

Hello my amazing mathematicians! We are going to begin with a maths brain teaser. Draw the grids on paper before you begin.

## Maths Brain Teaser - 8

Copy and complete the following multiplication grids as quickly as you can.

x	2	5	8
0			
7			
6			

x	3	2	10
2			
11			
4			

x	7	8	2
2			
3			
0			

x	10	7	1
5			
8			
9			

x	2	8	5
12			
4			
5			

x	4	5	9
2			
7			
1			

I wonder how long this took you to complete.

For the main task we are going to continue to work from the White Rose site. We are going reason about 3d shapes.

Please let the video guide you when tackling the activity.

1. Copy or click on the link (press Ctrl then click) <https://whiterosemaths.com/homelearning/>

Then click Year 5

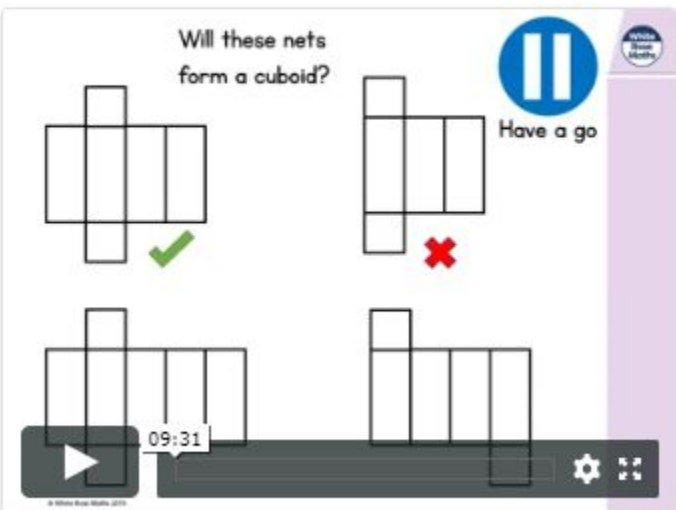
The screenshot shows the 'Home Learning' section of the White Rose Maths website. It features a 'Summer Term Plans' box with a 'Click here for more details' button. Below this is a 'Hello there, Parents and Carers!' section with introductory text. The main navigation area consists of a grid of buttons for 'Early Years', 'Year 1', 'Year 2', 'Year 3', 'Year 4', 'Year 5', 'Year 6', 'Year 7', 'Year 8', 'Year 9', 'Year 10', and 'By Topic'. A blue arrow points to the 'Year 5' button with the word 'click' written next to it. To the right of the grid is a vertical sidebar menu with a dark blue header 'Home Learning' and a list of options: 'Summer Term', 'Easter Fun', 'Home Learning - Early Years', 'Home Learning - Year 1', 'Home Learning - Year 2', 'Home Learning - Year 3', 'Home Learning - Year 4', 'Home Learning - Year 5', 'Home Learning - Year 6', 'Home Learning - Year 7', 'Home Learning - Year 8', 'Home Learning - Year 9', and 'Home Learning - Year 10'.

**Click**

**First, watch the video to support your learning and use it to work on the activity sheets below.**

### Lesson 2 - Reasoning about 3D shapes

Will these nets form a cuboid?



Have a go

Looking for the worksheets? Contact your child's teacher to check if they have a subscription to our worksheets. Alternatively, [read more here](#) or get some extra practice from [BBC Bitesize](#).

Now complete the worksheets below.

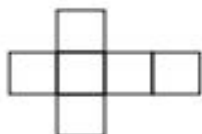
For question 1 discuss it with an adult. For question 7 you could just practice drawing cuboids. Remember, we did this in our art and maths lessons.

## Reasoning about 3D shapes

1 Match the net to the correct label.



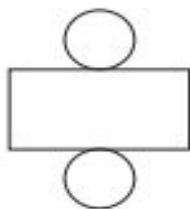
cube



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



Whitney

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



Rosie

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

Who do you agree with? Circle your answer.

Whitney

Rosie

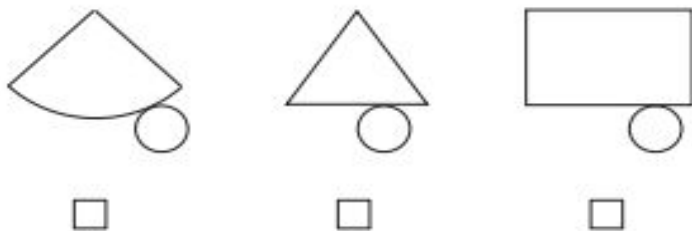
both of them

Explain your reasons.

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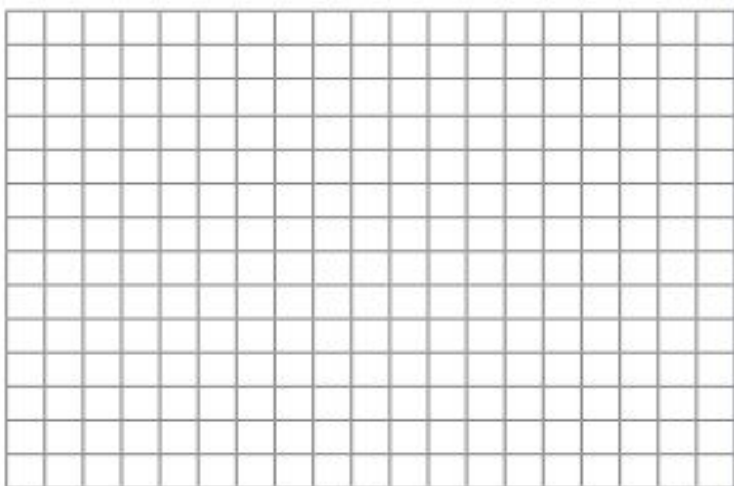
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- 4 Tick the diagram that is the net of a cone.

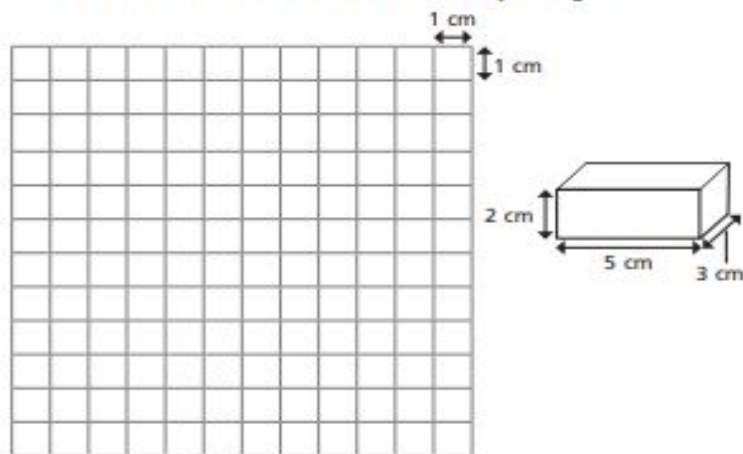


Compare answers with a partner.

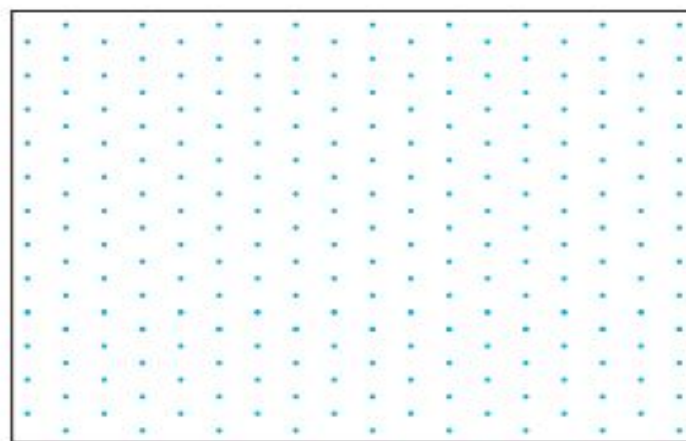
- 5 Draw the net for a triangular prism on the squared grid.



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



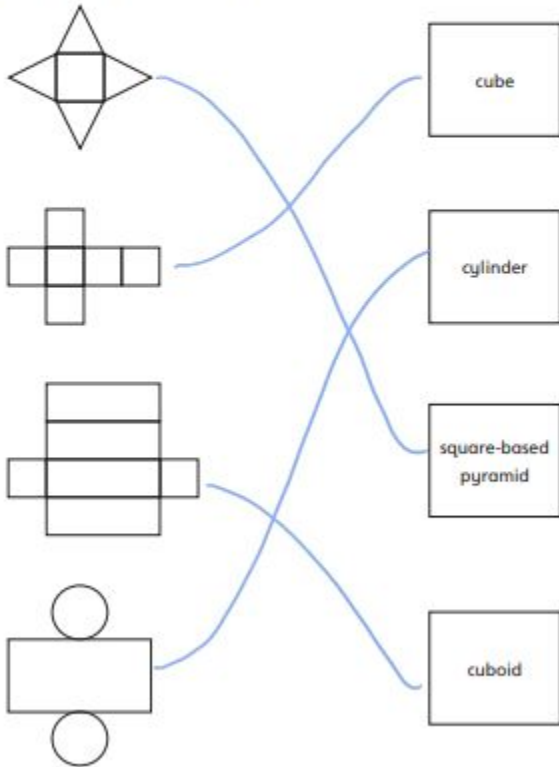
- 7 Draw two different cuboids on the isometric paper.



# Answers

## Reasoning about 3D shapes

1 Match the net to the correct label.



2 Complete the sentences.

a) The faces of a cube are all square.

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

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

3



Whitney

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



Rosie

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

Who do you agree with? Circle your answer.

Whitney

Rosie

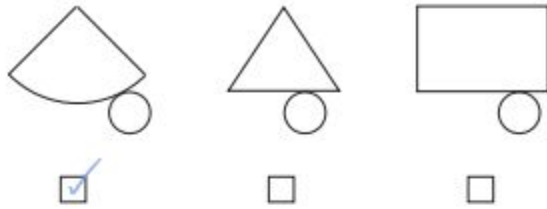
both of them

Explain your reasons.

Whitney is sometimes right if a cuboid has square faces. Rosie is always right as a square is a type of rectangle.

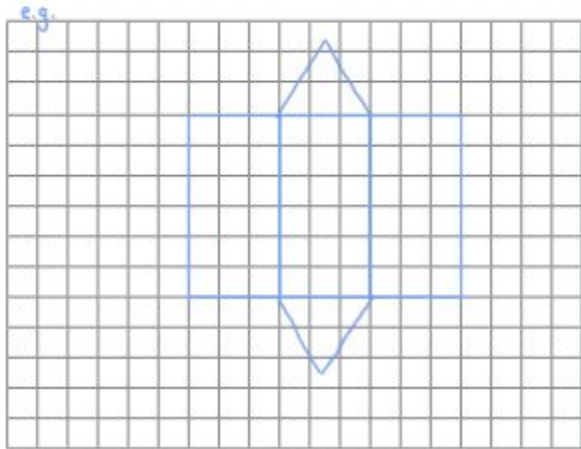
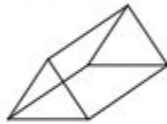


- 4 Tick the diagram that is the net of a cone.

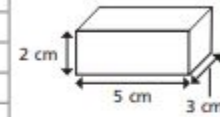
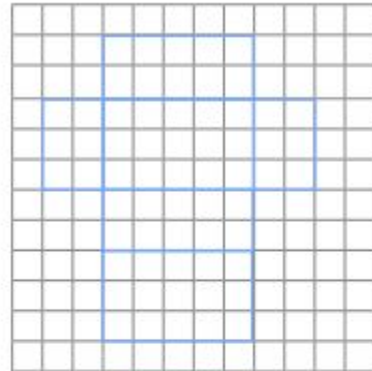


Compare answers with a partner.

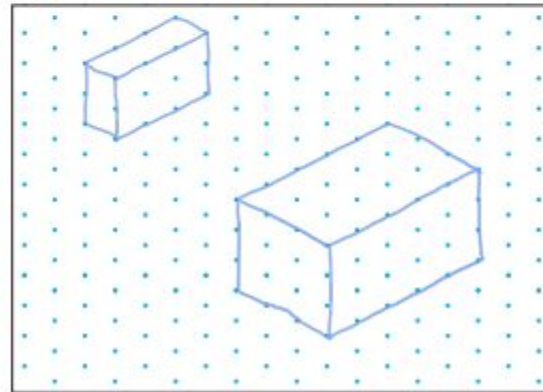
- 5 Draw the net for a triangular prism on the squared grid.



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



- 7 Draw two different cuboids on the isometric paper.  
e.g.



### Challenge answer

3.

x	2	5	8
0	0	0	0
7	14	35	56
6	12	30	48

x	3	2	10
2	6	4	20
11	33	22	110
4	12	8	40

x	7	8	2
2	14	16	4
3	21	24	6
0	0	0	0

x	10	7	1
5	50	35	5
8	80	56	8
9	90	63	9

x	2	8	5
12	24	96	60
4	8	32	20
5	10	40	25

x	4	5	9
2	8	10	18
7	28	35	63
1	4	5	9