Symmetry KS2 SATS Standard Worksheet

1.



Write each of these letters in the correct region on this diagram

	has reflective symmetry	has no reflective symmetry
has rotational symmetry		
has no rotational symmetry		

2 marks

2. Here is a jigsaw with one piece **missing**.



Which one of the pieces below fits the hole in the middle?

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1 mark

3. Kim has a shape sorter toy.



How many different ways does each piece fit into its hole?



2 marks

4. Karl puts 6 pegs in a pegboard.



He turns the board through 1 right angle.

Draw below how the board looks now.

You may use tracing paper.

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o	0	0	0
0	0	0	o
0	0	0	0
0	0	0	o

5. Complete the diagram below to make a shape that is symmetrical about the mirror line.

Use a ruler.



1 mark

6. Here is a pattern on a window.



Draw how the pattern would look from the **other side** of the window.



2 marks

7. The letter D has a line of symmetry.

Tick (\checkmark) all the other letters that have a line of symmetry.



8. Shade in two more squares to make this design symmetrical about the mirror line.

You may use a mirror or tracing paper.



9. Here is an arrow.



The arrow is rotated 90° clockwise.

In which direction does the arrow now point? Put a tick (\checkmark) by the correct answer.



1 mark

10. Here is a shape.



11. Use a ruler to draw **one** line of symmetry on **each** of these designs.

You may use a mirror or tracing paper.



12. Here are three badges.



You may use a mirror and tracing paper.

Put a tick (\checkmark) in the box if the badge has **reflective** symmetry.



Draw **ONE** line of symmetry on this badge.



1 mark

13. Draw the **reflection** of the shape in the **mirror line**.

Use a ruler.



1 mark

14. Here is a grid with eight squares shaded in.

Shade in two more squares to make a symmetrical pattern.



1 mark

Complete the diagram below to make a shape that is symmetrical about the mirror line.
Use a ruler.



16. Here are some shaded shapes on a grid.



Which three shapes have reflective symmetry?

You may use a mirror or tracing paper.

2 marks

.....

17. Shade in one more square so that this design has rotational symmetry of order 4.

.....

You may use tracing paper

.....



1 mark

18. This pattern is made by turning a shape clockwise through 90° each time.

Draw the two missing triangles on the last shape.



1 mark

19. This board has six holes cut in it.



Here is a shape cut out of card.



Which hole will the shape fit exactly into?

You may use tracing paper.



1 mark

20. Here are five shapes on a square grid.



Write the letters of the two shapes which have a line of symmetry.



21. Draw the reflection of this shape.

> mirror line 1 į,

Here is a shaded shape on a grid. 22.

The shape is rotated 90° clockwise about point A.

Draw the shape in its **new position** on the grid.

You may use tracing paper.

2 marks

		\square		
	A			

2 marks

23. Here is part of a shape on a square grid.

Draw two more lines to make a shape which has a line of symmetry.

Use a ruler.

1 mark

24. Here is a shaded square on a grid.

Shade in **3 more squares** so that the design is symmetrical in **both** mirror lines.



25.



Write the correct letter in this sentence.

Shape is a **reflection** of shape A.

Shape A is rotated 180° about the point P.

Draw **shape A** in its **new** position on the diagram below.

You may use tracing paper.

You may use an angle measurer.



2 marks

26. Look at the shape on the grid. Turn it through one right angle around the point A.

Draw its new position.

You may use tracing paper.



2 marks

27. Here is a shaded shape on a grid made of squares.

Draw the line of symmetry of the shaded shape.

You may use a mirror or tracing paper.



1 mark

1 mark

What fraction of the area of the grid is shaded?

Measure **angle x** in degrees.

Use an angle measurer (protractor).

