



- 1) a) Give a definition of a net in one sentence.



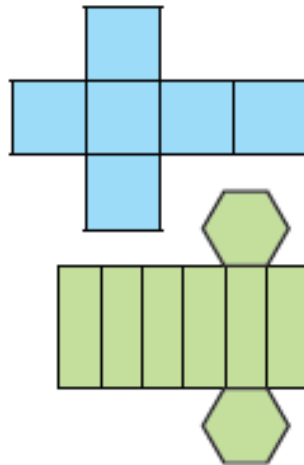
- b) Match the nets of 3D shapes to their correct names. Some names won't be needed.

cube

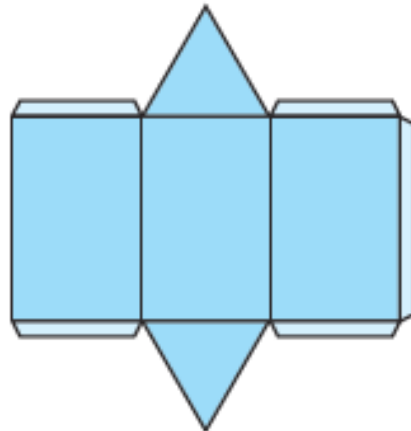
rectangular
based pyramid

hexagonal
prism

tetrahedron

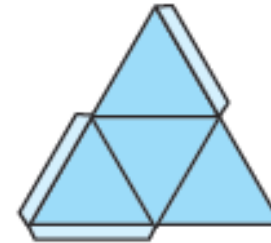


- 2) a) When assembled, what 3D shape does this net make?

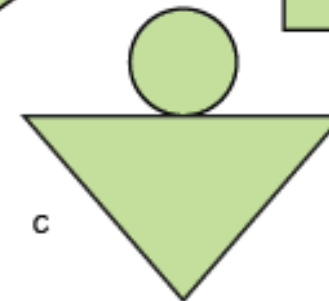
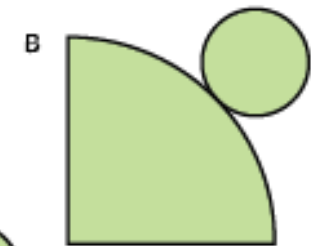


- b) How many faces does the assembled 3D shape have? Describe them.

- 3) When assembled, what 3D shape does this net make?

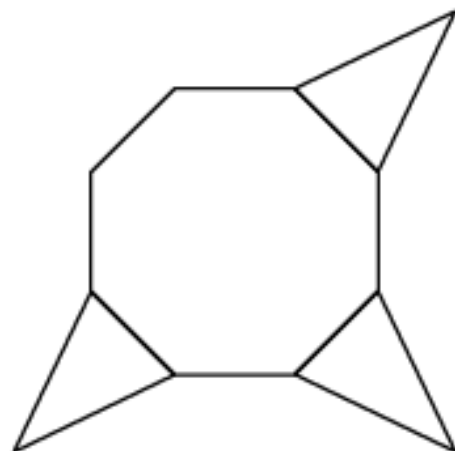


- 4) Which of these nets would make a cone? Circle the correct answer.





- 1) Mandy is attempting to create a net of an octagonal based pyramid. Complete the net.



- 3) Tariq is discussing the possibility of constructing a net from these 2D shapes.



It is impossible to make a net for a 3D shape using the shapes I have.



Do you agree with Tariq? If not, draw a net to support your reasoning.

- 2) Year 6 are discussing nets of shapes.



You cannot make a net of the soup can because it is curved.



Do you agree with Hamed? Draw a net to support your explanation.



- 1) Here is part of a net from a 3D shape. Which 3D shape could it be? Find as many examples as you can, explaining how you know.



- 2) Here is part of a net from a 3D shape. Which 3D shape could it be? Find as many examples as you can, explaining how you know.



- 3) Year 6 are discussing the way in which nets of cubes are created.



Any net made with 6 squares can be folded to make a cube.



Nets of cubes can be made using 6 squares, but only in particular orders.

- 4) Shawn is discussing nets of 3D shapes. Shawn is incorrect. Draw as many nets as you can to prove this.

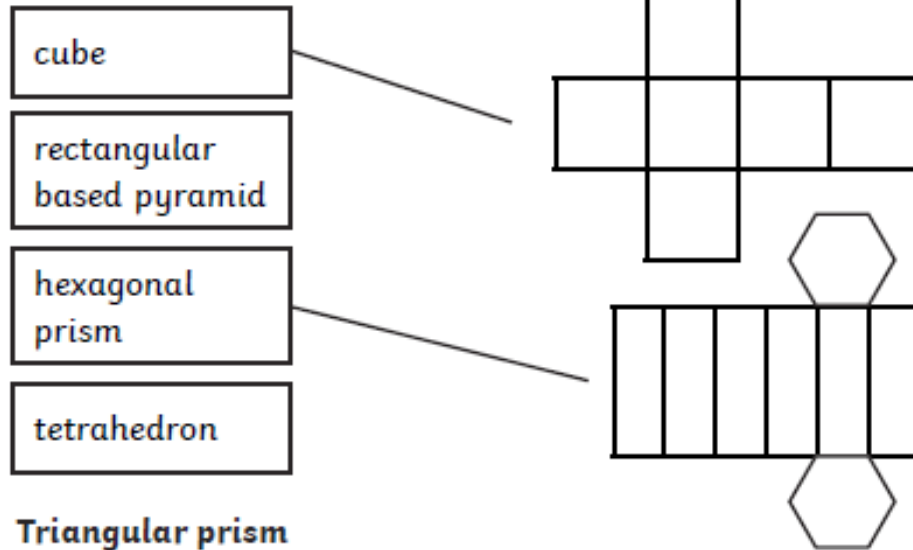


You cannot make a net of a 3D shape using less than five 2D shapes as faces.

ANSWERS

- 1) a) The net of a 3D shape is what the shape looks like if it is opened out flat. or A net can be folded up to make a 3D shape.

b)



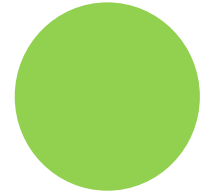
- 2) a) Triangular prism

b) 5

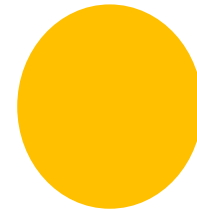
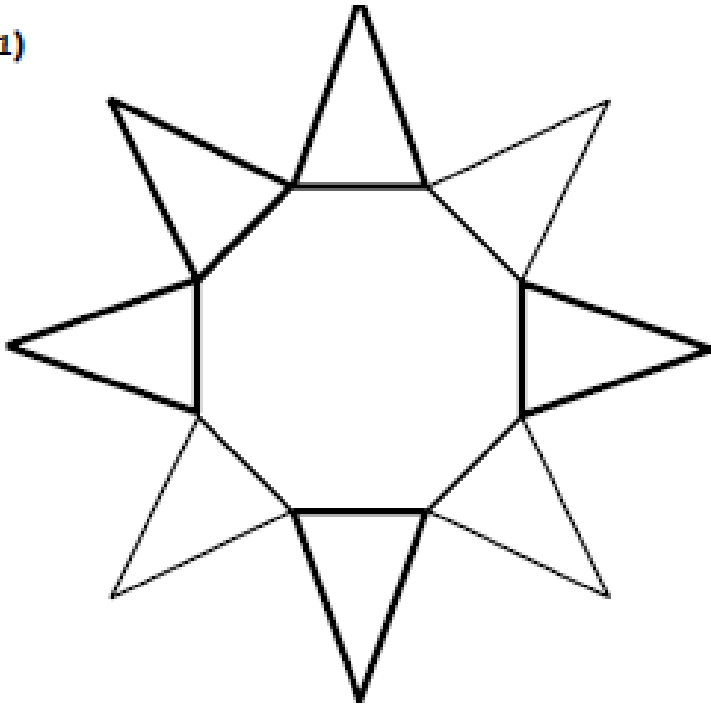
3 rectangles and 2 triangles

- 3) Tetrahedron

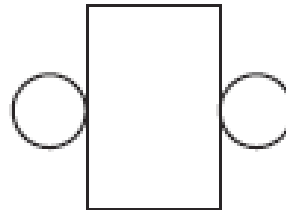
- 4) B



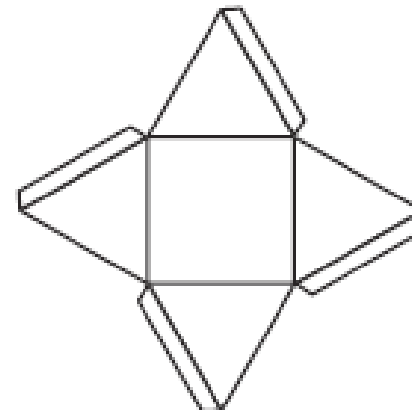
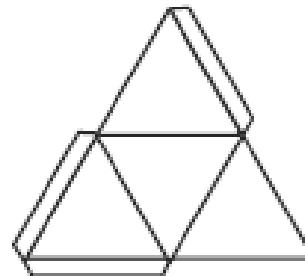
1)



- 2) Hamed is incorrect. The soup can is a cylinder.
The curved face can be flattened out into a rectangle.
Without the tabs, the net would look like this:



- 3) Tariq is incorrect. With the shapes provided,
it is possible to draw a net of a tetrahedron
or a square-based pyramid.



- 1) Various answers could include cube, cuboid, rectangular and square-based pyramid, hexagonal/pentagonal/octagonal prisms.
- 2) Various answers could include: cuboid, rectangular based pyramid, hexagonal/pentagonal/octagonal prisms.
- 3) Alyx is correct. For example, if a net with 6 squares was drawn in this way, it would not produce a cube when formed:



- 4) There are a variety of possible answers, including:

