



Year 4 Maths Home Learning | Summer Term



W.C. 13th July 2020

Please use this link first : <https://whiterosemaths.com/homelearning/year-4/>

<https://www.bbc.co.uk/bitesize/tags/z63tt39/year-4-and-p5-lessons/1>

Maths

Use these worksheets to work from **and not on**. All you need is a piece of paper, pencil and a ruler.

After watching the videos and having a go at the practise activities, have a go at these activities. Depending on your confidence choose Mild, Medium or Spicy (you may wish to have a go at more



Extensions – You may wish to deepen your learning by looking at the Collins Worksheets provided by the BBC too.

Over the course of this week, please complete the following arithmetic quiz. Please choose between the two challenge levels, dependent on your level of confidence.

Mild:

1 $14 - 10 =$ 	2 $\boxed{} = 7 + 9$ $+ 1$		
3 $19 - \boxed{} =$ 4	4 $165 + 3 =$ 	11 $316 + 300 =$ 	12 $71 - 53$
5 $\boxed{} \times 3 =$ 18	6 $84 - \boxed{} =$ 22	13 $36 \div 4 =$ 	14 $\frac{7}{10} - \frac{4}{10} =$
7 $\boxed{} = 245$ $+ 50$	8 $\frac{1}{3}$ of 30 = 	15 $375 + 455$	16 $\boxed{} + 37 =$ 86
9 $48 + 28$	10 $6 \times 40 =$ 	17 $\boxed{} - \frac{3}{4} =$ 44	18 47×2

Medium and Spicy:

1	$\square = 2 \times 5 \times 2$	☐	2	$14 \times 1 = \square$	☐
3	$10 \times 0 = \square$	☐	4	$\square + 16 = 42$	☐
5	$120 \div 3 = \square$	☐	6	$63 = \square \times 7$	☐
7	$65 \div 1 = \square$	☐	8	$\frac{9}{12} - \frac{2}{12} = \square$	☐
9	$3 \overline{)78}$	☐	10	$\square = 54 \div 6$	☐
11	$\begin{array}{r} 62 \\ + 88 \\ \hline \end{array}$	☐	12	$\begin{array}{r} 38 \\ \times 4 \\ \hline \end{array}$	☐
13	$660 \div 11 = \square$	☐	14	$70 \times 7 = \square$	☐
			15	$\square \div 5 = 27$	☐
			16	$\begin{array}{r} 3409 \\ + 4826 \\ \hline \end{array}$	☐
			17	$\begin{array}{r} 248 \\ \times 4 \\ \hline \end{array}$	☐
			18	$\square = \frac{3}{4} \text{ of } 60$	☐
			19	$\begin{array}{r} 624 \\ - 245 \\ \hline \end{array}$	☐
			20	$\square \times 6 = 96$	☐
			21	$\frac{8}{9} + \frac{3}{9} = \square$	☐
			22	$\begin{array}{r} 269 \\ \times 4 \\ \hline \end{array}$	☐
			23	$84 \div \square = 6$	☐
			24	$\begin{array}{r} 4300 \\ + 1628 \\ \hline \end{array}$	☐
			25	$\begin{array}{r} 134 \\ \times 6 \\ \hline \end{array}$	☐
			Total marks		/25

Monday

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<https://www.bbc.co.uk/bitesize/tags/z63tt39/year-4-and-p5-lessons/1>

Monday - Finding line of symmetry

Starter 'Fluent in 5'

A. $145 + 3 =$

B. $7894 - ? = 3858$

C. $\frac{3}{4} \text{ of } 12 =$

D. $65 \times 3 =$

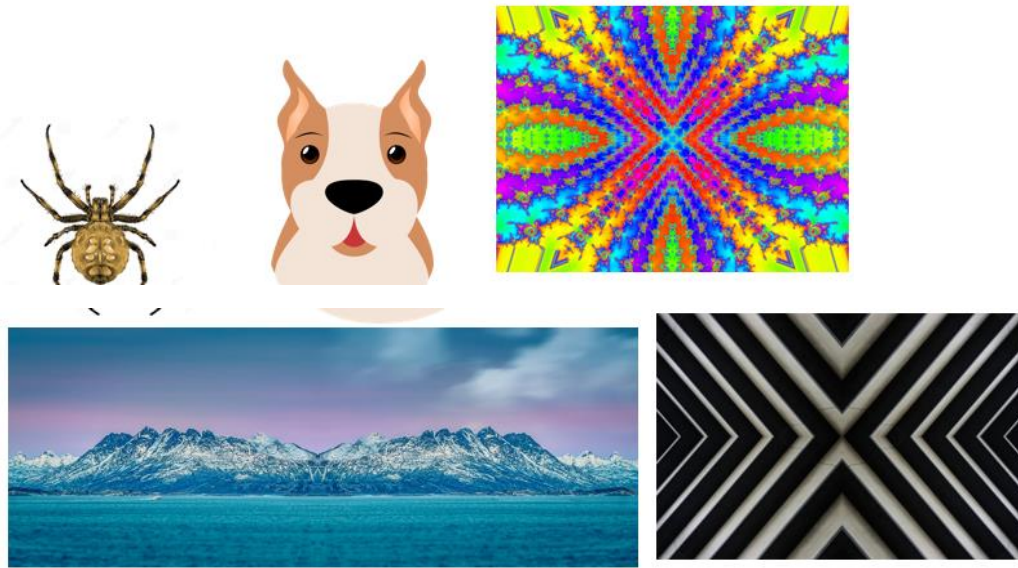
E. $\frac{3}{5} - \frac{1}{5} =$

Mild

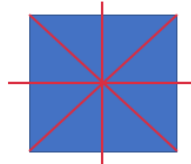
STARTER:

Draw four different quadrilaterals.

Draw the lines of symmetry on each of the following pictures



Here is a shape which has a line of symmetry showing that it is the same on both sides.

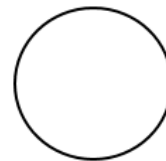


Draw all the lines of symmetry on these shapes (Remember they could be horizontal, vertical or diagonal).

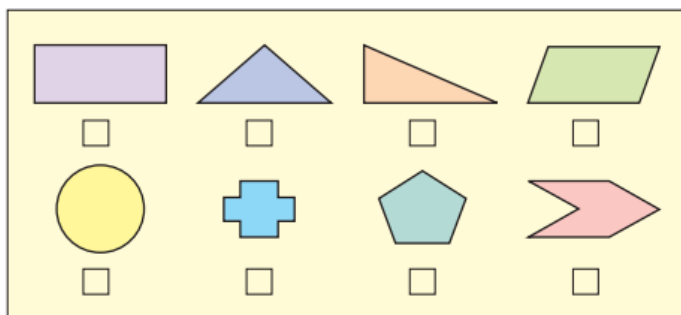


Wi

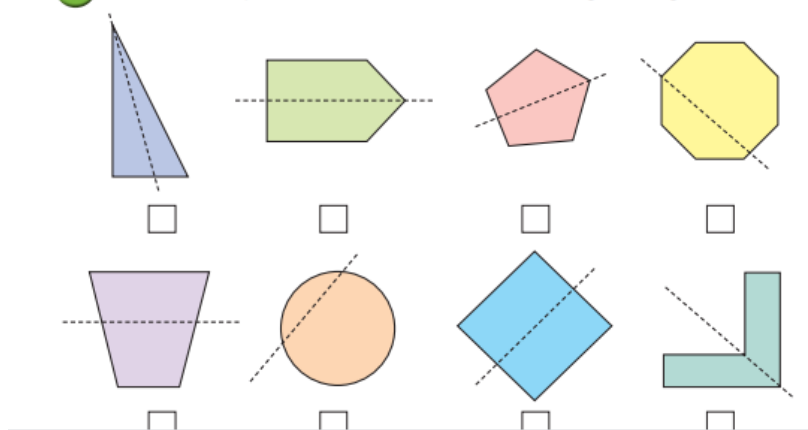
What about this shape?



1 Tick the shapes that have at least one line of symmetry.



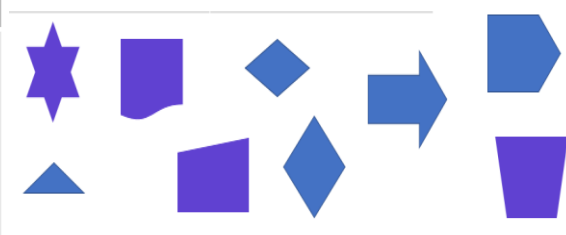
2 Tick the shapes that show a correct line of symmetry.



Medium

Sort these shapes according to how many lines of symmetry they have.

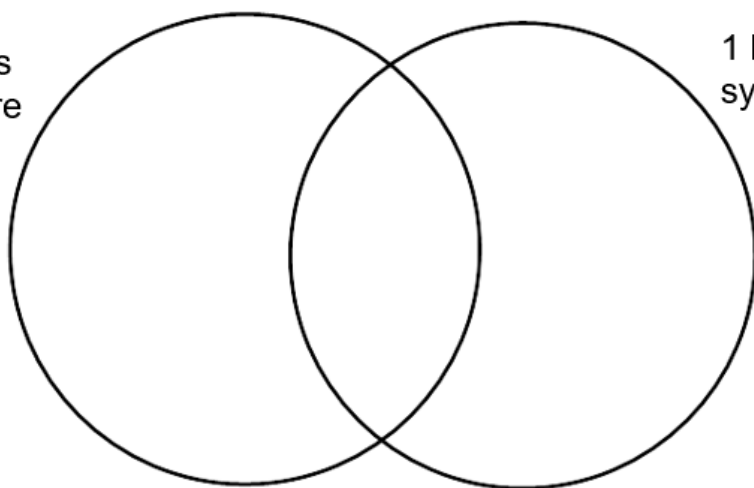
One line of symmetry or less	More than one line of symmetry



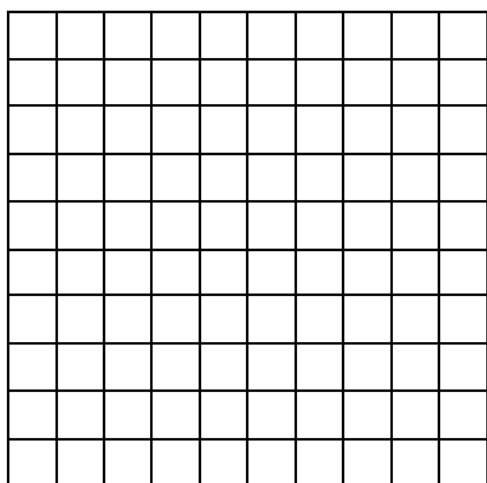
Put the shapes in the correct places on the venn diagram.

4 sides
or more

1 line of
symmetry



Can you draw a symmetrical pattern on the grid.

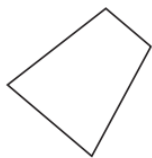


3 Draw one line of symmetry on each shape.

a)



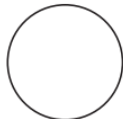
e)



b)



f)



c)



g)



d)



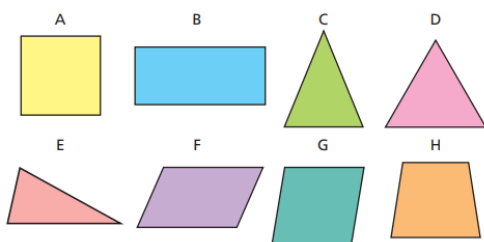
h)



Spicy

Sort the shapes into the table.

The first one has been done for you.



	1 line of symmetry	More than 1 line of symmetry	No lines of symmetry
Triangle			
Quadrilateral		A	

6 Here are 3 logos.



Dora

All of these logos have lines of symmetry because they're circles.



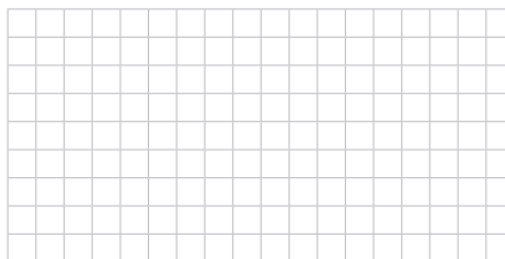
Mo

I disagree because the design on them isn't symmetrical.

Who do you agree with? _____

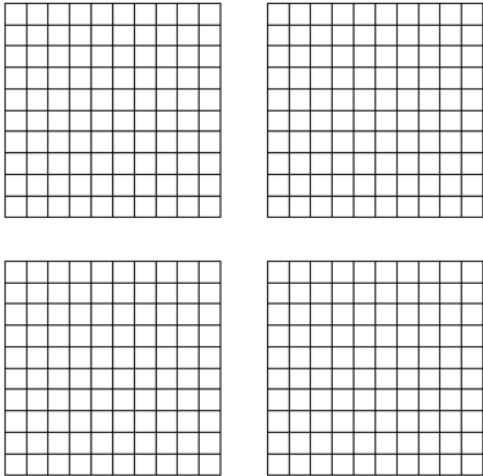
Talk about it with a partner.

7 Shade a maximum of 8 squares to make a symmetrical shape.



Compare answers with a partner. How many different shapes can you make?

Draw 4 different symmetrical patterns on 4 different grids.
Remember there could be lines of symmetry vertically,
horizontally or diagonally.



Tommy is folding a paper circle to find lines of symmetry.



A circle has
lots of lines
of symmetry!

Do you agree with Tommy? _____

Talk about it with a partner.



All of these logos
have lines of symmetry
because they're circles.

Dora



I disagree because
the design on them
isn't symmetrical.

Mo

Who do you agree with? _____

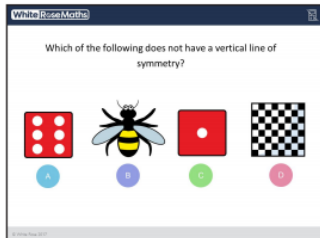
Talk about it with a partner.

7 Shade a maximum of 8 squares to make a symmetrical shape.



Compare answers with a partner. How many different shapes
can you make?

Want to sharpen your skills further? Have a go at the following diagnostic questions:



Correct Answer: A B C D

Explanation:

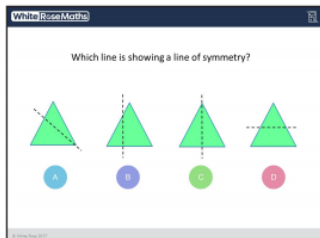
.....

.....

.....

.....

.....



Correct Answer: A B C D

Explanation:

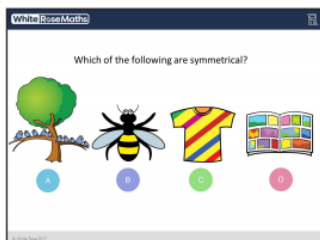
.....

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.....



Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

Tuesday - Line Symmetry Complete shape

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<https://www.bbc.co.uk/bitesize/tags/z63tt39/year-4-and-p5-lessons/1>

Starter:

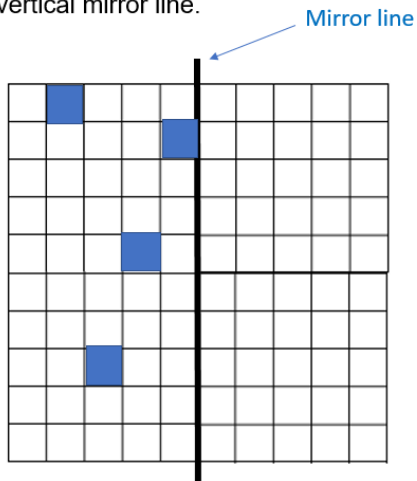
 A. $6 \times 80 =$	 B. $18 \times 3 =$
 C. $80 \times 3 =$	 D. $981 + 4894 =$
 E. $183 \times 100 =$	

Mild:

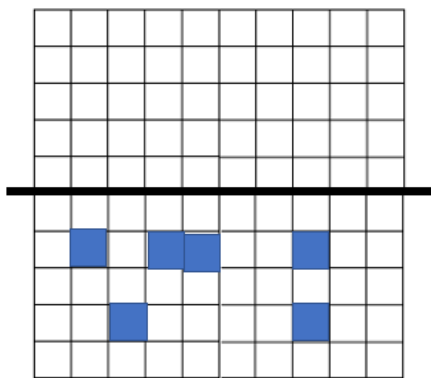
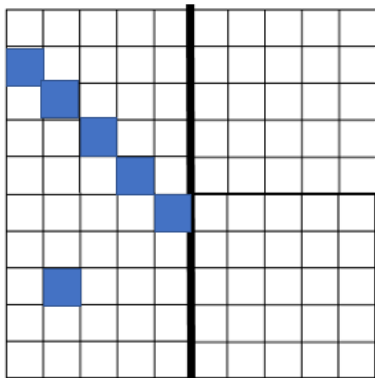
Draw all the lines of symmetry on these shapes.



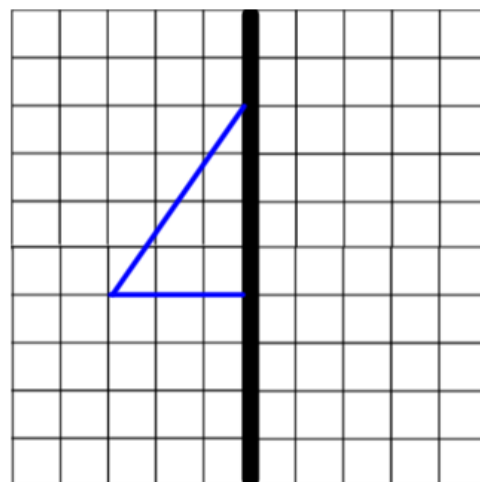
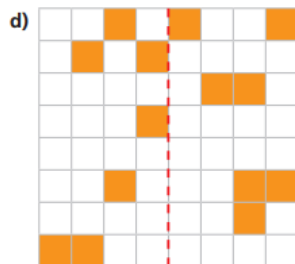
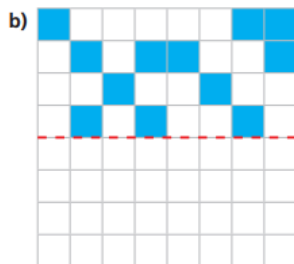
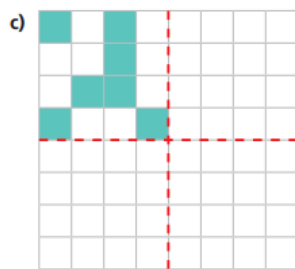
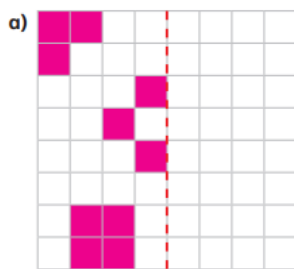
Finish the rest of the pattern on the grid to make it symmetrical in the vertical mirror line.



Finish the patterns so they are symmetrical in the mirror line(s)

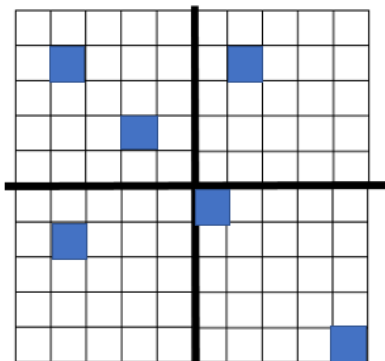
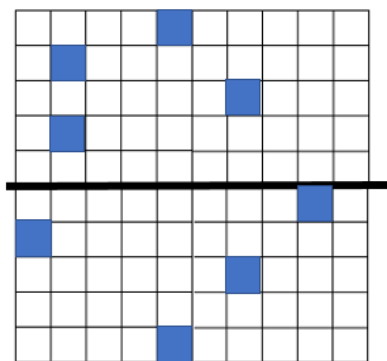


1 Shade squares to make the patterns symmetrical.



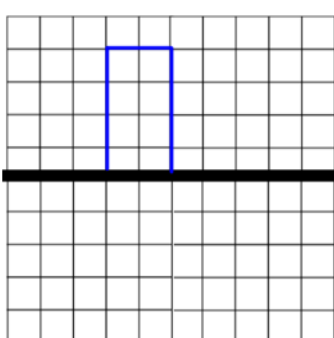
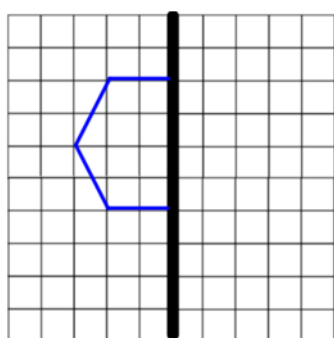
Medium:

Finish the patterns so they are symmetrical in the mirror line(s)

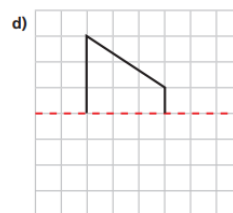
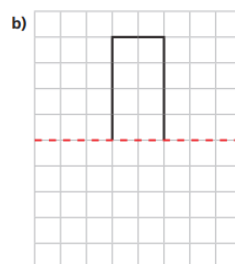
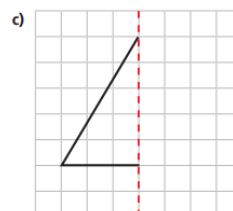
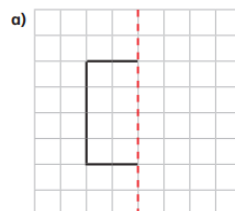


Try this one if you fancy a challenge!

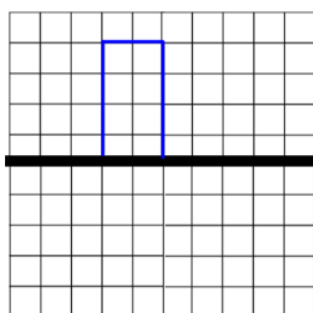
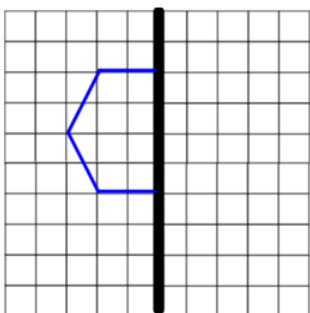
Complete and name the symmetrical shapes you have drawn on the grids.



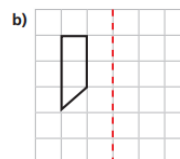
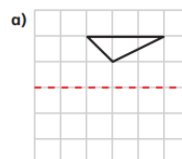
Name each shape once you have drawn it.



Complete and name the symmetrical shapes you have drawn on the grids.

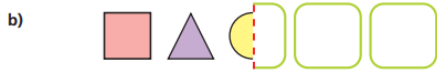


Reflect the shapes in the given mirror line.



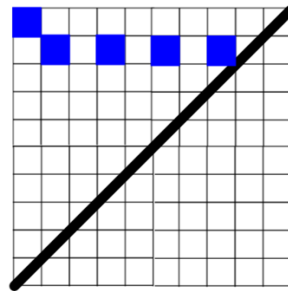
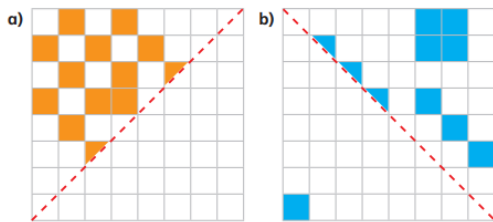
4 Each pattern is symmetrical around the mirror line.

Complete the patterns.



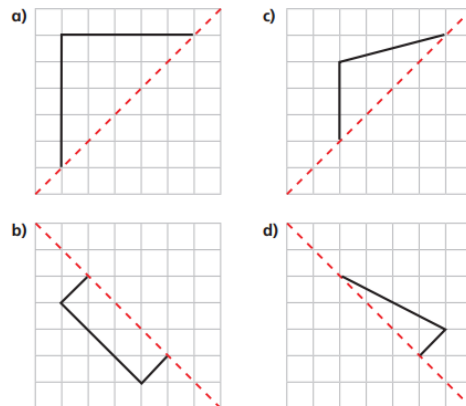
How would you complete the pattern so it was symmetrical in the diagonal mirror line?

5 Shade squares to make the patterns symmetrical.

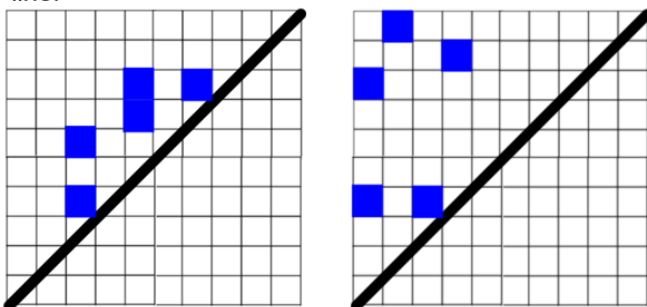


HINT: Turn the paper round so the mirror line is horizontal or vertical.

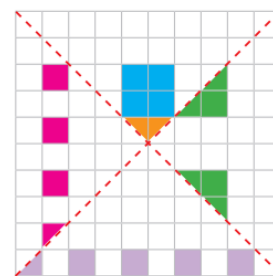
6 Complete the symmetric figures.



Complete these patterns so they are symmetrical in the mirror line.

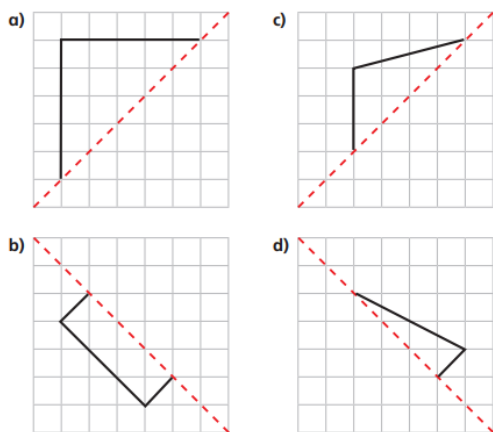


7 Complete the symmetric figure.

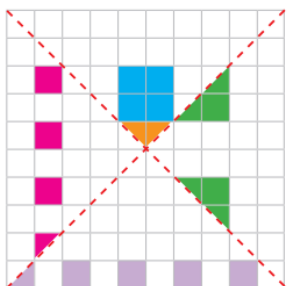


Create your own question like this for a partner.

6 Complete the symmetric figures.



7 Complete the symmetric figure.



Create your own question like this for a partner.

Evaluation Question:

EVALUATION:

Which letters have a line of symmetry?

A B C D E F G
H I J K L M N
O P Q R S T U
V W X Y Z

Wednesday: Describing Position

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<https://www.bbc.co.uk/bitesize/tags/z63tt39/year-4-and-p5-lessons/1>

Starter:

A. $92 \div 6 =$

B. $69 \times 8 =$

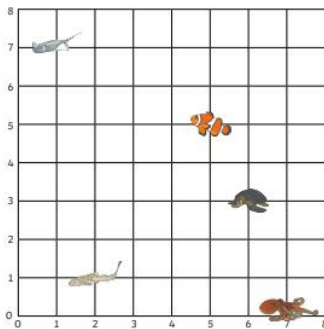
C. $654 \times 10 =$

D. $87 - 29 =$

E. $98 + 65 =$

Mild:

1) Martin has gone scuba diving. He has a list of sea creatures that he really wants to see. Can you give him the coordinates to find each of the sea creatures on his list?



clownfish = (,)

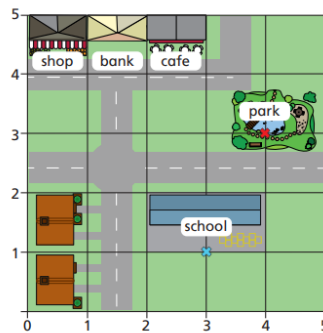
zebra shark = (,)

stingray = (,)

octopus = (,)

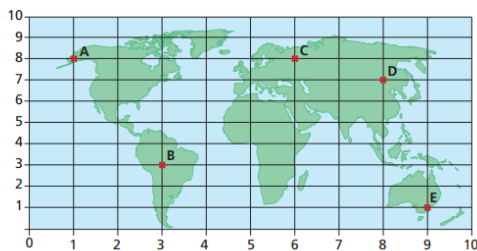
turtle = (,)

Here is a map of part of a town.



- Which place is next to the shop? _____
 - Which place is next to the bank and close to the park? _____
 - The front gates of the school have been marked with a cross.
Write the coordinates of the school gates. (,)
 - The slide in the park has been marked with a cross.
Write the coordinates of the slide. (,)
- Compare answers with a partner.

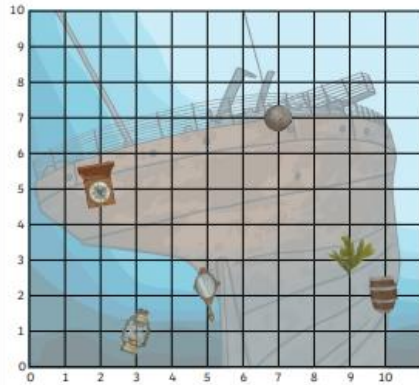
2 A map of the world is drawn on a grid.
Some locations are marked at points A to E.



- Which point is at the bottom right of the grid? _____
- Which two points are to the left of point C on the map?
_____ and _____
- Write the coordinates of each location.
A (,) D (,)
B (,) E (,)
C (,)

Medium:

- 2) Sienna is studying a shipwreck. She needs to record what item she found at each location on the grid. Help her by drawing or writing the names of the shipwrecked items next to the correct coordinates.



= (3,1)

= (2,5)

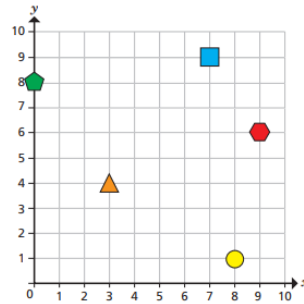
= (10,2)

= (9,3)

= (7,7)

= (5,2)

Some shapes are drawn on a grid.



- a) Tommy, Dora and Eva are working out the coordinates of the pentagon.



Dora

The coordinates of the pentagon are (0, 8).



Tommy

The coordinates of the pentagon are (8, 0).



Eva

I think you are both right!

Who is correct? _____

Talk about it with a partner.

- b) Write the coordinates of the other shapes.

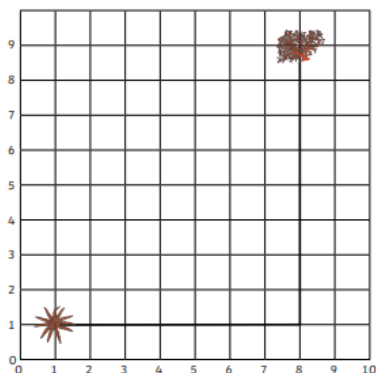
square (,)

triangle (,)

circle (,)

hexagon (,)

- 2) This starfish is moving along the seabed towards the coral. Here is the path the starfish takes to reach the coral.

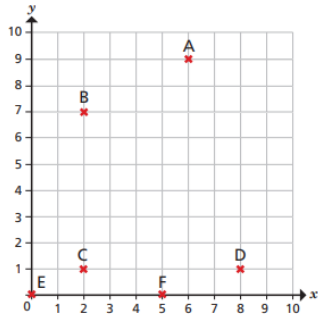


The starfish has to travel 8 squares right and 9 squares up to get to the coral at (8,9).

- a) Is Kenneth right? Explain your reasoning.
- b) Write two true statements and one false statement about the coordinates the starfish travels along. Can your partner identify the incorrect statement?

Spicy:

- 4 Six points are drawn on a grid.



- a) Write the coordinates of each point.

A (,) C (,) E (,)

B (,) D (,) F (,)

- b) Teddy and Alex each choose a point.



Teddy

Our x
coordinates are
the same.



Alex

My y
coordinate is greater
than Teddy's.

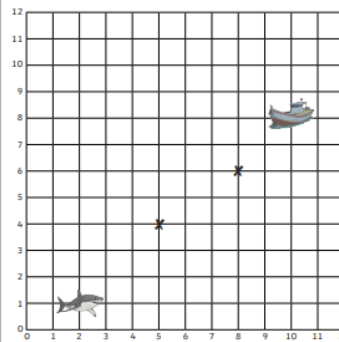
What points have Alex and Teddy chosen?

Alex (,) Teddy (,)

- 1) a) This shark is swimming in a straight line towards the boat. Two of the coordinates it will swim through are shown on the grid. Write the other coordinates the shark will swim through on its way to the boat.



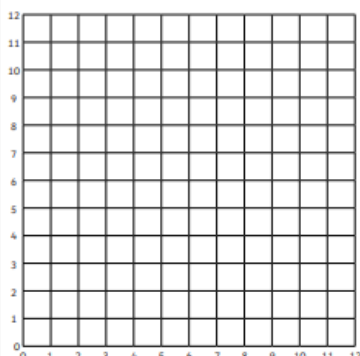
- b) Move the shark to a new coordinate position. Can your partner give three coordinates the shark will swim through to reach the boat?



Coordinates the shark will
swim through:

twinkl.com

- 1) An explorer in the Antarctic is recording the positions of several different sea creatures on this coordinate grid. Using the clues, can you find the possible coordinate positions of the sea creatures on the grid? Is there more than one possible answer? Use the sea creature cutouts to investigate.



 penguin = (,)

 blue whale = (,)

 orca = (,)

 seal = (,)

 shrimp = (,)

Clues

- | | |
|--|---|
| a) The shrimp's position has the same number for both its x-axis and its y-axis coordinate. | b) The blue whale's position has an x-coordinate that is one quarter of its y-coordinate. |
| c) The penguin's position has a difference of 6 between the x-coordinates and y-coordinates. | d) The orca's position has coordinates that are both multiples of 5. |
| e) The seal's position has consecutive x-coordinates and y-coordinates. | |

Thursday: Co-ordinates in first quadrant

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<https://whiterosemaths.com/homelearning/year-4/>

Starter:

 A. $75 \div 6 =$

 B. $604 - 100 =$

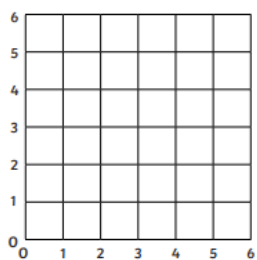
 C. $439 + 7842 =$

 D. $654 + 230 =$

 E. $56 \div 8 =$

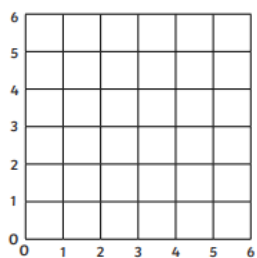
Mild

- 1) Plot these coordinates onto the grid.
Plot two more points to make a square.

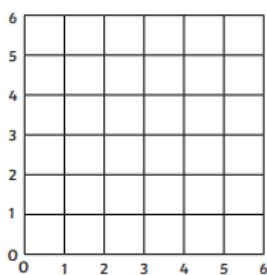


$(2,2)$, $(2,5)$

- 2) Plot these coordinates onto the grid. Plot two more points to make a rectangle.



- 3) Plot these coordinates onto the grid. Plot two more points to make a parallelogram.



$(3,1)$, $(5,5)$

twinkl.com

- 1 The cards show the coordinates of six points.

A $(4, 4)$

B $(2, 3)$

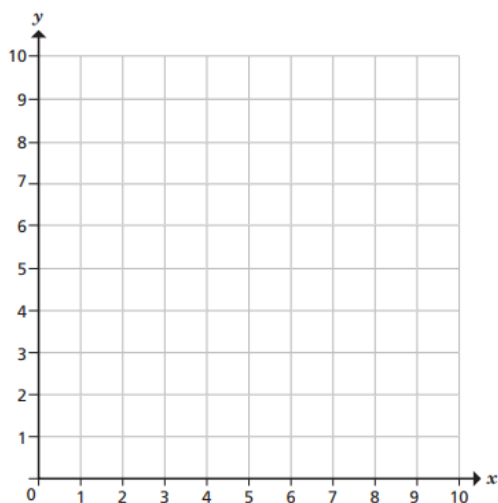
C $(6, 4)$

D $(10, 8)$

E $(0, 5)$

F $(9, 0)$

Plot and label the points on the grid.



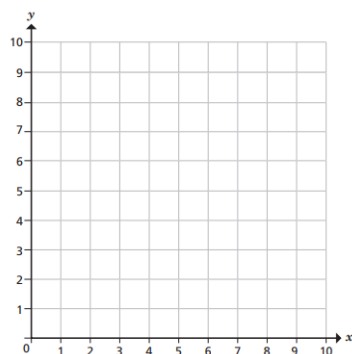
- 2 Here are the coordinates of three points.

X $(1, 3)$

Y $(2, 5)$

Z $(3, 7)$

- a) Plot and label the points on the grid.



- b) Join up the points.

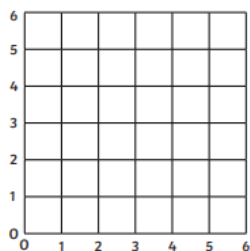
What do you notice?

- c) Write the coordinates of two other points that fit this pattern.

$(\square, \square)$ and $(\square, \square)$

Medium

- 4) Plot these coordinates onto the grid.
Plot two more points to make a kite.



$(4, 5), (4, 2)$

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Isaac says:

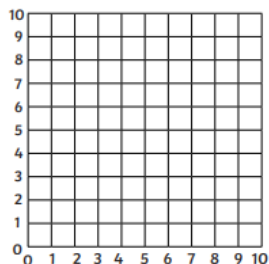


If I plot five points on a grid, I will always make a pentagon.



Do you agree with this statement?

Draw a coordinate grid on squared paper and investigate different ways of plotting five coordinates. Label all the coordinates that you plot.



- 3 Here are the coordinates of the vertices of a rectangle.

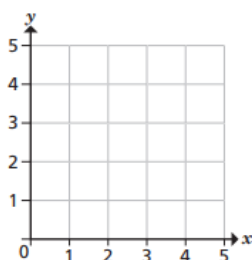
$(1, 1)$

$(5, 1)$

$(1, 3)$

$(5, 3)$

Draw the rectangle on the grid.



Spicy

- 4 Two squares are drawn on a grid.

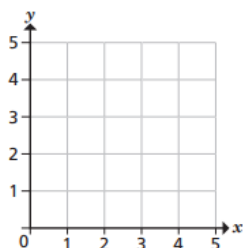
Here are the coordinates of the vertices of each square.

Square A $(1, 1)$ $(1, 3)$ $(3, 3)$ $(3, 1)$

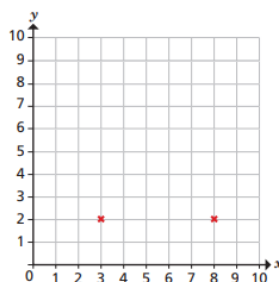
Square B $(2, 2)$ $(2, 4)$ $(4, 4)$ $(4, 2)$

a) Do you think the squares will overlap? _____

b) Draw on the grid to check your answer.



- 5 Two vertices of a triangle are shown on the grid.



a) What are the coordinates of the two vertices shown?

$(\square, \square)$ and $(\square, \square)$

b) Give a possible coordinate for the third vertex, if the triangle is right-angled.

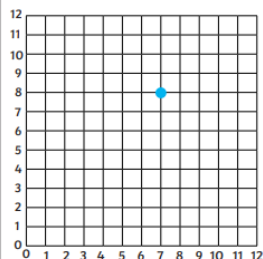
$(\square, \square)$

c) Give a possible coordinate for the third vertex, if the triangle is isosceles.

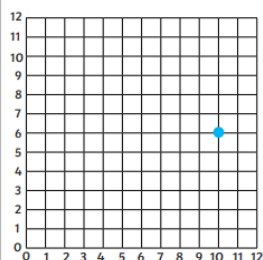
$(\square, \square)$

Compare answers with a partner.

The coordinate point shown on this grid is a shared vertex of three types of triangles. Can you plot the missing vertices and draw lines to construct the three different triangles? Write the coordinates of each triangle. Can you find at least three different ways to solve this problem?



The coordinate point shown on this grid is a shared vertex of three different types of quadrilaterals. Can you plot the missing vertices and draw lines to construct the three different quadrilaterals? Write the coordinates of each quadrilateral. Can you find at least three different ways to solve this problem?



6 The coordinates of one vertex of a square are (10, 10).

Give possible coordinates for the other three vertices.

(,) (,) (,)

How many different answers can you find?

Friday

Today you can challenge yourself with the key skills test, along with the challenge activities posted on the **BBC website and White Rose**

<https://www.bbc.co.uk/bitesize/tags/z63tt39/year-4-and-p5-lessons/1>

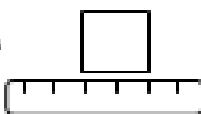
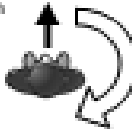
<https://whiterosemaths.com/homelearning/year-4/>



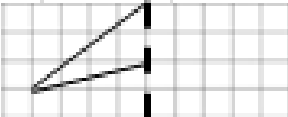
Times Table Rock Star Battle- Mrs Shaughnessy has organised a "battle" between each class in our year group. The start date is today and the finishing date is next Friday 17th July so the results will be published that week on twitter. Get battling and let's see who wins!!!

Remember the Key Skills sheets are only to work from **not on** so do not worry if you cannot complete a couple of the questions.

Mild

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure and Geometry	
1. What is 10 less than this number? 106	103	11. $64 \div 8 =$	1034	23. How many grams are there in 2 and a half kilograms?	
2. What is the 6 worth in this number? 962	103	12. $6 \times 4 =$	1034		
3. Write < or > to make this correct: 245 254	103	13. $32 \times 2 =$	1037	22. What is the perimeter of this square?	
4. Show 8°C on the thermometer.	104	14. There are 3 girls for every 2 boys. If there are 10 boys, how many girls?	1037	23. Ian turns through half a turn. How many degrees has he turned through?	
5. Make the largest number possible using the digits 6 3 and 8.	106	15. What is one tenth of 12?	1034		
6. $299 + 1 =$	106	16. Circle $\frac{5}{10}$ of the marbles.	1034	24. Is this angle bigger or smaller than a right angle?	
7. $389 - 237 =$	107	17. What is $\frac{3}{4}$ of 25?	1034		
8. Circle the best estimate to $119 - 58$: 60 70 80 90	108	18. $\frac{4}{10} - \frac{2}{10}$	1034	25. Which pair of lines are perpendicular?	
9. A school has 700 tickets to sell for a play. They sell 537. How many left?	108	19. Add the fractions. $\frac{2}{10} + \frac{4}{10}$	1037		
10. What is the missing number? $33 + \square - 24 = 27$	108	20. Write the largest fraction. $\frac{1}{10}, \frac{1}{10}, \frac{1}{10}, \frac{1}{10}$	1034		

Medium and Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure, Geometry and Statistics																
1. What is the missing number? 1,000 2,000 3,000 5,000	1	11. $12 \times 6 =$	8	21. How many centimetres are there in 4.25 metres?																
2. What is the missing number? 200 250 275 300	1	12. Complete the sum that is equal to $2 \times 3 \times 12$: $12 \times$	8																	
3. Round this number to the nearest 1,000: 5,731	2	13. $429 \times 3 =$	8	22. Tick (✓) the shape that has more than one line of symmetry.																
4. What is 1,000 more than 2,960?	4	14. To work out 62×7 you could do: $60 \times$ $+$ $\times 7$	8	☐ ☐ ☐																
5. If the temperature starts at 4°C, then drops by 12°C, what is it now?	2	15. $\frac{2}{10} - \frac{5}{10}$	2	23. Complete this shape:																
6. What is the value of the 9 in this number? 3,296	2	16. What is the missing number? 4.00 4.01 4.02 4.03	2	24. This table shows how teachers and students own different pets:	<table><tr><td></td><td>Dog</td><td>Cat</td><td>Rabbit</td><td>Mouse</td></tr><tr><td>Teacher</td><td>13</td><td>10</td><td>9</td><td>5</td></tr><tr><td>Student</td><td>28</td><td>23</td><td>14</td><td>8</td></tr></table>		Dog	Cat	Rabbit	Mouse	Teacher	13	10	9	5	Student	28	23	14	8
	Dog	Cat	Rabbit			Mouse														
Teacher	13	10	9	5																
Student	28	23	14	8																
7. Write the number 38 in Roman numerals.	40	17. $\frac{8}{10} - \frac{5}{10}$	10																	
8. $3,629 + 5,318 =$	8	18. Write 0.75 as a fraction.	10																	
9. Estimate the answer to: $15,982 - 8,025$	8	19. $123 \div 100 =$	2	How many students have cats?																
10. From 750 tickets, pupils buy 205 & parents buy 478. How many are left?	8	20. Using £20 Rob buys a top for £8.90 and a scarf for £5.50. How much left?	0	25. Which pet is the most popular?																