





Maths in a Box



<p>Always, Sometimes, Never</p>  <p>If you fold a square in half you will always make a rectangle.</p>	<p>TRUE OR FALSE</p>  <p>Turning from North to East is a 1/4 turn.</p>	<p><u>Colour Challenge</u></p>  <p>Green is not next to yellow Orange is between blue and yellow Red is not a triangle</p>	<p>Money, Money, Money</p>  <p>I have 20p and I count on in threes. Will I say 37p?</p>	<p>I have two even numbers < 50 That have a difference of 4. What could they be?</p>
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Could you make a surprise maths challenge in a box for someone in your family?

It is a lovely 'surprise' gift that is so simple to make.

Your first challenge is to make the net of either a cube or cuboid from a piece of card.

What are the shapes of the faces?

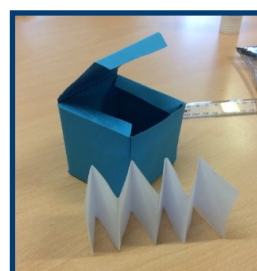
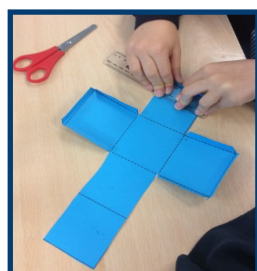
How many faces will it have?

Can you design your own net to make a box with a lid? Don't forget to include some flaps to stick it together.

Next, can you cut an A4 sheet of paper in half landscape ways and concertina (fold it)

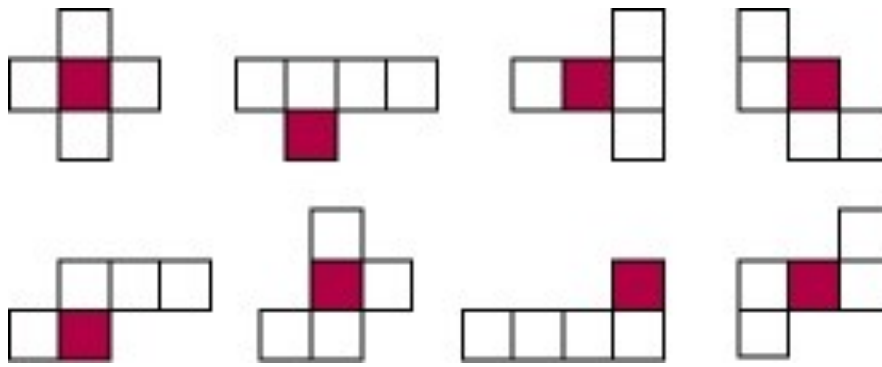
Finally can you design some maths problems to challenge someone.

Remember if you think they will need objects to help them solve your problem you could add a few counter, buttons or something else to help them.



Cube Nets

A **net** is a 2-D shape made from polygons which, by folding and joining, can form a 3D shape.

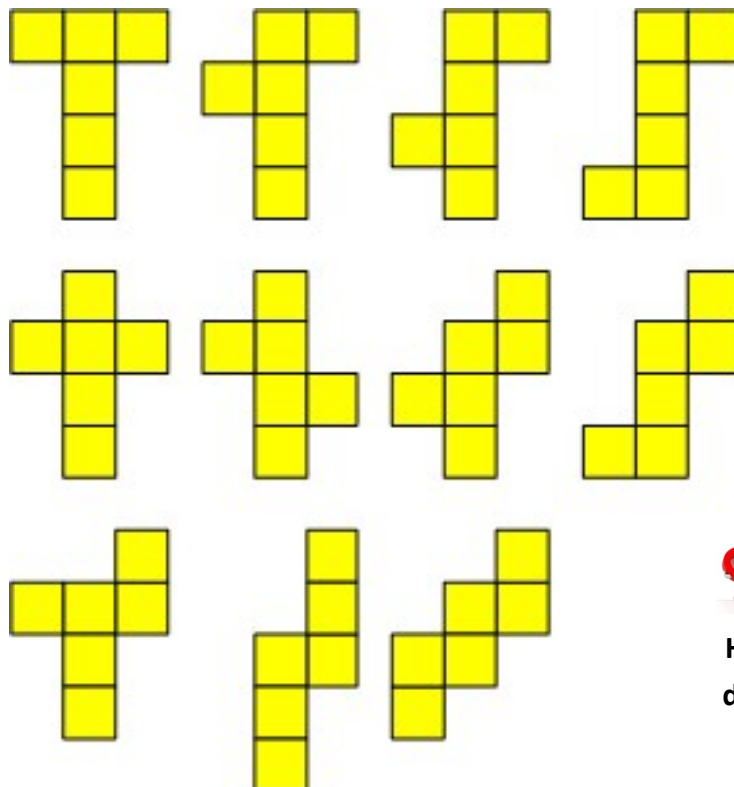


These are nets of an open cube. The red square is the base.

Q: How many different nets of a closed cube can you find?

A: There are 11 in total.

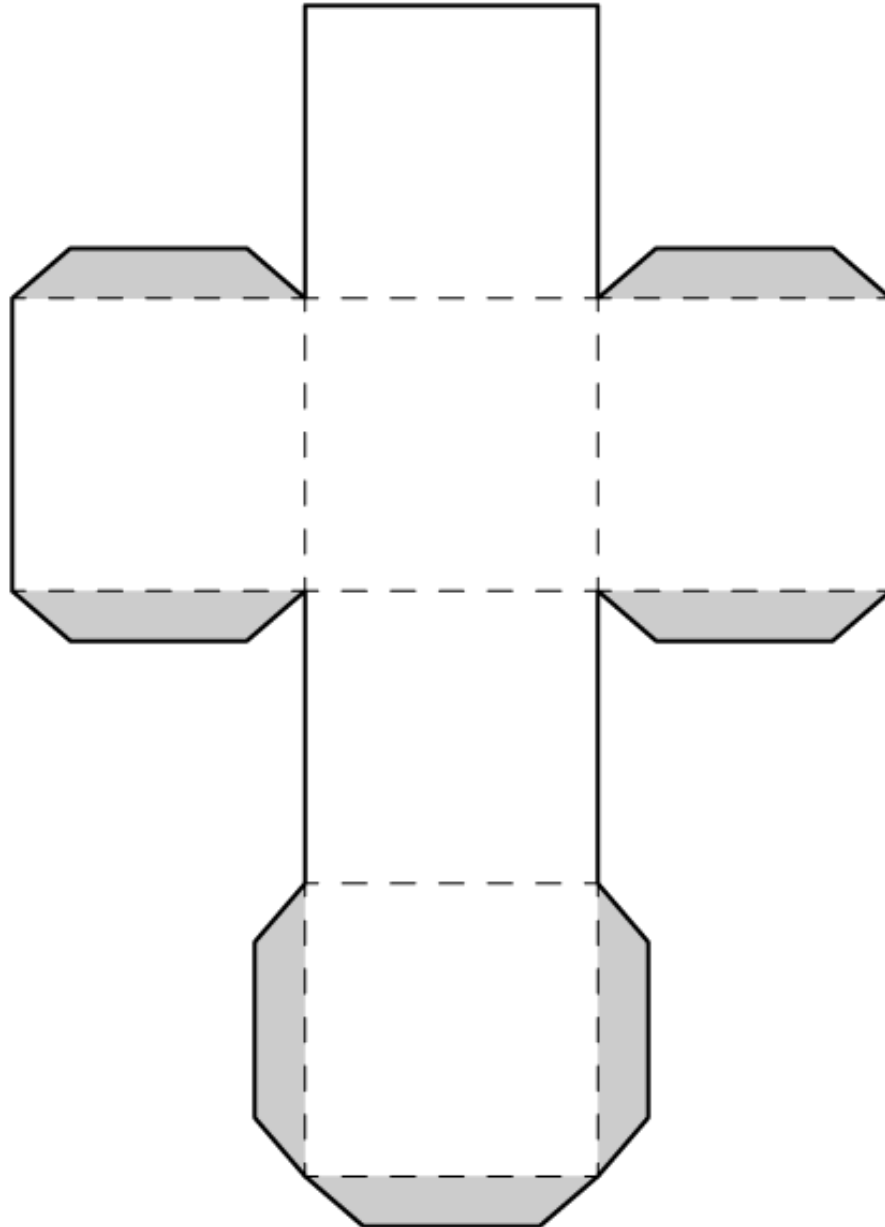
Can you make a cube from each of these 11 nets?



CHALLENGE

How would the nets be different if they made a cuboid?

Cube Nets



[Watch how to make a cube from a net.](#)