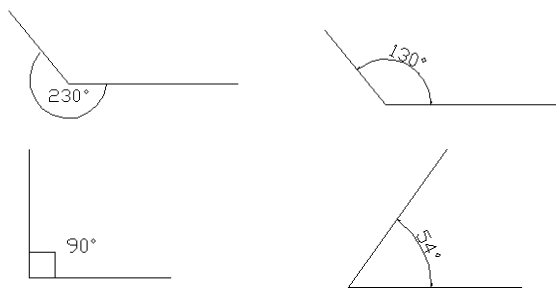


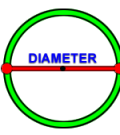
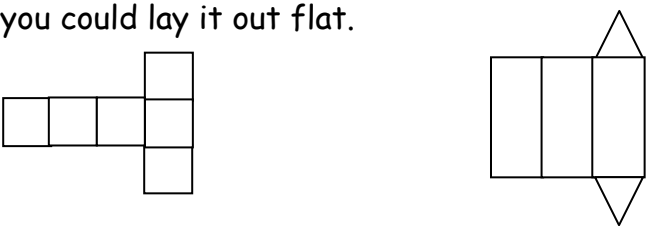
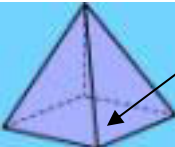
**quadrilateral**


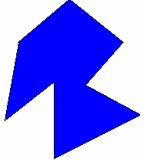
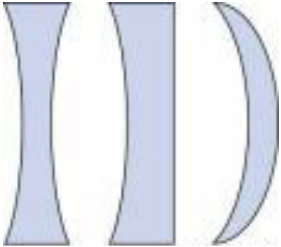
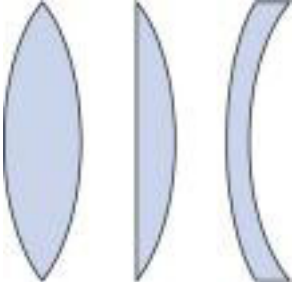
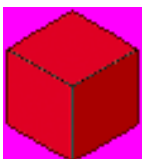
A polygon with four sides. See the table below for examples of quadrilaterals.

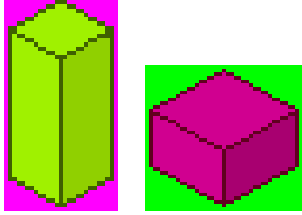
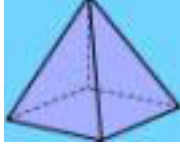


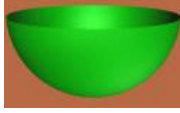

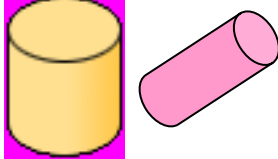

trapezium	
parallelogram	
rhombus	
rectangles	
kite	
arrowhead	
irregular quadrilaterals	





Year	Vocabulary	Definition
Year 4	<b>Properties of Shape</b>	
	shape	The shape of an object is its outline.
	flat	A flat object has a level surface with no ups or downs.
	line	A line has no width; it has only one measurement - its length.
	curved	A line that is not straight or an object that is not flat.
	straight	A line or edge which has no curves is straight.
	round	A round object is shaped like a circle or a ball.
	hollow	A hollow shape has a space inside it.
	solid	A solid shape has no space inside it.
	corner	Two or more edges or sides meet at a corner.  This triangle has 3 corners. This cube has 8 corners.
	point, pointed	A sharp part of a shape is a point.  point The pyramid is pointed.
	face	A face is one of the surfaces of a 3D shape.  This pyramid has 5 faces.
	side	A line in a 2D shape is called a side.
	edge	An edge is where 2 faces meet in a 3D shape.
	end	The outer parts of a 3D shape are called the ends.  This rod has 2 ends.
surface	A surface is the 2D boundary of a 3D object. Face can be used instead.	
bigger	Comparing the size of two objects.  The dog is bigger than the cat.	
larger	Comparing the size of two objects.  The butterfly is larger than the ant.	

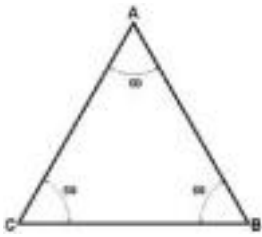
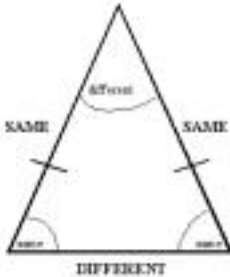

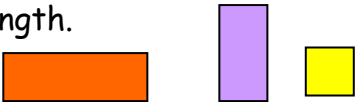


<p><b>smaller</b></p>	<p>Comparing the size of two objects.</p>  <p>The bike is smaller than the car.</p>
<p><b>symmetrical</b></p>	<p>A shape is symmetrical if we can fold it so that one half covers the other half exactly.</p> 
<p><b>line of symmetry</b></p>	<p>The line of symmetry divides a shape into symmetrical parts.</p>  <p>The blue line is the line of symmetry.</p>
<p><b>line symmetry</b></p>	<p>If a shape is symmetrical about a line, it has line symmetry</p> 
<p><b>fold</b></p>	<p>Bend so that one part covers another.</p>
<p><b>match</b></p>	<p>When you fold a shape and one half covers the other exactly, the two halves match.</p>  <p>The two halves of this shape match.</p>
<p><b>mirror line</b></p>	<p>The mirror line is another way of saying line of symmetry.</p>
<p><b>reflection</b></p>	<p>A mirror view.</p>
<p><b>reflect</b></p>	<p>To produce a reflection, you need to reflect the object in a mirror line.</p>
<p><b>translation</b></p>	<p>A translation moves an object by sliding it in any direction. The shape does not change size.</p> 

Year 4	<b>vertex</b>	A vertex of a shape is a point at which 2 or more edges meet. It is more commonly referred to as a 'corner'.
	<b>vertices</b>	More than one vertex.
	<b>angle</b>	An angle is made when two straight lines cross or meet each other at a point. Its size is measured by the amount one line has been turned in relation to the other. 
	<b>right-angled</b>	A right angle is the angle made by a quarter turn or 90°. 
	<b>centre</b>	Exactly in the middle of a shape.
	<b>radius</b>	The length of a straight line from the centre of the circle to its circumference (edge). 
	<b>diameter</b>	A line that cuts a circle in half and passes through the centre of the circle. 
	<b>net</b>	A net shows you what a solid shape would look like if you could lay it out flat. 
	<b>base</b>	The bottom face of a solid shape. 
	<b>square-based</b>	When the bottom face of a solid shape is a square, e.g. in a square-based pyramid.


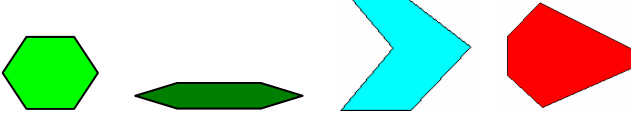
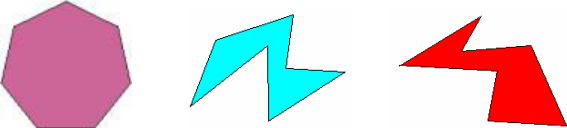


<b>vertex</b>	A vertex of a shape is a point at which 2 or more edges meet. It is more commonly referred to as a 'corner'.
<b>vertices</b>	More than one vertex.
<b>regular</b>	<p>A 2D regular shape has all sides the same length and all angles the same.</p> <p>On a 3D regular shape, all of the faces are identical regular polygons.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>A regular octagon</p> </div> <div style="text-align: center;">  <p>An irregular octagon.</p> </div> </div>
<b>irregular</b>	Any shape which is not regular (see above).
<b>concave</b>	<p>A concave surface curves inwards like the inside of a bowl or a spoon. (Caves go inwards!)</p> <div style="text-align: center;">  </div>
<b>convex</b>	<p>A convex surface curves outwards like the outside of a bowl or the back of a spoon.</p> <div style="text-align: center;">  </div>
<b>open</b>	When making nets of a cube, if the cube is open it is like an open box, it will have five faces rather than six.
<b>closed</b>	When making nets of a cube, if the cube is closed it creates a solid shape.
<b>3D shapes</b>	
<b>3D</b>	An object that has 3 dimensions: length, width and height.
<b>three-dimensional</b>	An object that has 3 dimensions: length, width and height.
<b>cube</b>	<div style="display: flex; align-items: center;">  <p>A cube has 6 square faces all the same size. It also has 8 corners and 12 edges.</p> </div>

<p><b>cuboid</b></p>	 <p>A cuboid has 6 rectangular faces.</p>
<p><b>pyramid</b></p>	<p>There are two types of pyramids:</p>  <p>square based pyramid (1 square face and 4 triangular faces)</p>  <p>triangular based pyramid (4 triangular faces) also called a tetrahedron</p>
<p><b>sphere</b></p>	 <p>A sphere has only one curved face.</p>
<p><b>hemisphere</b></p>	 <p>A hemisphere is half a sphere. It is made by cutting through the centre of a sphere, e.g. when the earth is cut in two it creates the northern hemisphere and the southern hemisphere.</p>
<p><b>spherical</b></p>	<p>Something is spherical if it has the same shape as a sphere.</p>
<p><b>cone</b></p>	 <p>A cone has a circle as its base, a curved face and a point.</p>
<p><b>cylinder</b></p>	 <p>A cylinder has circular faces at each end and a curved face.</p>
<p><b>cylindrical</b></p>	<p>Something is cylindrical if it has the same shape as a cylinder.</p>
<p><b>prism</b></p>	<p>A prism is a solid shape with matching ends. A prism has the same cross-section all across its length (like Blackpool rock!)</p> 

<b>Year 4</b>	<b>tetrahedron</b>	<p>A regular polyhedron with 4 faces that are congruent (the same size and shape) equilateral triangles.</p>  <p>A tetrahedron</p>
	<b>polyhedron</b>	<p>A 3D shape whose faces are all polygons. These are cube, cuboid, triangular prism, pentagonal prism, hexagonal prism, octagonal prism, tetrahedron, square based pyramid, pentagonal pyramid, octagonal pyramid, octahedron, dodecahedron and icosahedron. When each of the faces of a polyhedron is identical it is called a regular polyhedron. There are 5 different regular polyhedra (plural of polyhedron); tetrahedron (4 triangular faces), cube (6 square faces), octahedron (8 triangular faces), dodecahedron (12 pentagonal faces) and icosahedron (20 triangular faces).</p>
	<b>2D shapes</b>	
	<b>2D</b>	Flat shapes are two dimensional. They have length and width, but no height or thickness.
	<b>two-dimensional</b>	Flat shapes are two dimensional. They have length and width, but no height or thickness.
	<b>circle</b>	 <p>A circle is a shape where it is always the same distance from the edge to the centre.</p>
	<b>circular</b>	Something is circular if it has the same shape as a circle.
	<b>semi-circle</b>	 <p>A semicircle is one half of a circle made by cutting along a line that goes from side to side through the middle of the circle.</p>
	<b>triangle</b>	<p>A triangle has 3 straight sides and 3 corners.</p>  <p>Ensure that children see triangles in a variety of forms.</p>
	<b>triangular</b>	Something is triangular if it has the same shape as a triangle.

Year 4	<b>equilateral triangle</b>	<p>All three sides of an equilateral triangle are the same length and all the angles are equal at <math>60^\circ</math>.</p> 
	<b>isosceles triangle</b>	<p>An isosceles triangle has two equal sides and two angles that are equal.</p> 
	<b>square</b>	<p>A square is a special type of rectangle. It has 4 straight sides of the same lengths and 4 right angles.</p>  <p>Ensure that children see squares in various rotations.</p>
	<b>rectangle</b>	<p>A rectangle has 4 straight sides. Pairs of opposite sides are the same length.</p> 
	<b>rectangular</b>	<p>Something is rectangular if it has the same shape as a rectangle.</p>
	<b>oblong</b>	<p>A quadrilateral with four right angles and two pairs of equal parallel sides with each pair different in length. (A rectangle in which one pair of edges is longer than the other - the other form of rectangle being a square).</p> 
	<b>star</b>	<p>A star has points coming out of the centre.</p> 

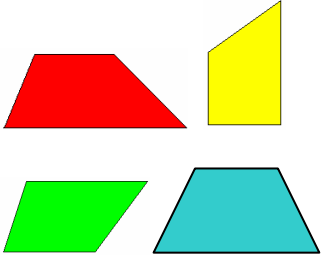
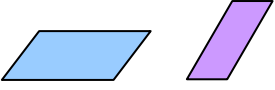
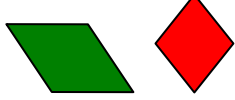
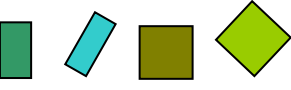
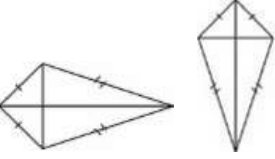
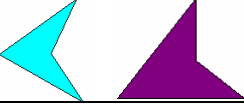



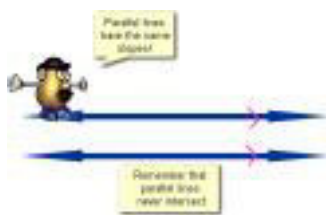


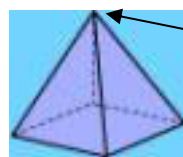

<p><b>pentagon</b></p>	<p>A pentagon has 5 straight sides and 5 corners.</p>  <p>Ensure that children see pentagons in a variety of forms.</p>																						
<p><b>pentagonal</b></p>	<p>Something is pentagonal if it has the same shape as a pentagon.</p>																						
<p><b>hexagon</b></p>	<p>A hexagon has 6 straight sides and 6 corners.</p>  <p>Ensure that children see hexagons in a variety of forms.</p>																						
<p><b>hexagonal</b></p>	<p>Something is hexagonal if it has the same shape as a hexagon.</p>																						
<p><b>heptagon</b></p>	<p>A heptagon has 7 straight sides and 7 corners.</p>   <p>20p and 50p coins are examples of heptagons.</p> <p>Ensure that children see heptagons in a variety of forms.</p>																						
<p><b>octagon</b></p>	<p>An octagon has 8 straight sides and 8 corners.</p>  <p>Ensure that children see octagons in a variety of forms.</p>																						
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<p><b>polygon</b></p>	<p>Any flat shape with three or more straight sides. When all the sides and angles of a polygon are equal, it is called a regular polygon.</p> <table border="1" data-bbox="762 1738 1358 2096"> <thead> <tr> <th>No. of sides</th> <th>Name of polygon</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>triangle</td> </tr> <tr> <td>4</td> <td>quadrilateral</td> </tr> <tr> <td>5</td> <td>pentagon</td> </tr> <tr> <td>6</td> <td>hexagon</td> </tr> <tr> <td>7</td> <td>heptagon</td> </tr> <tr> <td>8</td> <td>octagon</td> </tr> <tr> <td>9</td> <td>nonagon</td> </tr> <tr> <td>10</td> <td>decagon</td> </tr> <tr> <td>11</td> <td>hendecagon</td> </tr> <tr> <td>12</td> <td>dodecagon</td> </tr> </tbody> </table>	No. of sides	Name of polygon	3	triangle	4	quadrilateral	5	pentagon	6	hexagon	7	heptagon	8	octagon	9	nonagon	10	decagon	11	hendecagon	12	dodecagon
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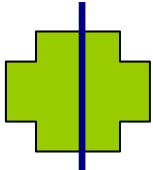
Year 4


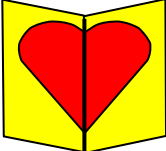
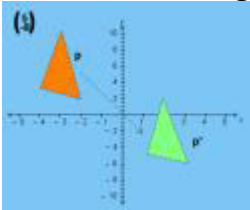
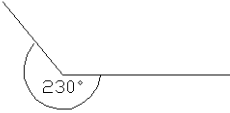

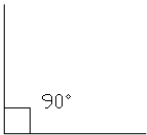

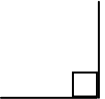
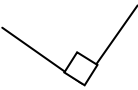
**quadrilateral**


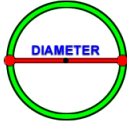
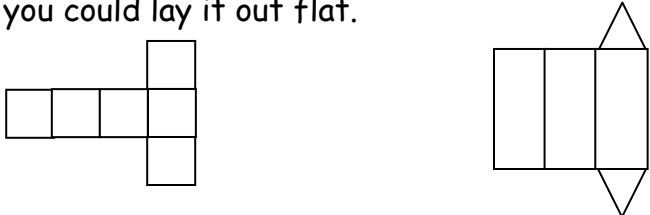
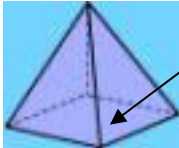

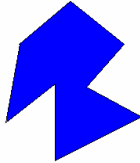
A polygon with four sides. See the table below for examples of quadrilaterals.

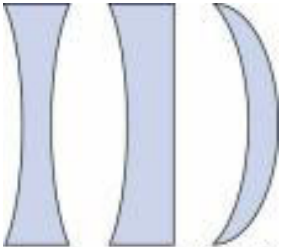
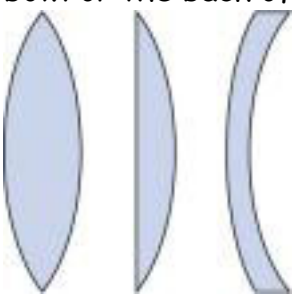
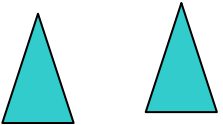
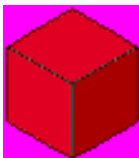
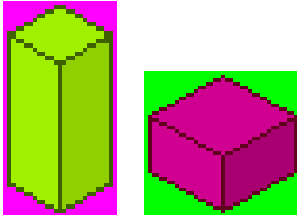
trapezium	
parallelogram	
rhombus	
rectangles	
kite	
arrowhead	
irregular quadrilaterals	

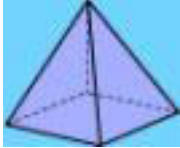
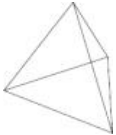










Year	Vocabulary	Definition
Year 5	<b>Properties of Shape</b>	
	<b>shape</b>	The shape of an object is its outline.
	<b>flat</b>	A flat object has a level surface with no ups or downs.
	<b>line</b>	A line has no width; it has only one measurement - its length.
	<b>parallel</b>	Parallel lines never meet. They are the same distance apart from each other all the way along their length.  
	<b>perpendicular</b>	Two lines which meet at right angles to each other are perpendicular.  
	<b>curved</b>	A line that is not straight or an object that is not flat.
	<b>straight</b>	A line or edge which has no curves is straight.
	<b>round</b>	A round object is shaped like a circle or a ball.
	<b>hollow</b>	A hollow shape has a space inside it.
	<b>solid</b>	A solid shape has no space inside it.
	<b>corner</b>	Two or more edges or sides meet at a corner.   This triangle has 3 corners. This cube has 8 corners.
	<b>point, pointed</b>	A sharp part of a shape is a point.   point The pyramid is pointed.
	<b>face</b>	A face is one of the surfaces of a 3D shape.   This pyramid has 5 faces.
<b>side</b>	A line in a 2D shape is called a side.	
<b>edge</b>	An edge is where 2 faces meet in a 3D shape.	

Year 5	<b>end</b>	<p>The outer parts of a 3D shape are called the ends.</p> 
	<b>surface</b>	<p>A surface is the 2D boundary of a 3D object. Face can be used instead.</p>
	<b>bigger</b>	<p>Comparing the size of two objects.</p>  <p>The dog is bigger than the cat.</p>
	<b>larger</b>	<p>Comparing the size of two objects.</p>  <p>The butterfly is larger than the ant.</p>
	<b>smaller</b>	<p>Comparing the size of two objects.</p>  <p>The bike is smaller than the car.</p>
	<b>symmetrical</b>	<p>A shape is symmetrical if we can fold it so that one half covers the other half exactly.</p> 
	<b>line of symmetry</b>	<p>The line of symmetry divides a shape into symmetrical parts.</p>  <p>The blue line is the line of symmetry.</p>
	<b>axis of symmetry</b>	<p>Axis of symmetry is another name for line of symmetry.</p>
	<b>line symmetry</b>	<p>If a shape is symmetrical about a line, it has line symmetry</p> 







<p><b>reflective symmetry</b></p>	<p>If a shape is symmetrical about a line, it has reflective symmetry (line symmetry).</p> <div style="text-align: center;">  </div>
<p><b>fold</b></p>	<p>Bend so that one part covers another.</p>
<p><b>match</b></p>	<p>When you fold a shape and one half covers the other exactly, the two halves match.</p> <div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 20px;">  </div> <div> <p>The two halves of this shape match.</p> </div> </div>
<p><b>mirror line</b></p>	<p>The mirror line is another way of saying line of symmetry.</p>
<p><b>reflection</b></p>	<p>A mirror view.</p>
<p><b>reflect</b></p>	<p>To produce a reflection, you need to reflect the object in a mirror line.</p>
<p><b>translation</b></p>	<p>A translation moves an object by sliding it in any direction. The shape does not change size.</p> <div style="text-align: center;">  </div>
<p><b>vertex</b></p>	<p>A vertex of a shape is a point at which 2 or more edges meet. It is more commonly referred to as a 'corner'.</p>
<p><b>vertices</b></p>	<p>More than one vertex.</p>
<p><b>angle</b></p>	<p>An angle is made when two straight lines cross or meet each other at a point. Its size is measured by the amount one line has been turned in relation to the other.</p> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; text-align: center;"> <div style="margin: 10px;">  <p>230°</p> </div> <div style="margin: 10px;">  <p>130°</p> </div> <div style="margin: 10px;">  <p>90°</p> </div> <div style="margin: 10px;">  <p>54°</p> </div> </div>
<p><b>right-angled</b></p>	<p>A right angle is the angle made by a quarter turn or 90°.</p> <div style="display: flex; justify-content: space-around; text-align: center;"> <div style="margin: 10px;">  </div> <div style="margin: 10px;">  </div> </div>

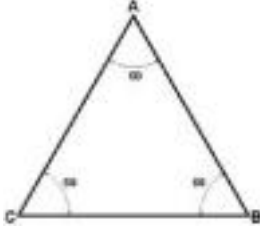

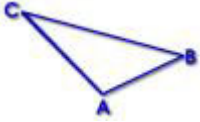

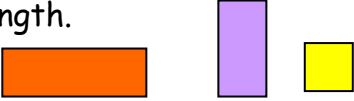

Year 5	<b>acute</b>	An acute angle is less than $90^\circ$ .
	<b>obtuse</b>	An obtuse angle is more than $90^\circ$ but less than $180^\circ$ .
	<b>centre</b>	Exactly in the middle of a shape.
	<b>radius</b>	The length of a straight line from the centre of the circle to its circumference (edge). 
	<b>diameter</b>	A line that cuts a circle in half and passes through the centre of the circle. 
	<b>net</b>	A net shows you what a solid shape would look like if you could lay it out flat.  net of a cube <span style="margin-left: 200px;">net of a triangular prism</span>
	<b>base</b>	The bottom face of a solid shape. 
	<b>square-based</b>	When the bottom face of a solid shape is a square, e.g. in a square-based pyramid.
	<b>regular</b>	A 2D regular shape has all sides the same length and all angles the same. On a 3D regular shape, all of the faces are identical regular polygons.  <span style="margin-left: 200px;"></span>
	<b>irregular</b>	Any shape which is not regular (see above).



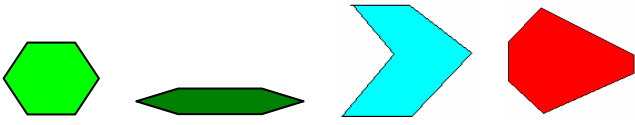
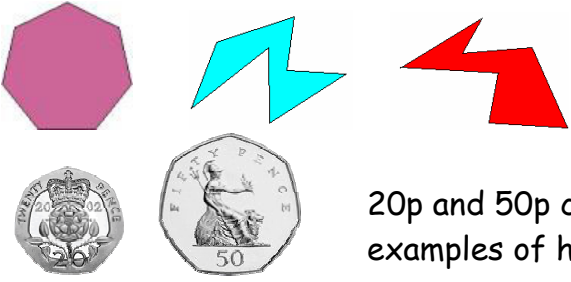
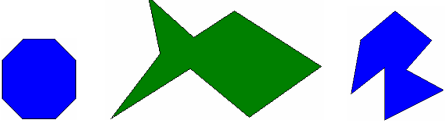
<b>Year 5</b>	<b>concave</b>	<p>A concave surface curves inwards like the inside of a bowl or a spoon. (Caves go inwards!)</p> 
	<b>convex</b>	<p>A convex surface curves outwards like the outside of a bowl or the back of a spoon.</p> 
	<b>open</b>	<p>When making nets of a cube, if the cube is open it is like an open box, it will have five faces rather than six.</p>
	<b>closed</b>	<p>When making nets of a cube, if the cube is closed it creates a solid shape.</p>
	<b>congruent</b>	<p>Two shapes are congruent if they are exactly the same. One shape can be placed exactly on the other. The sides must be the same length and the angles must also be equal.</p>  <p style="text-align: right;">These triangles are congruent.</p>
	<b>3D shapes</b>	
	<b>3D</b>	<p>An object that has 3 dimensions: length, width and height.</p>
	<b>three-dimensional</b>	<p>An object that has 3 dimensions: length, width and height.</p>
	<b>cube</b>	 <p>A cube has 6 square faces all the same size. It also has 8 corners and 12 edges.</p>
	<b>cuboid</b>	 <p>A cuboid has 6 rectangular faces.</p>

<b>Year 5</b>	<b>pyramid</b>	<p>There are two types of pyramids:</p>  <p>square based pyramid (1 square face and 4 triangular faces)</p>  <p>triangular based pyramid (4 triangular faces) also called a tetrahedron</p>
	<b>sphere</b>	  <p>A sphere has only one curved face.</p>
	<b>hemisphere</b>	 <p>A hemisphere is half a sphere. It is made by cutting through the centre of a sphere, e.g. when the earth is cut in two it creates the northern hemisphere and the southern hemisphere.</p>
	<b>spherical</b>	<p>Something is spherical if it has the same shape as a sphere.</p>
	<b>cone</b>	 <p>A cone has a circle as its base, a curved face and a point.</p>
	<b>cylinder</b>	  <p>A cylinder has circular faces at each end and a curved face.</p>
	<b>cylindrical</b>	<p>Something is cylindrical if it has the same shape as a cylinder.</p>
	<b>prism</b>	<p>A prism is a solid shape with matching ends. A prism has the same cross-section all across its length (like Blackpool rock!)</p>   
	<b>tetrahedron</b>	<p>A regular polyhedron with 4 faces that are congruent (the same size and shape) equilateral triangles.</p>  <p>A tetrahedron</p>



<b>Year 5</b>	<b>polyhedron</b>	<p>A 3D shape whose faces are all polygons.</p> <p>These are cube, cuboid, triangular prism, pentagonal prism, hexagonal prism, octagonal prism, tetrahedron, square based pyramid, pentagonal pyramid, octagonal pyramid, octahedron, dodecahedron and icosahedron.</p> <p>When each of the faces of a polyhedron is identical it is called a regular polyhedron. There are 5 different regular polyhedra (plural of polyhedron); tetrahedron (4 triangular faces), cube (6 square faces), octahedron (8 triangular faces), dodecahedron (12 pentagonal faces) and icosahedron (20 triangular faces).</p>
	<b>octahedron</b>	<p>An octahedron is a 3D shape with 8 triangular faces.</p> <div style="text-align: center;">  </div>
	<b>2D shapes</b>	
	<b>2D</b>	Flat shapes are two dimensional. They have length and width, but no height or thickness.
	<b>two-dimensional</b>	Flat shapes are two dimensional. They have length and width, but no height or thickness.
	<b>circle</b>	<div style="display: flex; align-items: center;">  <p>A circle is a shape where it is always the same distance from the edge to the centre.</p> </div>
	<b>circular</b>	Something is circular if it has the same shape as a circle.
	<b>semi-circle</b>	<div style="display: flex; align-items: center;">  <p>A semicircle is one half of a circle made by cutting along a line that goes from side to side through the middle of the circle.</p> </div>
	<b>triangle</b>	<p>A triangle has 3 straight sides and 3 corners.</p> <div style="display: flex; justify-content: center; align-items: center; gap: 20px;">    </div> <p>Ensure that children see triangles in a variety of forms.</p>
	<b>triangular</b>	Something is triangular if it has the same shape as a triangle.

Year 5	<b>equilateral triangle</b>	<p>All three sides of an equilateral triangle are the same length and all the angles are equal at <math>60^\circ</math>.</p> 
	<b>isosceles triangle</b>	<p>An isosceles triangle has two equal sides and two angles that are equal.</p> 
	<b>scalene triangle</b>	<p>In a scalene triangle, all sides are different and all angles are different.</p> 
	<b>square</b>	<p>A square is a special type of rectangle. It has 4 straight sides of the same lengths and 4 right angles.</p>  <p>Ensure that children see squares in various rotations.</p>
	<b>rectangle</b>	<p>A rectangle has 4 straight sides. Pairs of opposite sides are the same length.</p> 
	<b>rectangular</b>	<p>Something is rectangular if it has the same shape as a rectangle.</p>
	<b>oblong</b>	<p>A quadrilateral with four right angles and two pairs of equal parallel sides with each pair different in length. (A rectangle in which one pair of edges is longer than the other - the other form of rectangle being a square).</p> 

<b>Year 5</b>	<b>star</b>	<p>A star has points coming out of the centre.</p> 
	<b>pentagon</b>	<p>A pentagon has 5 straight sides and 5 corners.</p>  <p>Ensure that children see pentagons in a variety of forms.</p>
	<b>pentagonal</b>	<p>Something is pentagonal if it has the same shape as a pentagon.</p>
	<b>hexagon</b>	<p>A hexagon has 6 straight sides and 6 corners.</p>  <p>Ensure that children see hexagons in a variety of forms.</p>
	<b>hexagonal</b>	<p>Something is hexagonal if it has the same shape as a hexagon.</p>
	<b>heptagon</b>	<p>A heptagon has 7 straight sides and 7 corners.</p>  <p>20p and 50p coins are examples of heptagons.</p> <p>Ensure that children see heptagons in a variety of forms.</p>
	<b>octagon</b>	<p>An octagon has 8 straight sides and 8 corners.</p>  <p>Ensure that children see octagons in a variety of forms.</p>
	<b>octagonal</b>	<p>Something is octagonal if it has the same shape as an octagon.</p>

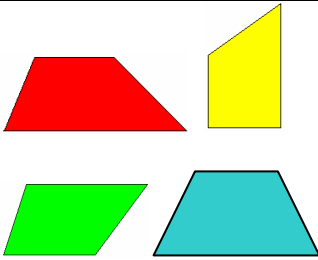

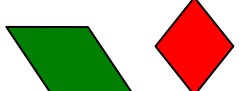

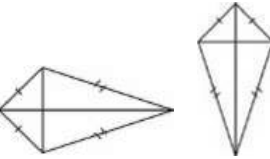
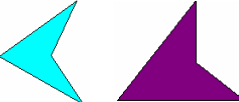

**polygon**

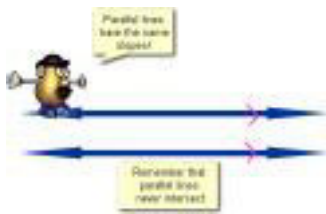


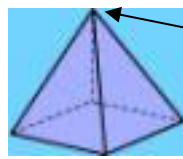

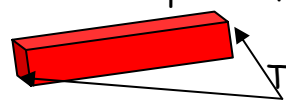
Any flat shape with three or more straight sides. When all the sides and angles of a polygon are equal, it is called a regular polygon.






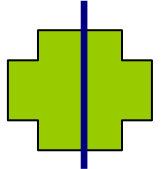

No. of sides	Name of polygon
3	triangle
4	quadrilateral
5	pentagon
6	hexagon
7	heptagon
8	octagon
9	nonagon
10	decagon
11	hendecagon
12	dodecagon

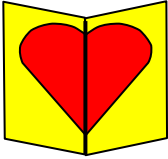
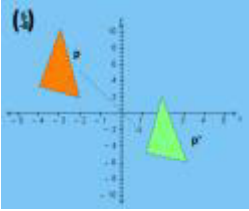
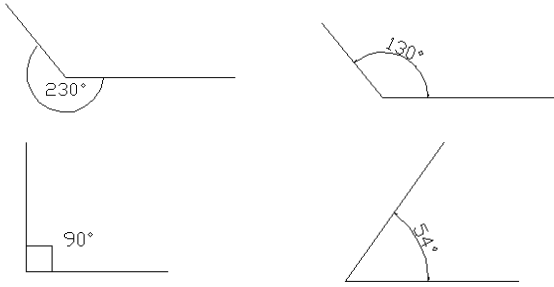

**quadrilateral**


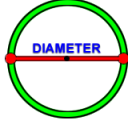
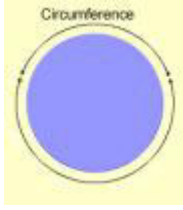
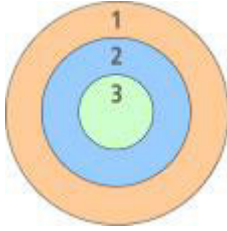

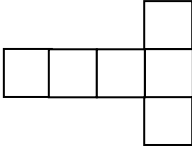
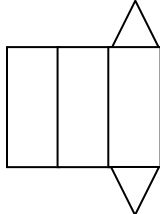
A polygon with four sides. See the table below for examples of quadrilaterals.

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parallelogram	
rhombus	
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kite	
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irregular quadrilaterals	

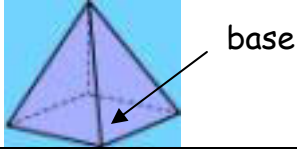

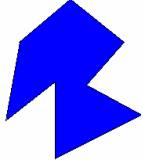
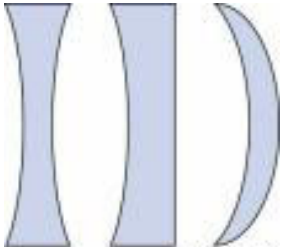
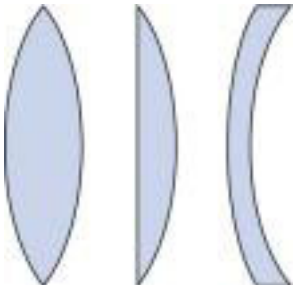
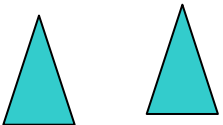
Year	Vocabulary	Definition
Year 6	<b>Properties of Shape</b>	
	<b>shape</b>	The shape of an object is its outline.
	<b>flat</b>	A flat object has a level surface with no ups or downs.
	<b>line</b>	A line has no width; it has only one measurement - its length.
	<b>parallel</b>	Parallel lines never meet. They are the same distance apart from each other all the way along their length.  
	<b>perpendicular</b>	Two lines which meet at right angles to each other are perpendicular.  
	<b>curved</b>	A line that is not straight or an object that is not flat.
	<b>straight</b>	A line or edge which has no curves is straight.
	<b>round</b>	A round object is shaped like a circle or a ball.
	<b>hollow</b>	A hollow shape has a space inside it.
	<b>solid</b>	A solid shape has no space inside it.
	<b>corner</b>	Two or more edges or sides meet at a corner.   This triangle has 3 corners. This cube has 8 corners.
	<b>point, pointed</b>	A sharp part of a shape is a point.   The pyramid is pointed.
	<b>face</b>	A face is one of the surfaces of a 3D shape.   This pyramid has 5 faces.
<b>side</b>	A line in a 2D shape is called a side.	
<b>edge</b>	An edge is where 2 faces meet in a 3D shape.	
<b>end</b>	The outer parts of a 3D shape are called the ends.   This rod has 2 ends.	

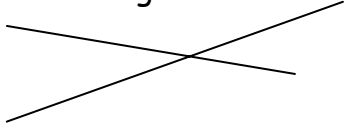
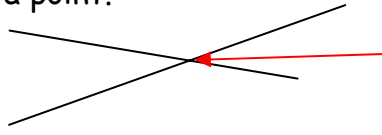
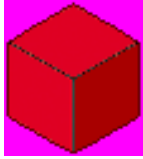
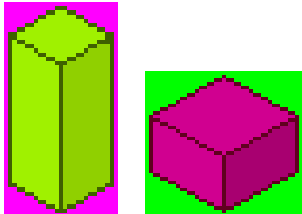
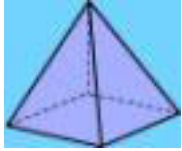


<b>Year 6</b>	<b>surface</b>	A surface is the 2D boundary of a 3D object. Face can be used instead.
	<b>bigger</b>	Comparing the size of two objects.  The dog is bigger than the cat.
	<b>larger</b>	Comparing the size of two objects.  The butterfly is larger than the ant.
	<b>smaller</b>	Comparing the size of two objects.  The bike is smaller than the car.
	<b>symmetrical</b>	A shape is symmetrical if we can fold it so that one half covers the other half exactly. 
	<b>line of symmetry</b>	The line of symmetry divides a shape into symmetrical parts.  The blue line is the line of symmetry.
	<b>axis of symmetry</b>	Axis of symmetry is another name for line of symmetry.
	<b>line symmetry</b>	If a shape is symmetrical about a line, it has line symmetry 
	<b>reflective symmetry</b>	If a shape is symmetrical about a line, it has reflective symmetry (line symmetry). 

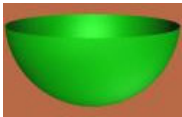

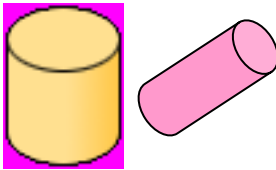

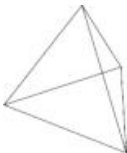
<b>fold</b>	Bend so that one part covers another.
<b>match</b>	When you fold a shape and one half covers the other exactly, the two halves match.  <p>The two halves of this shape match.</p>
<b>mirror line</b>	The mirror line is another way of saying line of symmetry.
<b>reflection</b>	A mirror view.
<b>reflect</b>	To produce a reflection, you need to reflect the object in a mirror line.
<b>translation</b>	A translation moves an object by sliding it in any direction. The shape does not change size. 
<b>vertex</b>	A vertex of a shape is a point at which 2 or more edges meet. It is more commonly referred to as a 'corner'.
<b>vertices</b>	More than one vertex.
<b>angle</b>	An angle is made when two straight lines cross or meet each other at a point. Its size is measured by the amount one line has been turned in relation to the other. 
<b>right-angled</b>	A right angle is the angle made by a quarter turn or $90^\circ$ . 
<b>acute</b>	An acute angle is less than $90^\circ$ .
<b>obtuse</b>	An obtuse angle is more than $90^\circ$ but less than $180^\circ$ .
<b>reflex</b>	A reflex angle is greater than $180^\circ$ .
<b>centre</b>	Exactly in the middle of a shape.


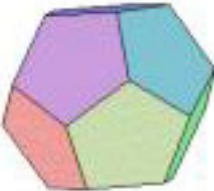

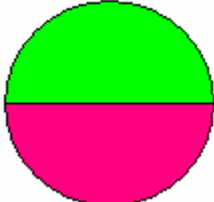

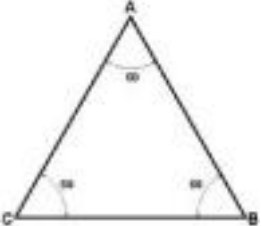
<b>Year 6</b>	<b>radius</b>	<p>The length of a straight line from the centre of the circle to its circumference (edge).</p> 
	<b>diameter</b>	<p>A line that cuts a circle in half and passes through the centre of the circle.</p> 
	<b>circumference</b>	<p>The circumference is the distance across the circle through the centre.</p> 
	<b>concentric</b>	<p>Circles of different sizes but which have the same centre are concentric.</p> 
	<b>arc</b>	<p>An arc is part of the circumference of a circle.</p> <p>If you continued the two ends of this line, it would form a circle.</p> 
	<b>net</b>	<p>A net shows you what a solid shape would look like if you could lay it out flat.</p>  <p>net of a cube</p>  <p>net of a triangular prism</p>

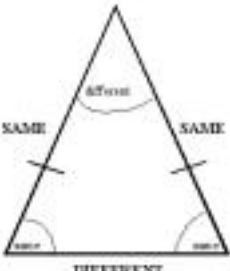

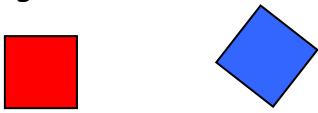
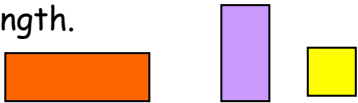






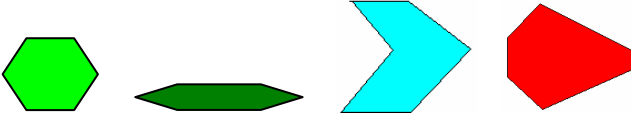
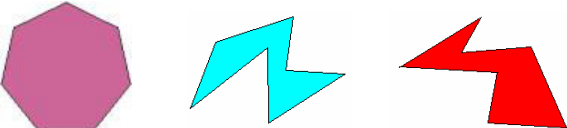

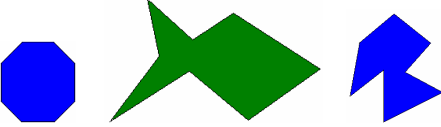
Year 6	<b>base</b>	The bottom face of a solid shape. 
	<b>square-based</b>	When the bottom face of a solid shape is a square, e.g. in a square-based pyramid.
	<b>regular</b>	A 2D regular shape has all sides the same length and all angles the same. On a 3D regular shape, all of the faces are identical regular polygons.  
	<b>irregular</b>	Any shape which is not regular (see above).
	<b>concave</b>	A concave surface curves inwards like the inside of a bowl or a spoon. (Caves go inwards!) 
	<b>convex</b>	A convex surface curves outwards like the outside of a bowl or the back of a spoon. 
	<b>open</b>	When making nets of a cube, if the cube is open it is like an open box, it will have five faces rather than six.
	<b>closed</b>	When making nets of a cube, if the cube is closed it creates a solid shape.
	<b>congruent</b>	Two shapes are congruent if they are exactly the same. One shape can be placed exactly on the other. The sides must be the same length and the angles must also be equal.  These triangles are congruent.

<b>Year 6</b>	<b>intersecting</b>	<p>If two or more lines cross, they are said to be intersecting.</p>  <p>These lines intersect.</p>
	<b>intersection</b>	<p>A crossing point or place. Two or more lines intersect at a point.</p>  <p>This is the intersection.</p>
	<b>plane</b>	<p>A flat surface with no ripples, curves or bumps. Plane shapes have length or width but no thickness (2D or flat shapes).</p>
	<b>tangram</b>	<p>A Chinese puzzle consisting of a square divided into seven pieces that must be arranged to match particular designs.</p>
	<b>3D shapes</b>	
	<b>3D</b>	<p>An object that has 3 dimensions: length, width and height.</p>
	<b>three-dimensional</b>	<p>An object that has 3 dimensions: length, width and height.</p>
	<b>cube</b>	 <p>A cube has 6 square faces all the same size. It also has 8 corners and 12 edges.</p>
	<b>cuboid</b>	 <p>A cuboid has 6 rectangular faces.</p>
	<b>pyramid</b>	<p>There are two types of pyramids:</p>  <p>square based pyramid (1 square face and 4 triangular faces)</p>  <p>triangular based pyramid (4 triangular faces) also called a tetrahedron</p>
<b>sphere</b>	 <p>A sphere has only one curved face.</p>	

<b>Year 6</b>	<b>hemisphere</b>		A hemisphere is half a sphere. It is made by cutting through the centre of a sphere, e.g. when the earth is cut in two it creates the northern hemisphere and the southern hemisphere.
	<b>spherical</b>		Something is spherical if it has the same shape as a sphere.
	<b>cone</b>		A cone has a circle as its base, a curved face and a point.
	<b>cylinder</b>		A cylinder has circular faces at each end and a curved face.
	<b>cylindrical</b>		Something is cylindrical if it has the same shape as a cylinder.
	<b>prism</b>		A prism is a solid shape with matching ends. A prism has the same cross-section all across its length (like Blackpool rock!)
	<b>tetrahedron</b>		A regular polyhedron with 4 faces that are congruent (the same size and shape) equilateral triangles.  A tetrahedron
	<b>polyhedron</b>		A 3D shape whose faces are all polygons. These are cube, cuboid, triangular prism, pentagonal prism, hexagonal prism, octagonal prism, tetrahedron, square based pyramid, pentagonal pyramid, octagonal pyramid, octahedron, dodecahedron and icosahedron. When each of the faces of a polyhedron is identical it is called a regular polyhedron. There are 5 different regular polyhedra (plural of polyhedron); tetrahedron (4 triangular faces), cube (6 square faces), octahedron (8 triangular faces), dodecahedron (12 pentagonal faces) and icosahedron (20 triangular faces).

<b>Year 6</b>	<b>octahedron</b>	An octahedron is a 3D shape with 8 triangular faces. 
	<b>dodecahedron</b>	A regular polyhedron with 12 faces that are congruent (the same size and shape) regular pentagons.  A dodecahedron
	<b>2D shapes</b>	
	<b>2D</b>	Flat shapes are two dimensional. They have length and width, but no height or thickness.
	<b>two-dimensional</b>	Flat shapes are two dimensional. They have length and width, but no height or thickness.
	<b>circle</b>	 A circle is a shape where it is always the same distance from the edge to the centre.
	<b>circular</b>	Something is circular if it has the same shape as a circle.
	<b>semi-circle</b>	 A semicircle is one half of a circle made by cutting along a line that goes from side to side through the middle of the circle.
	<b>triangle</b>	A triangle has 3 straight sides and 3 corners.  Ensure that children see triangles in a variety of forms.
	<b>triangular</b>	Something is triangular if it has the same shape as a triangle.
<b>equilateral triangle</b>	All three sides of an equilateral triangle are the same length and all the angles are equal at $60^\circ$ . 	

	<p><b>isosceles triangle</b></p>	<p>An isosceles triangle has two equal sides and two angles that are equal.</p> 
	<p><b>scalene triangle</b></p>	<p>In a scalene triangle, all sides are different and all angles are different.</p> 
	<p><b>square</b></p>	<p>A square is a special type of rectangle. It has 4 straight sides of the same lengths and 4 right angles.</p>  <p>Ensure that children see squares in various rotations.</p>
	<p><b>rectangle</b></p>	<p>A rectangle has 4 straight sides. Pairs of opposite sides are the same length.</p> 
	<p><b>rectangular</b></p>	<p>Something is rectangular if it has the same shape as a rectangle.</p>
	<p><b>oblong</b></p>	<p>A quadrilateral with four right angles and two pairs of equal parallel sides with each pair different in length. (A rectangle in which one pair of edges is longer than the other - the other form of rectangle being a square).</p> 
	<p><b>star</b></p>	<p>A star has points coming out of the centre.</p> 
	<p><b>rhombus</b></p>	<p>A parallelogram with four equal sides and equal opposite angles.</p> 

<b>pentagon</b>	<p>A pentagon has 5 straight sides and 5 corners.</p>  <p>Ensure that children see pentagons in a variety of forms.</p>																						
<b>pentagonal</b>	<p>Something is pentagonal if it has the same shape as a pentagon.</p>																						
<b>hexagon</b>	<p>A hexagon has 6 straight sides and 6 corners.</p>  <p>Ensure that children see hexagons in a variety of forms.</p>																						
<b>hexagonal</b>	<p>Something is hexagonal if it has the same shape as a hexagon.</p>																						
<b>heptagon</b>	<p>A heptagon has 7 straight sides and 7 corners.</p>   <p>20p and 50p coins are examples of heptagons.</p> <p>Ensure that children see heptagons in a variety of forms.</p>																						
<b>octagon</b>	<p>An octagon has 8 straight sides and 8 corners.</p>  <p>Ensure that children see octagons in a variety of forms.</p>																						
<b>octagonal</b>	<p>Something is octagonal if it has the same shape as an octagon.</p>																						
<b>polygon</b>	<p>Any flat shape with three or more straight sides. When all the sides and angles of a polygon are equal, it is called a regular polygon.</p> <table border="1" data-bbox="762 1697 1358 2063"> <thead> <tr> <th>No. of sides</th> <th>Name of polygon</th> </tr> </thead> <tbody> <tr><td>3</td><td>triangle</td></tr> <tr><td>4</td><td>quadrilateral</td></tr> <tr><td>5</td><td>pentagon</td></tr> <tr><td>6</td><td>hexagon</td></tr> <tr><td>7</td><td>heptagon</td></tr> <tr><td>8</td><td>octagon</td></tr> <tr><td>9</td><td>nonagon</td></tr> <tr><td>10</td><td>decagon</td></tr> <tr><td>11</td><td>hendecagon</td></tr> <tr><td>12</td><td>dodecagon</td></tr> </tbody> </table>	No. of sides	Name of polygon	3	triangle	4	quadrilateral	5	pentagon	6	hexagon	7	heptagon	8	octagon	9	nonagon	10	decagon	11	hendecagon	12	dodecagon
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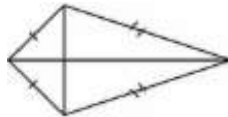
**quadrilateral**

A polygon with four sides. See the table below for examples of quadrilaterals.

trapezium	
parallelogram	
rhombus	
rectangles	
kite	
arrowhead	
irregular quadrilaterals	

**kite**

A flat shape having two sets of equal sides and one set of opposite angles that are equal.



**parallelogram**

A quadrilateral with opposite sides that are parallel and of equal length and opposite angles that are equal.



**trapezium**

A quadrilateral with one pair of parallel sides. An isosceles trapezium has two non-parallel sides the same length.

