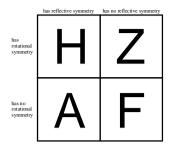
## **Symmetry KS2 SATS Standard Worksheet Answers**

1. Writes all of the four letters in the correct regions of the Carroll diagram.

[2]



Writes any two or three of the four letters in the correct regions of the Carroll diagram.

Write 1 or 2 for score for question 44.

(or [1])

2. C Accept alternative, unambiguous indications of the answer such as a cross on shape C or a line from C to the hole.

[1]

**3.** Award **TWO** marks for the correct answer of

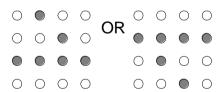
up to 2

1

If the answer is incorrect award **ONE** mark for two numbers in correct positions, provided the two numbers are drawn only from 3, 4, 1 OR only from 6, 8, 2.

[2]

4.



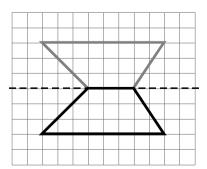
1

Accept answers on tracing paper, provided orientation is clear.

[1]

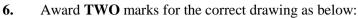
**5.** Diagram completed as shown:

1m



Accept slight inaccuracies in drawing provided the intention is clear.

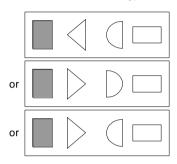
up to 2





Accept inaccurate but recognisable triangles and semi-circles.

If the drawing is incorrect, award **ONE** mark for the correct location of **BOTH** shapes (triangle on left of semi-circle), ie



OR award ONE mark for the correct orientation of BOTH shapes, ie



No marks are awarded for drawings of only ONE shape.

[2]

[1]

1

1m

**7.** Two letters ticked as shown:

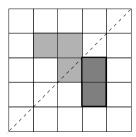


**Both** letters must be correct for the award of the mark.

**Do not** award the mark if either S or N are ticked.

Accept any other clear way of indicating the correct letters, such as 'Yes' or circling.

**8.** Squares shaded as shown:



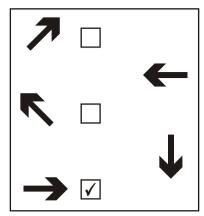
Accept alternative unambiguous indications, eg squares crossed.

Accept slight inaccuracies in the shading, provided the intention is clear.

[1]

**9.** Arrow ticked as shown:

1

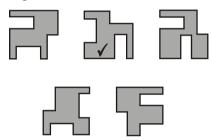


Accept alternative indications such as the answer underlined or circled, provided the intention is clear.

1

[1]

**10.** The correct shape ticked as follows:

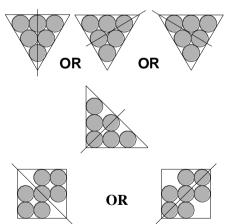


Accept alternative unambiguous indications of the correct shape, eg shape circled.

[1]

**11.** Award **TWO** marks for one line of symmetry drawn correctly on each diagram as shown:





If the answer is incorrect, award  $\mbox{\bf ONE}$  mark for lines of symmetry drawn correctly on any two diagrams.

Accept slight inaccuracies in drawing provided intention is clear.

Accept diagrams with more than one line drawn, provided all the lines are correct.

The length of the line is unimportant provided the intention is clear.

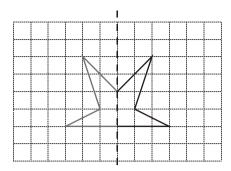
[1]

12.	(a) All 3 boxes must be correct.	1	
	Allow cross in centre box.		
	(b) Any one of the three lines of symmetry drawn.	1	
	Do <b>not</b> penalise if more than one correct line is drawn.  Do <b>not</b> give a mark if there is a combination of correct and	!	
	incorrect lines.		[0]
13.	Diagram completed as shown:	1	[2]
	Accept slight innacuracies in drawing, provided the intentic clear.  Vertices must be within 2mm of the correct grid points.  The reflection need not be shaded.	on is	[1]
14.	Diagram marked as shown:	1m	
	Both squares must be correctly marked.  Accept alternative indications, eg		
	squares ticked, crossed or circled.		[1]

15.

Diagram completed correctly as shown:

1m



Accept slight inaccuracies in drawing, provided the intention is clear.

[1]

**16.** Award **TWO** marks for the correct answer of A, C, E.

Up to 2m

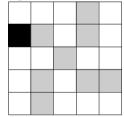
Accept letters in any order.

Accept for **ONE** mark either three correct letters and one additional letter **OR** two correct letters and up to one incorrect letter.

Accept alternative, unambiguous indications, eg ticks or mirror lines drawn on the correct shapes.

[2]

**17.** Square shaded as shown.



1

1

1

Shading is not essential provided the choice of square is unambiguous.

[1]

**18.** Shape completed correctly, as shown:



Shape need not be completed accurately, provided the two correct triangles are identified unambiguously.

[1]

**19.** 3 Accept other unambiguous indications such as a circling of hole number 3.

[1]

**20.** Award **TWO** marks for the correct answers of A **AND** E.

Up to 2 marks

Answers may be given in either order.

Accept unambiguous indications on the diagram.

If the answer is incorrect, award **ONE** mark for:

• only one answer correct

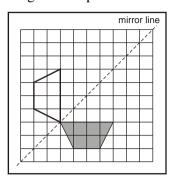
OR

• two answers correct and one incorrect.

[2]

1

**21.** Diagram completed as shown:



Accept slight inaccuracies in drawing, provided the intention is clear.

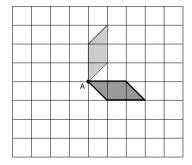
Vertices must be within 2mm of the correct grid points.

The reflection need not be shaded.

[1]

**22.** Award **TWO** marks for the correct drawing as shown below:

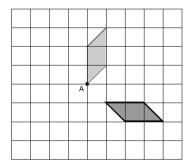




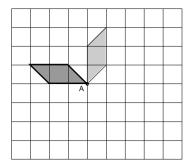
Shape need not be shaded.

Accept slight inaccuracies in drawing, provided the intention is clear.

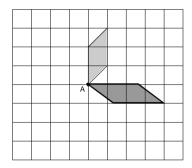
If the drawing is incorrect, then award **ONE** mark for the shape correctly orientated but rotated about the wrong point (or a relocated 'A'), eg



**OR** shape rotated 90° about A, but anti-clockwise, ie



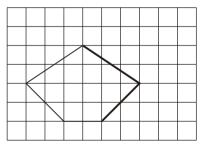
**OR** a stretching or contraction, by one square, of the length of the shape, which has otherwise been correctly rotated, eg



1

[2]

**23.** Two more lines drawn as shown:

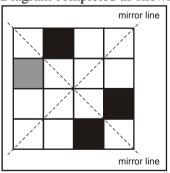


Accept slight inaccuracies in drawing.

**Do not** accept lines drawn outside of the grid. Ignore line of symmetry if drawn.

[1]

**24.** Diagram completed as shown:



Accept alternative, unambiguous indications such as ticks or crosses, provided the intention is clear.

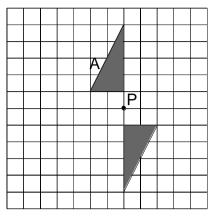
[1]

**25.** (a) Shape  $\mathbf{B}$  is a reflection of  $\mathbf{A}$ .

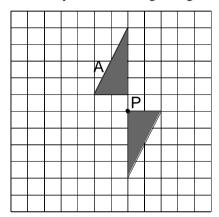
1

Accept unambiguous indications of  $\boldsymbol{B}$  (correct triangle) on the diagram if the dotted line is blank.

(b) Award **TWO** marks for the lower triangle in the position as shown below. up to 2

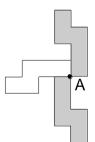


If the answer is incorrect, award **ONE** mark for the correct rotation, but incorrect position drawn anywhere on the grid, eg:

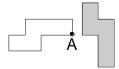


Triangle need not be shaded.

**26.** Award **TWO** marks for either of the shaded positions.



Award **ONE** mark for the correct rotation, but incorrect position drawn anywhere on the grid, eg:



**OR** incorrect rotation (orientation wrong) but point A used correctly, eg:



[3]

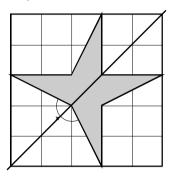
up to 2

One of the marks is awarded for correct rotation, ie 90° of rotation and shape in the correct orientation.

The second mark is for the rotation being around the point A.

[2]

**27.** (a) Line of symmetry drawn as shown.



The length of the line is unimportant, provided the intention is clear.

Accept slight inaccuracies in drawing provided the intention is clear.

(b)  $^{-1}/_{5}$  **OR** 0.2 **OR** 20%

1

1

1

Accept equivalent fractions, eg 5/25

(c) Answer in the range of 140 to 146 inclusive.

[3]