

## Maths Assessment Year 4: Geometry – Properties of Shapes

- 1. Compare and classify geometric shapes, based on their properties and sizes (including triangles and quadrilaterals).
- 2. Identify acute and obtuse angles and compare and order angles.
- 3. Identify lines of symmetry in 2D shapes presented in different orientations
- 4. Complete a simple symmetrical figure with respect to a specific line of symmetry.

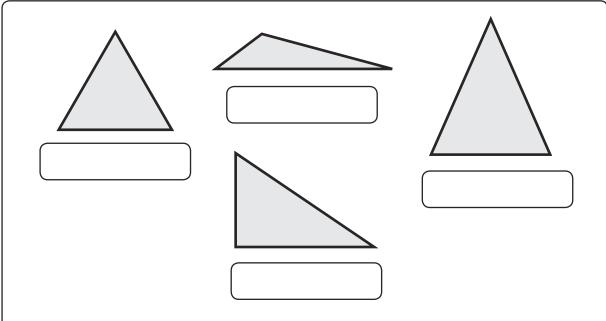
## 15 total marks

## Maths Assessment Year 4: Geometry - Properties of Shapes

twinkl

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

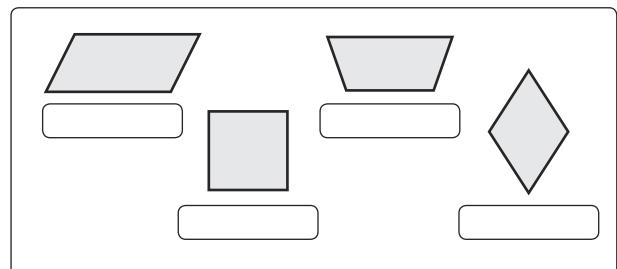
a) Name each triangle. Read the properties below and write the number of any properties that are true for each triangle **inside** it.



- 1) all sides and angles are equal
- 2) one of its angles measures 90°
- 3) it has two equal angles and 2 equal sides
- 4) all sides are different in length
- 5) it has one line of symmetry



b) Name each quadrilateral. Read the properties below and write the number of any properties that are true for each quadrilateral inside it.



- 1) opposite sides are equal
- 2) has only one pair of parallel sides
- 3) has 2 lines of symmetry

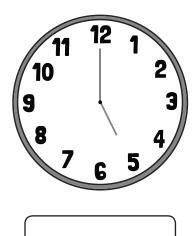
- 4) has no right angles
- 5) is a regular shape

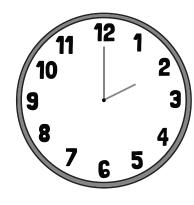


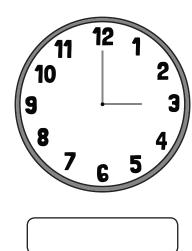


Identify acute and obtuse angles and compare and order angles.

a) For each time, say whether the hands of the clock make an acute, obtuse or right angle, turning clockwise from the big hand to the small.

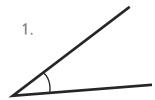








b) Order these angles from smallest angle to largest – write the numbers on the line.





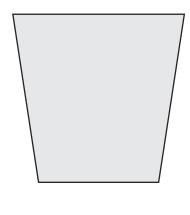


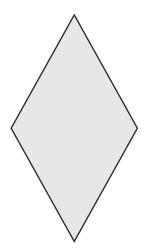
Order smallest to largest



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

a) Draw in all lines of symmetry on each shape. Use a pencil and ruler, if there are no lines of symmetry leave the shape blank. You can use a mirror and/or tracing paper to help.

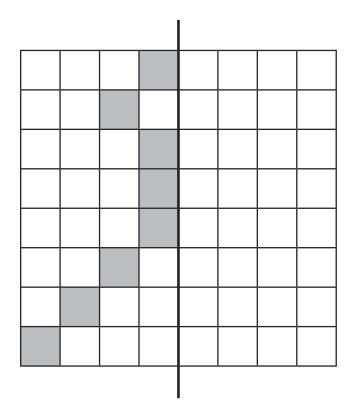


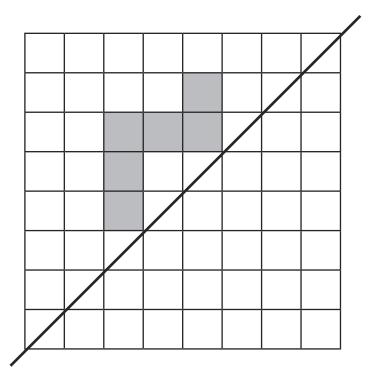




Complete a simple symmetrical figure with respect to a specific line of symmetry.

a) Reflect the shaded squares across the mirror line:











## **Answer Sheet: Maths Assessment Year 4:** Geometry - Properties of Shapes



question	answer	marks	notes		
1. Compare and classify geometric shapes, based on their properties and sizes (including triangles and quadrilaterals).					
а	A right-angled scalene triangle: 2; 4  scalene triangle: 4  isoceles triangle: 3; 5  equilateral triangle: 1	Up to 2 marks	Award 2 marks if all triangles are named correctly and all properties recognised.  Award 1 mark if 3 triangles named correctly and at least 3 properties named correctly.		
b	trapezium (or isoceles trapezium): 1; 2; 4  parallelogram: 1; 4  rhombus: 1; 3; 4  square: 1; 5	Up to 2 marks	Award 2 marks if all quadrilaterals are named correctly and all properties recognised.  Award 1 mark if 3 quadrilaterals named correctly and at least 3 properties named correctly.		
2. Identify acute and obtuse angles and compare and compare and order angles.					
а	Obtuse, Acute, Right angle	3			
b	3; 1; 2	1			



question	answer	marks	notes		
3. Identify lines of symmetry in 2D shapes presented in different orientations.					
			Accept a line drawn near to the central position		
		up to 3 marks	Both lines of symmetry needed to award the mark.		
	Ψ		No lines of symmetry to be drawn		
4. Complete a simple symmetrical figure with respect to a specific line of symmetry.					
а		2	All squares to be correctly shaded to award 2 marks		
b		2	All squares to be correctly shaded to award 2 marks		
		Total 15			