Year 5 Maths Home Learning | Summer Term

W.C. 6th June 2020

https://www.bbc.co.uk/bitesize/tags/zhgppg8/year-5-and-p6-lessons/1

Maths

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

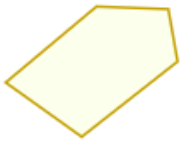
After watching the videos and having a go at the practise activities, have a go at these activities. Depending on your confidence choose Mild, Medium or Spicy.

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

Monday

Distinguishing between regular and irregular polygons

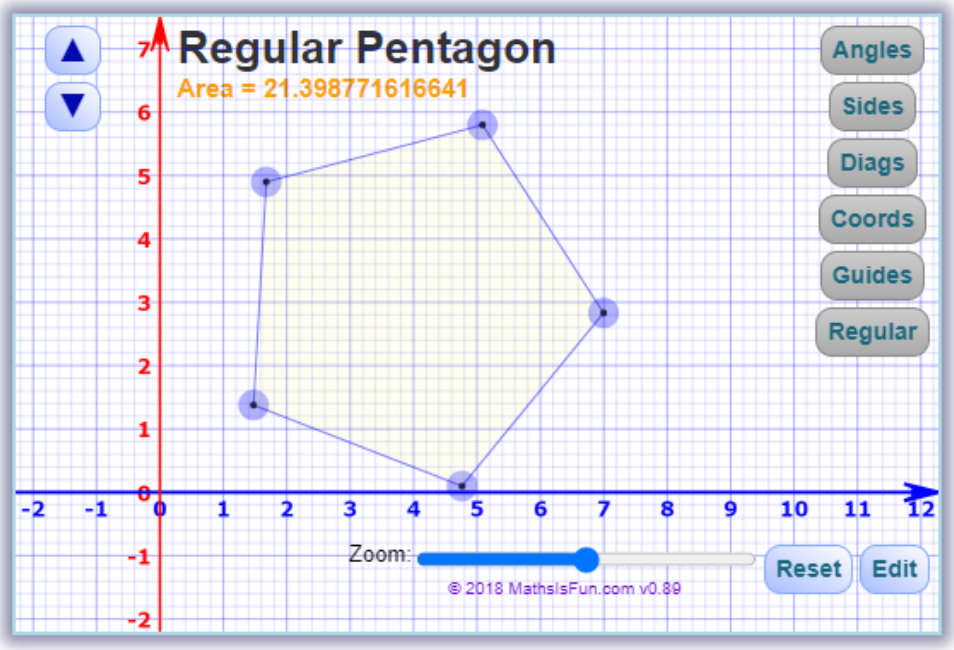
https://www.bbc.co.uk/bitesize/tags/zhgppg8/year-5-and-p6-lessons/1



A polygon that does not have all sides equal and all angles equal.

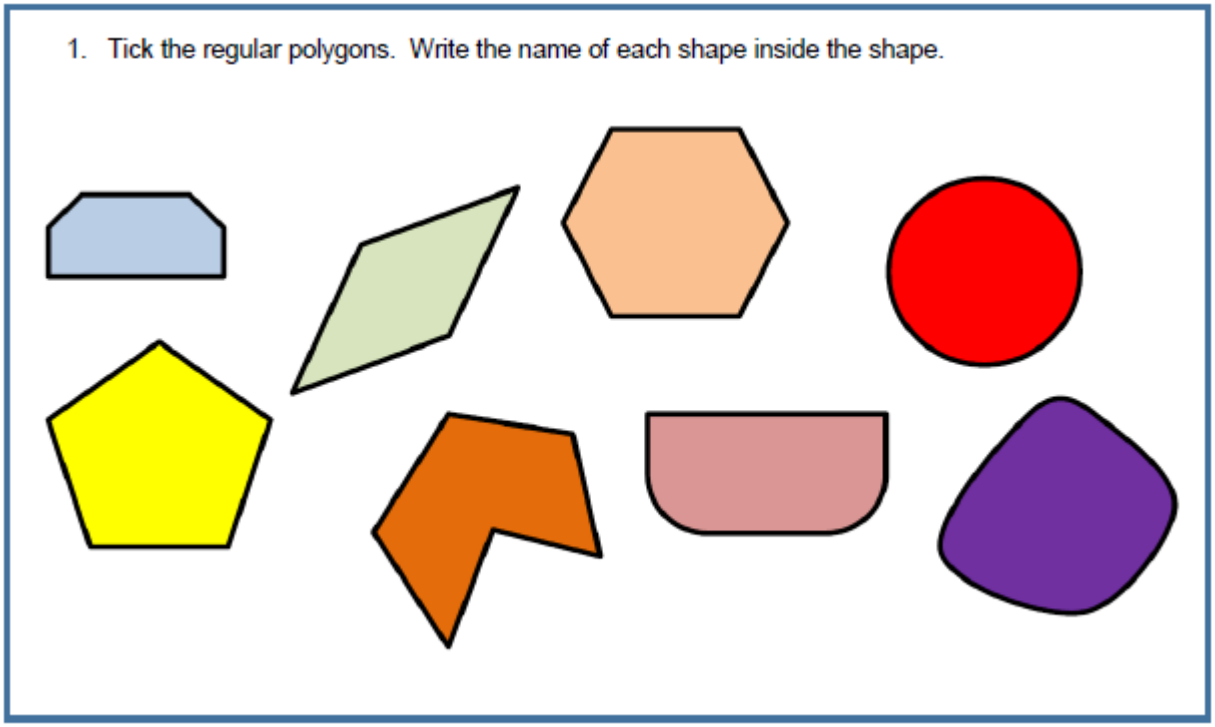
(A polygon is "regular" only when all angles are equal and all sides are equal, otherwise it is irregular.)

Try moving the points below:



Mild and medium

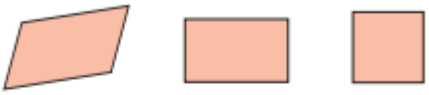
1. Tick the regular polygons. Write the name of each shape inside the shape.



3 One polygon in each set is regular. Tick the regular polygon.

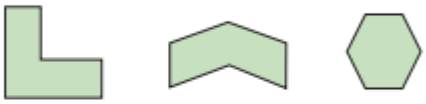
a)

b)



c)

d)



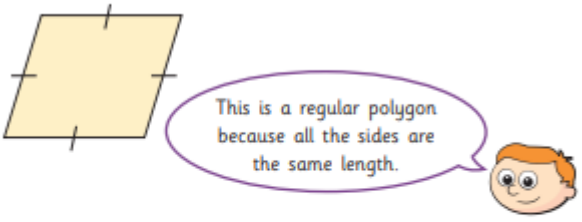
How did you know which one was regular without measuring?

4 Draw two regular and two irregular polygons on the grid.

Compare your polygons with a partner.

What is the same and what is different?

5 Here is a rhombus.



Do you agree with Ron? _____

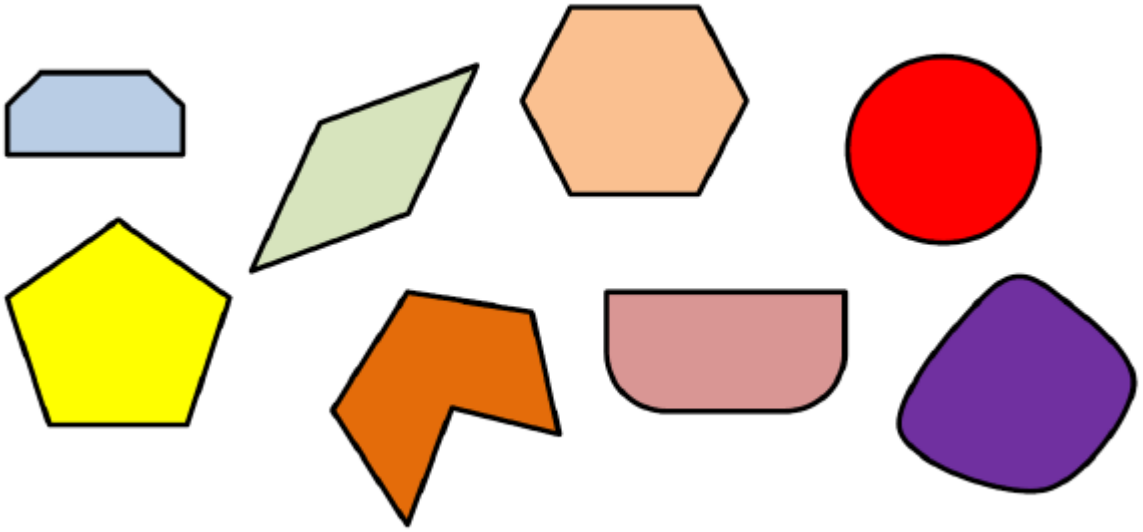
Explain your answer.

_____

_____

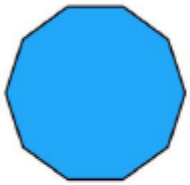
Spicy

1. Tick the regular polygons. Write the name of each shape inside the shape.

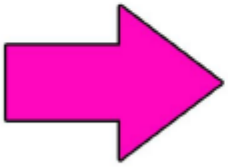


2. Write whether each shape is **regular or irregular.**
Give reasons next to each shape why it is **regular or irregular.**

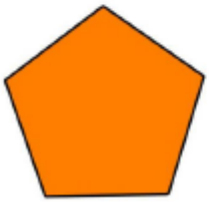
_____ because



_____ because

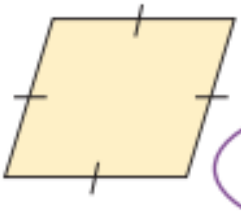


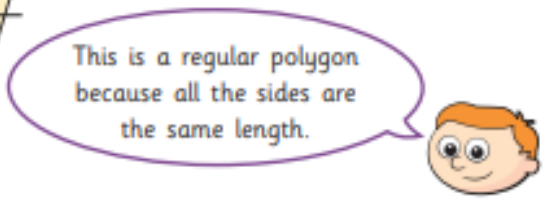
_____ because



_____ because

5 Here is a rhombus.





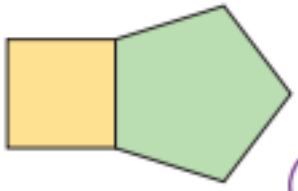
Do you agree with Ron? _____

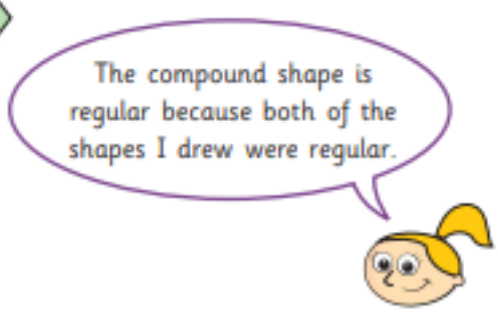
Explain your answer.

_____

_____

6 Eva has drawn a square and a regular pentagon.





Do you agree with Eva? _____

Explain your answer.

Tuesday

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Identify 2D and 3D shapes from representations

2D shapes

Circle

Square

Triangle

Rectangle

Pentagon

Hexagon

Octagon

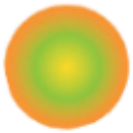
Nonagon

3D shapes

Cube

Cuboid

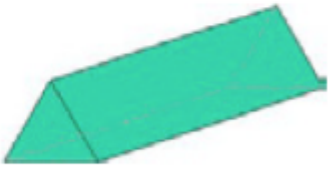
Sphere



Square-based pyramid

Cylinder

Triangular prism



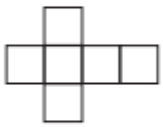
Pentagonal pyramid

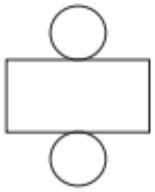
Hexagonal prism

Mild

Reasoning about 3D shapes

1 Match the net to the correct label.





cube

cylinder

square-based pyramid

cuboid

2 Complete the sentences.

a) The faces of a _____ are all square.

b) A square-based pyramid has ☐ triangular faces and ☐ square face.

c) The net of a _____ is made up of 2 circles and a rectangle.

3

The net of a cuboid is made up of 4 rectangles and 2 squares.

Whitney

The net of a cuboid is made up of 6 rectangles.

Rosie

Who do you agree with? Circle your answer.

Whitney **Rosie** **both of them**

Explain your reasons.

_____

_____

Medium

3

The net of a cuboid is made up of 4 rectangles and 2 squares.

Whitney

The net of a cuboid is made up of 6 rectangles.

Rosie

Who do you agree with? Circle your answer.

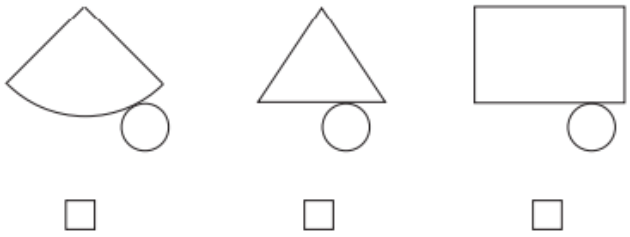
Whitney **Rosie** **both of them**

Explain your reasons.

_____

_____

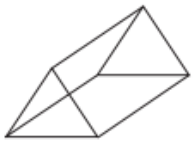
4 Tick the diagram that is the net of a cone.



☐ ☐ ☐

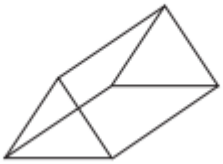
Compare answers with a partner.

5 Draw the net for a triangular prism on the squared grid.

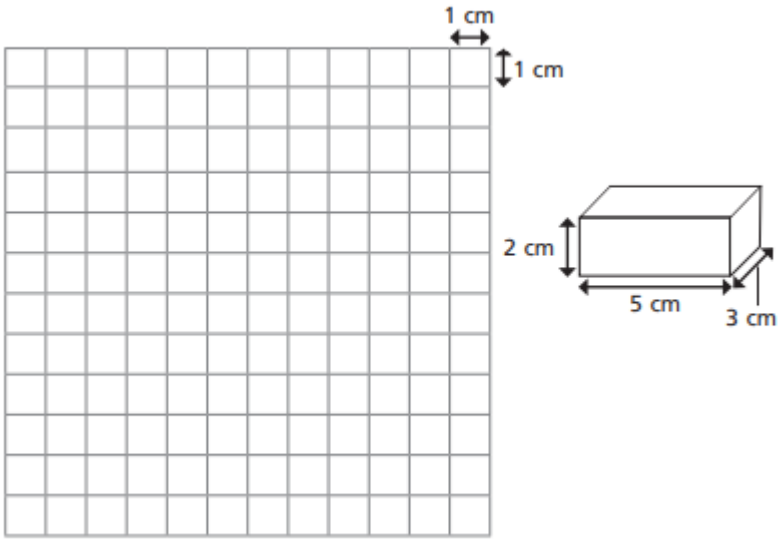


Spicy

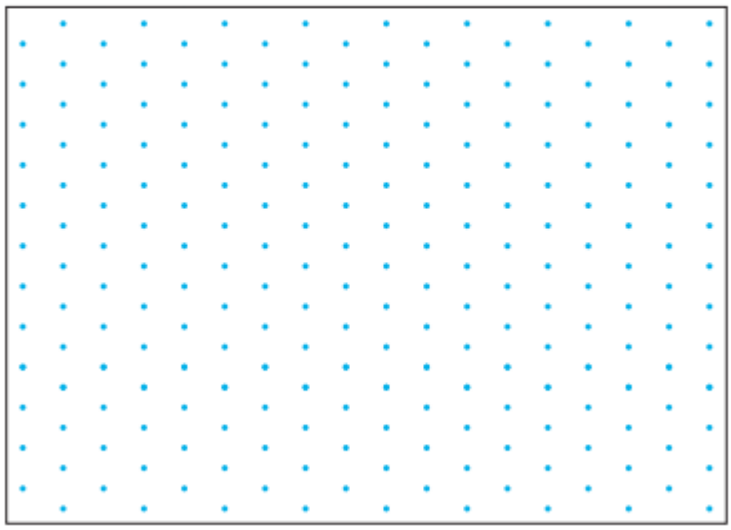
5 Draw the net for a triangular prism on the squared grid.



6 Draw an **accurate** net for this cuboid on the squared grid.



7 Draw two different cuboids on the isometric paper.



You can create your own isometric papr by doing a vertical line of dots 1 cm apart and then along side it, 1 cm apart dots on the 0.5cm, 1.5cm, 2.5cm etc marks.

Wednesday

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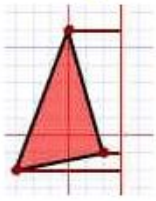
Reflection

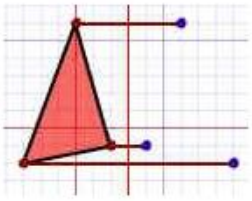
How Do I Do It Myself?

Just approach it step-by-step. For **each corner** of the shape:

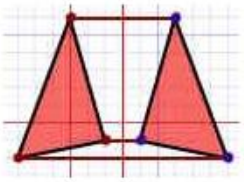
1. Measure from the point to the mirror line (must hit the mirror line at a right angle)



2. Measure the same distance again on the other side and place a dot.



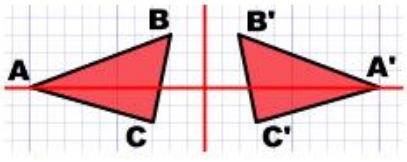
3. Then connect the new dots up!



Labels

It is common to label each corner with letters, and to use a little dash (called a **Prime**) to mark each corner of the reflected image.

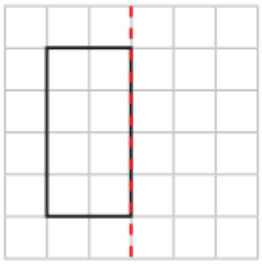
Here the original is **ABC** and the reflected image is **A'B'C'**



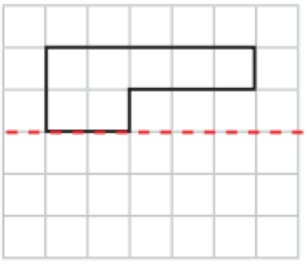
Mild

1 Reflect each shape in the mirror line.

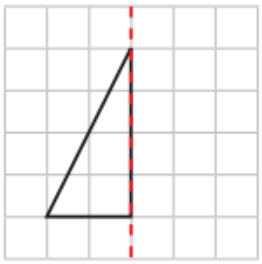
a)



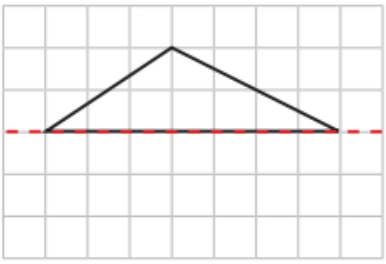
d)



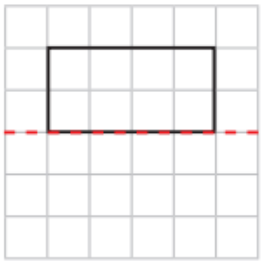
b)



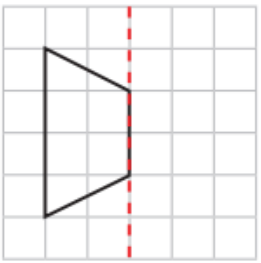
e)



c)

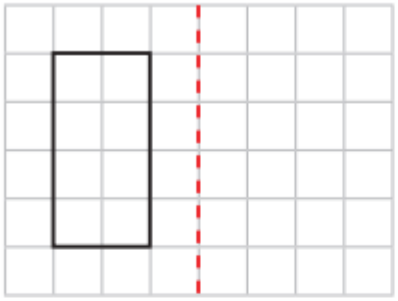


f)

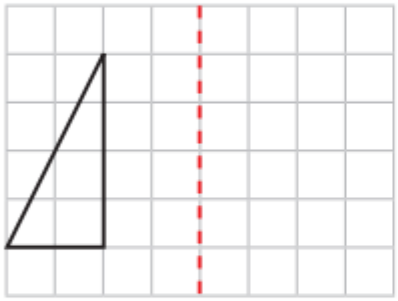


2 Reflect each shape in the mirror line.

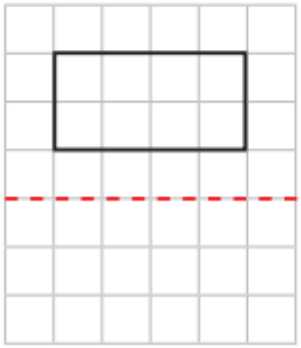
a)



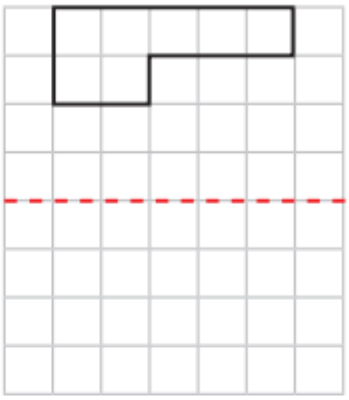
b)



c)

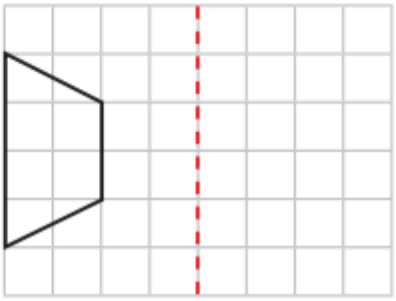


d)



e)

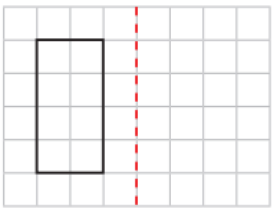
f)



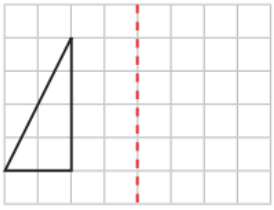
Medium

2 Reflect each shape in the mirror line.

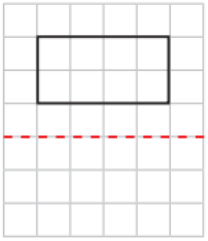
a)



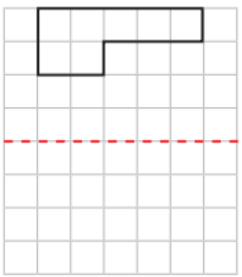
b)



c)

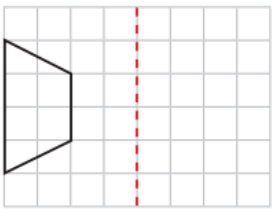


d)



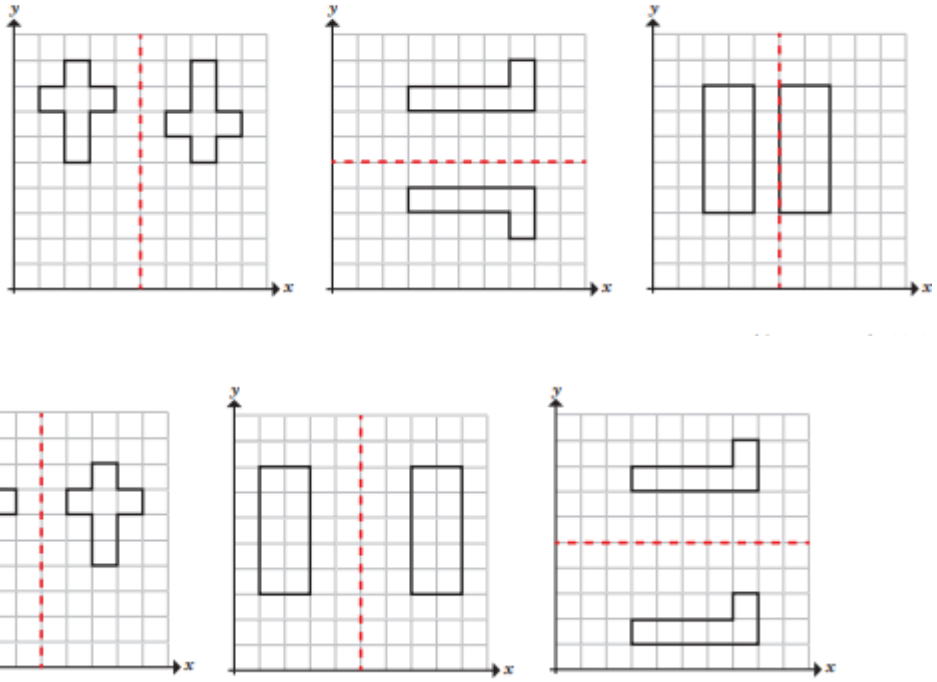
e)

f)



3 Which diagrams show a correct reflection in the given mirror line?

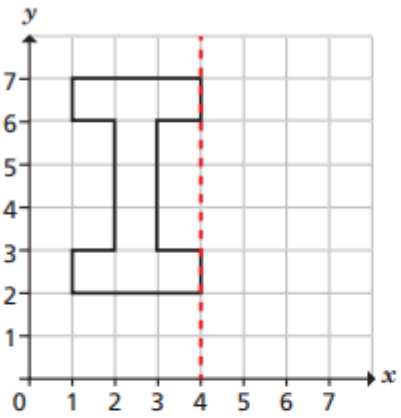
Tick your answers.



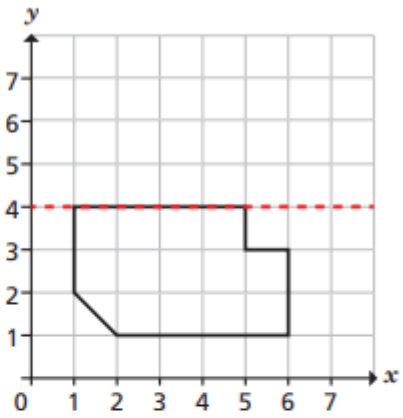
Spicy

4 Reflect the objects in the given mirror lines.

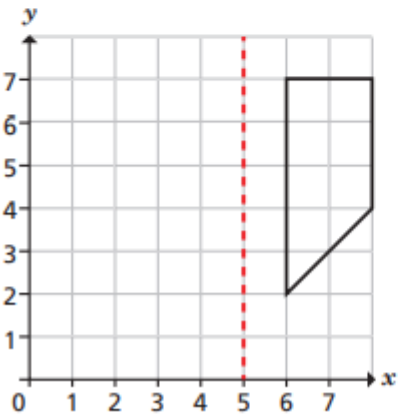
a)



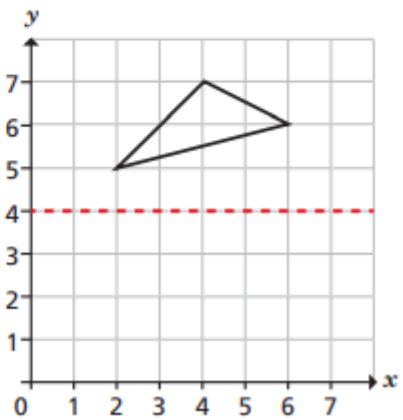
c)



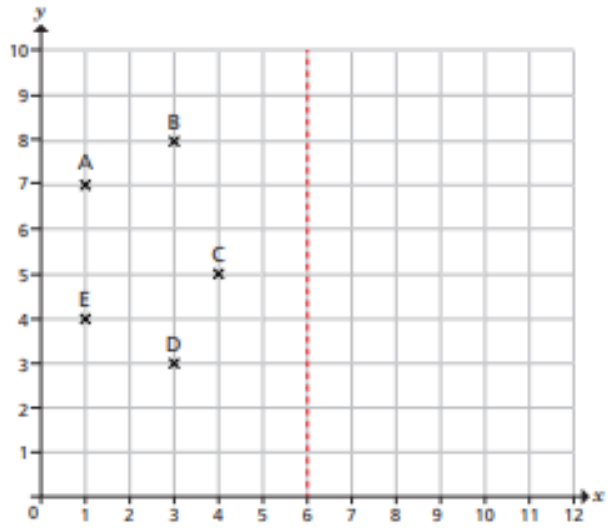
b)



d)



5 Five points are plotted on a coordinate grid.



a) Join the points to form a polygon. This is the object.

What type of polygon is the object? _____

b) Reflect the object in the given mirror line.

What type of polygon is the image? _____

c) Label the reflected vertices P, Q, R, S and T.

Write the new coordinates.

P (☐ , ☐) Q (☐ , ☐) R (☐ , ☐)

S (☐ , ☐) T (☐ , ☐)

d) The image and the object are identical polygons.

Is this statement true or false? _____

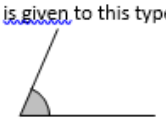
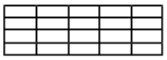
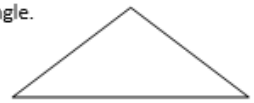
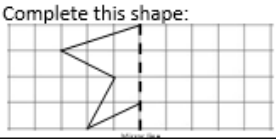
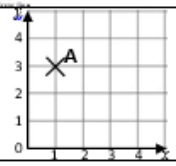
Talk about it with a partner.

If you feel like you don't have the resources to complete todays activities then spend your time battling on Timetables Rock Stars!*

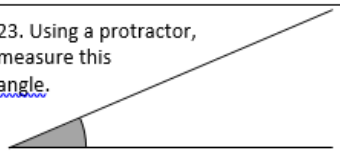
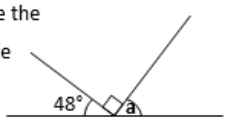
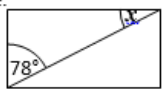
Thursday

Key Skills

Mild

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure and Geometry	
1. What is the missing number? 14 21 28 ☐ 42	4:1	11. 9 x 12 =	4:9	21. On the back of a film box it says length of the film is 97 minutes. How long is this in hours and minutes?	4:19
2. What is the missing number? 36 ☐ 48 54 60	4:1	12. Complete the sum that is equal to 36 x 7: 3 x ☐ x 7	4:10		
3. Round this number to the nearest 10: 5,731	4:2	13. 68 x 4 =	4:11	22. What name is given to this type of angle? 	4:24
4. Round this number to the nearest 100: 3,275	4:2	14. One wooden block is 4cm tall. If 14 blocks are piled up, how tall are they?	4:12		
5. What is the next number in this sequence: 4, 2, 0, -2, ☐	4:3	15. $\frac{?}{5} = \frac{4}{20}$ 	4:13	23. Draw all the lines of symmetry on this triangle. 	4:25
6. Write < or > to make this correct: 3,948 ☐ 2,817	4:4	16. When I divide a number by 100, what fraction do I have?	4:14		
7. What number does this Roman Numeral represent? **XC**	4:5	17. $\frac{14}{13} - \frac{5}{13}$	4:15	24. Complete this shape: 	4:26
8. 2,725 - 834 =	4:6	18. Write $\frac{7}{10}$ as a decimal number.	4:16		
9. **Estimate** the answer to: 6,504 + 4,478	4:7	19. What is the **value** of the 9 in: 3.91	4:17	25. What are the co-ordinates of the point labelled A? 	4:27
10. Sarah had £65. She bought a £28 dress and a £17 bag. How much left?	4:8	20. A log is 6 metres long. It is cut into quarters. How long is each piece?	4:18		

Medium and Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Geometry and Problem Solving	
1. What is the value of the **9** in this number? 2,934,765	5:1	11. Circle all the **multiples** of 11. 11 54 78 121	5:8	21. A jug had 1.317 litres in it. A further 0.923 litres was added to it. How many litres are in the jug now?	5:18
2. Write **fifty seven thousand, two hundred and thirty eight** in digits.	5:1	12. Circle the **composite (non-prime)** numbers? 2 3 9 13 15	5:9		
3. Round 163,824 to the **nearest hundred thousand.**	5:2	13. 4,962 x 6	5:10	22. Which of these is the largest? **a.** 55% **b.** $\frac{3}{5}$ **c.** 0.4	5:19
4. What is the missing number? 366,270 266,270 ☐ 66,270	5:2	14. 670.2 ÷ 10	5:11		
5. Find the difference in temperatures. London -1°C Glasgow -9°C	5:3	15. Complete this sequence of **cube numbers.** 1 8 ☐ 64	5:12	23. Using a protractor, measure this angle. 	5:25
6. Write this number in Roman Numerals: 509	5:4	16. Write <,= or > to make this correct: $\frac{1}{3}$ ☐ $\frac{5}{9}$	5:13		
7. 85,248 – 38,049 =	5:5	17. Find an **equivalent fraction** of $\frac{6}{10}$. 	5:14	24. Calculate the missing angle labelled **a**: 	5:26
8. 38,049 + 85,248 =	5:5	18. Write $4\frac{1}{2}$ as an **improper fraction.**	5:15		
9. Complete this sum without written working. 13,200 + 6,450 =	5:6	19. $\frac{5}{8}$ x 24 =	5:16	25. A diagonal has been drawn through this rectangle. Calculate the angle labelled x. 	5:27
10. 38,276 seats out of 40,000 are taken. How many are empty?	5:7	20. Round 3.71 to the nearest whole number.	5:17		

Friday

Today, I have given you a variety of maths problems linked to all areas of your maths learning in Year 5. Work through as many as you can!

Problems of the Day 2020

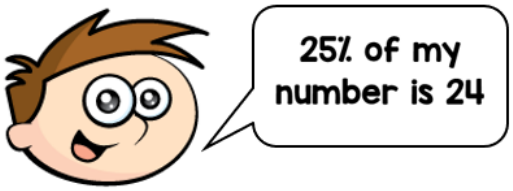
Day 1

1 Fill in the missing numbers.

100 less than 20,000 is ☐

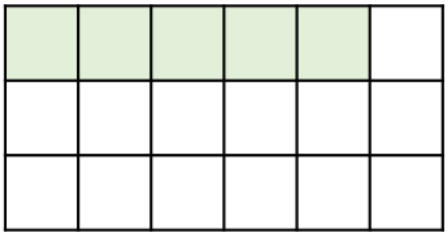
☐ more than 20,000 is 20,600

2



What number is Teddy thinking of?

3 Lucy shades in part of a rectangle.



She shades some more squares.

$\frac{7}{q}$ of the rectangle is now shaded.

How many more squares did Lucy shade?

Problems of the Day 2020

Day 2

1 Ron and Eva each make a 3-digit number from these digit cards.

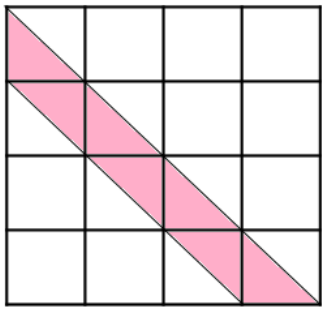
- Ron makes the largest even number possible.
- Eva makes the smallest odd number possible.

What is the difference between their numbers?

2 Circle all the fractions that are greater than 1 but less than 2

$\frac{12}{5}$ $\frac{12}{6}$ $\frac{12}{7}$ $\frac{12}{8}$

3 What fraction of this shape is shaded?



White Rose Maths

Problems of the Day 2020

Day 3

1 Which of these numbers round to 2,000 to the nearest 100?

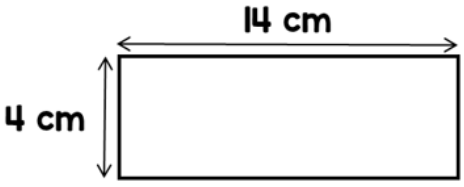
1,950 2,312 2,099 2,045

2 What are the missing numbers?

$6.4 = 1 + \square$

$3\frac{2}{5} = 1 + \frac{\square}{5}$

3 Annie has a 1 metre piece of wire. She cuts the wire into two pieces. She uses the smaller piece to make this rectangle.



She uses the other piece of wire to make a square.

What is the length of one side of the square?

White Rose