

Maths

Activity 1 & 2 – Watch the videos on 3D shapes and their nets and also on cube models. Then answer the questions below.

Maths Skills Practise:
Daily Challenge:

JUNE MATHS MASTERS

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1 What number is represented here: MCCXII?	2 What is double 357? Can you work it out 2 ways?	3 What is 765,551 rounded to the nearest 1000?	4 Is 43×10 the same as $4300 \div 100$? Why?	5 If $x - 57 = 35 + 76$, what is the value of x ?	6 What's missing in this sequence: 3, 6, 10, 15, __, 28. How do you know?	7 What is 13,563 rounded to the nearest 100? What is the rule?
8 How many degrees in a complete turn?	9 What is $10.7 - 4.9$? How did you work it out?	10 If $y = 37$, what is the value of x in ' $y + 67 = x$ '?	11 One third of a number is 59, what was the number?	12 Which number is bigger: 267676 or 276767? Describe how you know.	13 Calculate $4 \times 17 + 4$.	14 List all the prime numbers between 30 and 60.
15 $(6 \times 5) + 6 = 30$. Is this right? Why?	16 What is three and two thirds plus two thirds?	17 What is 10×13 ? What other calculations would give you the same answer?	18 What is $4.04 + 2.07 + 9$?	19 Put these numbers in descending order: 7543, 3457, 7453, 4753, 5743.	20 How many grams in 4.7kg? How do you know?	21 What time is 22:05 in words? Can you draw it on a clock face?
22 What is today's date in Roman Numerals?	23 What are the properties of a triangular prism? Can you draw one?	24 How many ml in 5.43l?	25 Which fraction is bigger: $\frac{3}{5}$ or $\frac{40}{100}$? How do you know?	26 Can you draw a regular and an irregular hexagon?	27 Jake says, "If $y+7=5$, then y must be 2." Is he right? How do you know?	28 What is $14.3 - 1.7 + 5.2$?
29 Joshua says, "the area of my shape is 32cm so the perimeter must be 24cm". Do you agree?	30 TRICKY QUESTION: How many minutes in a normal school week?	<p>Have fun doing a Maths question a day! Challenge yourself to talk to the people at home and show off what you know!</p>				

Reasoning & Problem Solving

Try any of the challenges on this website:

<http://www.iseemaths.com/lessons56/>

Nets of shapes

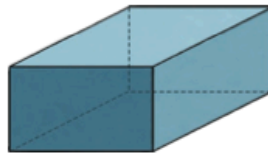
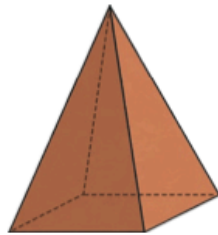
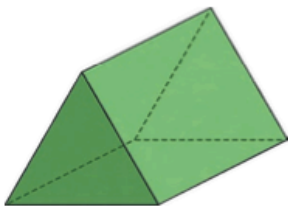
- a) Name three different 3D shapes that have at least one rectangular face.



- b) Name two different 3D shapes that have a curved surface.

- c) Name two different 3D shapes that have more than four but fewer than eight vertices.

Thinking about these 3D shapes, which could be the odd one out and why? Can you think of more than one example?

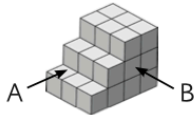


True or False?

- a) A cylinder is a type of prism.
b) A cuboid is the only 3D shape to have rectangular faces.
c) A triangular prism has six vertices.

Cube Models

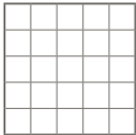
Here is a model made from cubes.



From direction A, the model looks like this.



On the grid, draw what the model looks like from direction B.



Jonah is looking at a cube model.



This cube is made up of 12 multilink cubes.



Do you agree with Jonah? Explain your answer.

Challenge:

Sinitta has got six cubes: two red, two blue and two green.
She arranges them to make a model, then says,



When I look from a plan view (from the top) I can see two red and two blue faces. When I look from the front (front elevation) I can see one red face, two blue faces and one green face.

How might Sinitta have arranged the cubes?
What might her model look like?