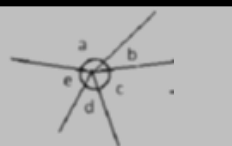
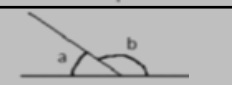
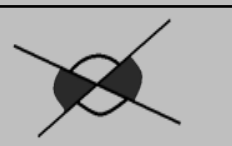
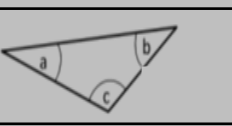
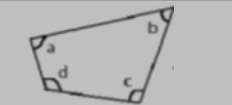


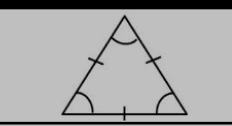
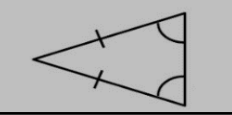
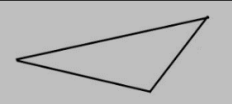
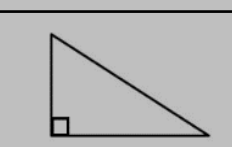
Year 7 Unit 3

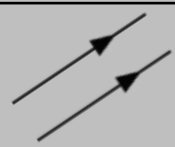

2D Shape and Angle Geometry

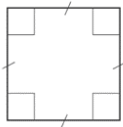
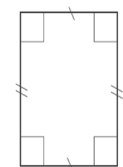
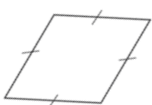
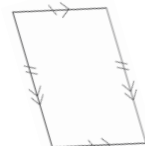
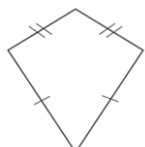
UNITS	
metric units	an international system of units based on 10s, 100s and 1000s
metric length conversions	1cm = 10mm 1m = 100cm 1km = 1000m
metric mass conversions	1kg = 1000g 1 tonne = 1000kg
metric capacity conversions	1 litre = 1000ml

TYPES OF ANGLE	
angle	a measure of turn, units=degrees
acute angle	an angle less than 90°
right angle	90°
obtuse angle	an angle between 90° and 180°
straight line	180°
reflex angle	an angle between 180° and 360°
a full turn	360°

ANGLE RULES		
angles around a point	add to 360° (as they make a full turn)	
angles on a straight line	add to 180°	
vertically opposite angles	when two lines intersect, angles opposite each other are equal	
angles in a triangle	add to 180°	
angles in a quadrilateral	add to 360°	

TYPES OF TRIANGLE		
equilateral	3 equal sides 3 equal angles (60°)	
isosceles	2 equal sides 2 equal angles	
scalene	no equal sides no equal angles	
right angled	any triangle with a 90° angle can be scalene or isosceles	

GENERAL VOCABULARY		
vertex (vertices)	a point where two or more line segments meet, a corner	
polygon	a 2D shape with 3 or more straight sides	
regular polygon	a polygon with sides that are all equal and angles that are all equal	
parallel lines	lines with the same gradient they never meet they are always the same distance apart	
perpendicular lines	lines are perpendicular when they meet or intersect at a right angle (90°)	

PROPERTIES OF QUADRILATERALS		
square	four equal sides four right angles opposite sides parallel diagonals bisect each other at right angles four lines of symmetry rotational symmetry of order four	
rectangle	two pairs of equal sides four right angles opposite sides parallel diagonals bisect each other, not at right angles two lines of symmetry rotational symmetry of order two	
rhombus	four equal sides diagonally opposite angles are equal opposite sides parallel diagonals bisect each other at right angles two lines of symmetry rotational symmetry of order two	
parallelogram	two pairs of equal sides diagonally opposite angles are equal opposite sides parallel diagonals bisect each other, not at right angles no lines of symmetry rotational symmetry of order two	
kite	two pairs of adjacent sides of equal length one pair of diagonally opposite angles are equal (where different length sides meet) diagonals intersect at right angles, but do not bisect one line of symmetry no rotational symmetry	
trapezium	one pair of parallel sides no lines of symmetry no rotational symmetry special Case: isosceles trapeziums have one line of symmetry	