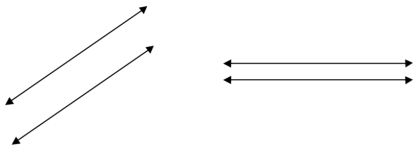
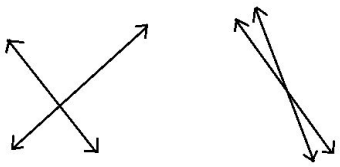
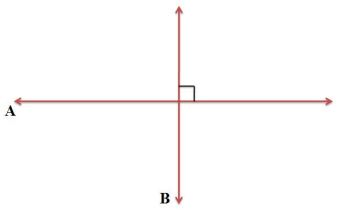
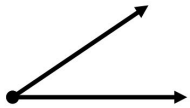
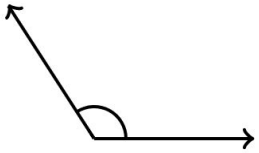
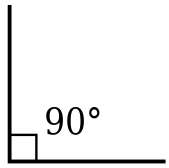
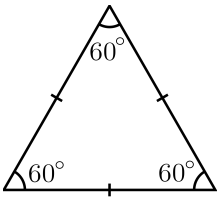
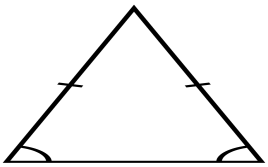
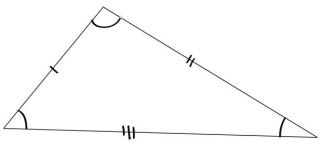
Geometry & Spatial Sense

Types of Lines		
Parallel	**Intersecting**	**Perpendicular**
The lines will never cross	The lines (will) cross	The lines cross at 90°
		

Types of Angles		
Acute	**Obtuse**	**Right**
Angle is smaller than 90°	Angle is larger than 90°	Angle is exactly 90°
		

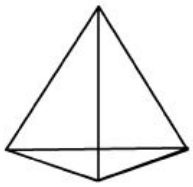
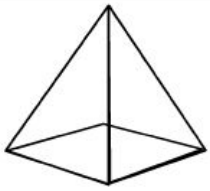
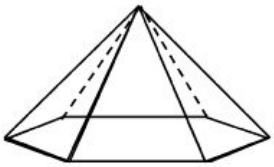
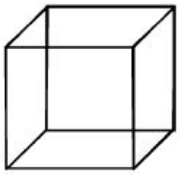
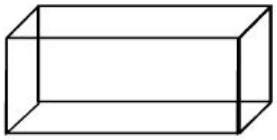
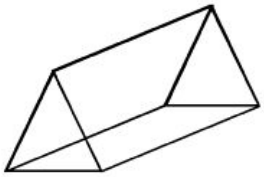
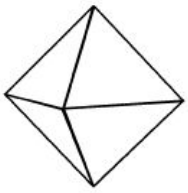
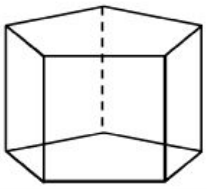
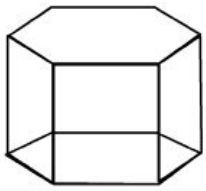
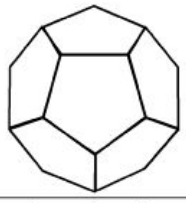
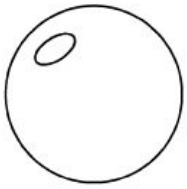
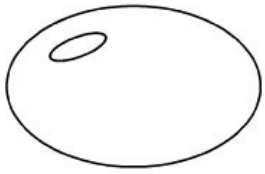
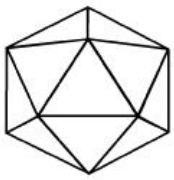
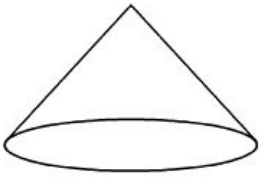
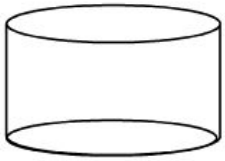
Types of Triangles (all angles add to 180°)		
Equilateral	**Isosceles**	**Scalene**
All sides are the same length	2 sides are the same length	All sides are different lengths
		

Ways to move objects		
Flip	**Slide**	**Turn**
The object is turned over, creating a mirror image	The objects stays in the same position but moves space	The object is rotated

Two shapes are **congruent if they are the same when turned, slid, flipped, or changes size.

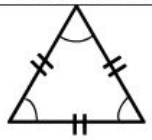
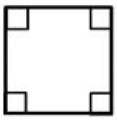
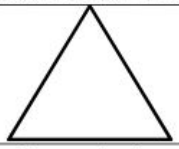
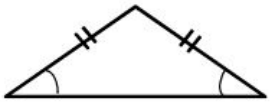
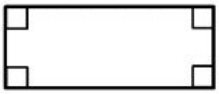
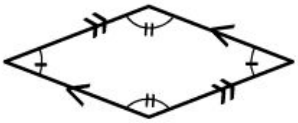
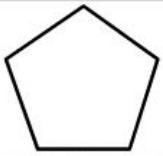
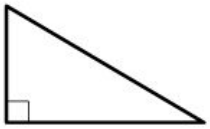
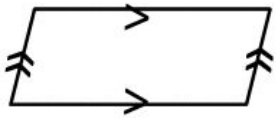
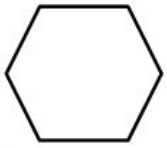
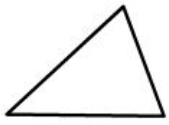
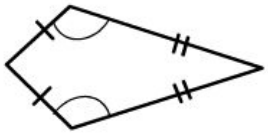
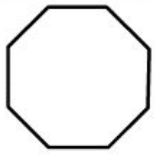
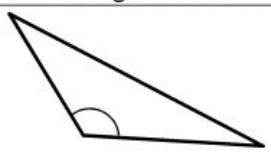
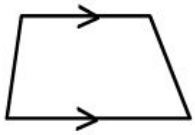
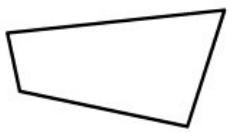
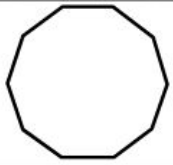
Geometry & Spatial Sense

Properties of 3D Shapes		
Faces	Edges	Vertices
Flat sides of an object	Where 2 faces meet	The points where faces meet

		
Tetrahedron Faces: 4; Edges: 6; Vertices: 4	Square pyramid Faces: 5; Edges: 8; Vertices: 5	Hexagonal pyramid Faces: 7; Edges: 12; Vertices: 7
		
Cube Faces: 6; Edges: 12; Vertices: 8	Cuboid Faces: 6; Edges: 12; Vertices: 8	Triangular prism Faces: 5; Edges: 9; Vertices: 6
		
Octahedron Faces: 8; Edges: 12; Vertices: 6	Pentagonal prism Faces: 7; Edges: 15; Vertices: 10	Hexagonal prism Faces: 8; Edges: 18; Vertices: 12
		
Dodecahedron Faces: 12; Edges: 30; Vertices 20	Sphere Faces: 0 or 1; Edges: 0; Vertices 0	Ellipsoid Faces: 0 or 1; Edges: 0; Vertices 0
		
Icosahedron Faces: 20; Edges: 30; Vertices: 12	Cone Faces: 1 or 2; Edges: 0 or 1; Vertices: 0 or 1	Cylinder Faces: 2 or 3; Edges: 0 or 2; Vertices: 0

Geometry & Spatial Sense

Properties of 2D Shapes	
Sides	Corners
The lines that form the object	Where two lines connect

TRIANGLES	QUADRILATERALS		REGULAR POLYGONS
			
Equilateral triangle All sides equal; interior angles 60°	**Square** All sides equal; all angles 90°		**Equilateral triangle** 3 sides; angle 60°
			
Isosceles triangle 2 sides equal; 2 congruent angles	**Rectangle** Opposite sides equal, all angles 90°		**Square** 4 sides; angle 90°
			
Scalene triangle No sides or angles equal	**Rhombus** All sides equal; 2 pairs of parallel lines; opposite angles equal		**Regular Pentagon** 5 sides; angle 108°
			
Right triangle 1 right angle	**Parallelogram** Opposite sides equal, 2 pairs of parallel lines		**Regular Hexagon** 6 sides; angle 120°
			
Acute triangle All angles acute	**Kite** Adjacent sides equal; 2 congruent angles		**Regular Octagon** 8 sides; angle 135°
			
Obtuse triangle 1 obtuse angle	**Trapezoid** 1 pair of parallel sides	**Trapezium** No pairs of parallel sides	**Regular Decagon** 10 sides; angle 144°