

Lesson 1

L.0 I am learning to identify nets of 3D shapes.

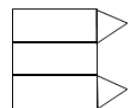
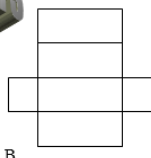
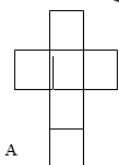
All	All of you must complete the fluency section.
Most	Most of you will complete the fluency and reasoning sections.
Some	Some of you will complete the fluency, reasoning, and problem-solving sections.

Try your best – it is all we can ask for! 😊

This video may help if you are stuck at any point:

Fluency

1. Match the 3D shapes to their nets.

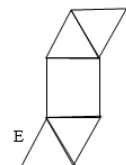
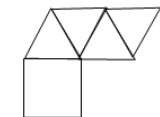


A

B

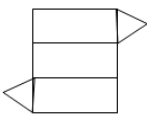
C

Can you match the correct net with its 3D shape?



D

E



F



F

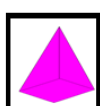
Net	Shape



1



2



3



4

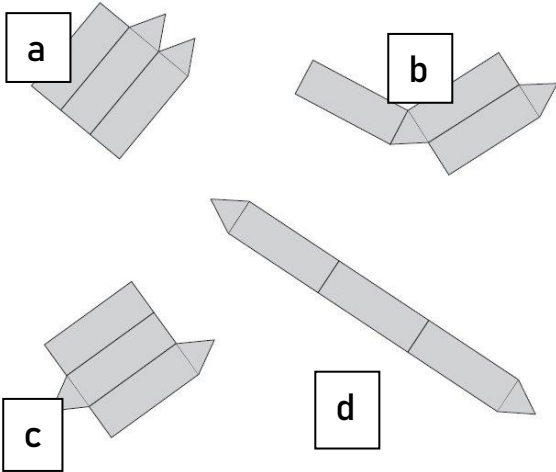


5

Your answer

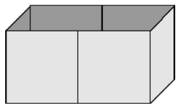
Net	Shape	Name
F	1	Triangular prism
A	2	Cube
E	3	Square based pyramid
B	4	rectangular prism
G	5	tetrahedron

2. Two of these diagrams are nets for triangular prisms. Which diagrams are they?

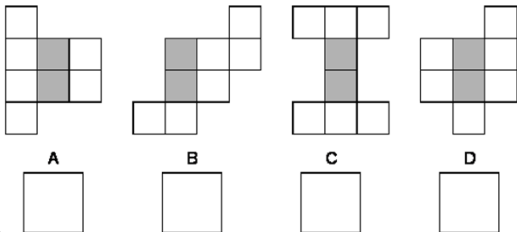


B and C

3. This is an open top box. Which of the nets below, is not a net for the box?

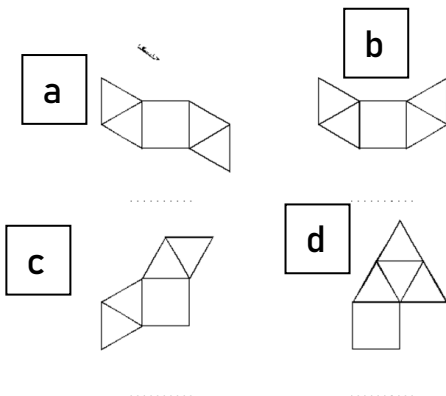


The base is shaded in each one.



B

4. Which two of these nets is a net for a square based pyramid?



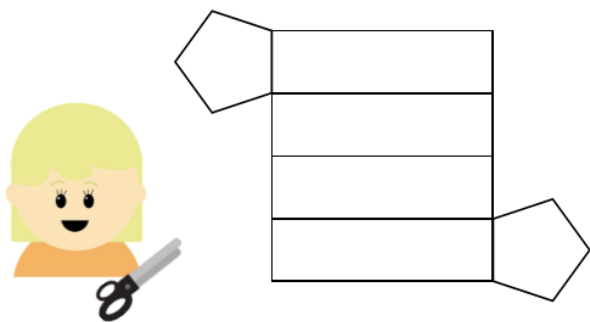
A and C

Reasoning and Problem Solving

Your answer

REASONING 1

Jane has made the net of a pentagonal prism.



Explain the mistake she has made.

How will she correct it?

Reasoning 1

Modelled DAB Reasoning Response

D – Jane has made a mistake.

A – The net of her pentagonal prism is not drawn correctly.

B – A pentagonal prism has two pentagonal faces which are joined by five rectangular faces. When drawing her net, Jane forgot one of the rectangular faces – she only has four. Therefore, it was incomplete.

REASONING 2

True or False?

The nets of prisms are always formed from an odd number of shapes.

Reasoning 2 Modelled DAB Reasoning Response

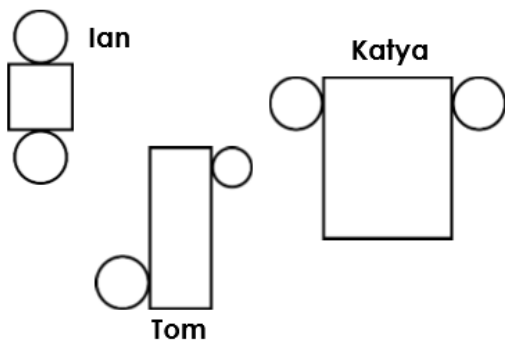
D – False

A – The nets of prisms are not always formed from an odd number of shapes.

B – A hexagonal prism is formed from an even number of shapes (8), proving the statement is inaccurate.

(other examples could have been used e.g. cube, cuboid, tetrahedron.)

3. Ian, Katya and Tom have made nets of a cylinder. Check which nets would work and explain any mistakes which have been made.



Ian's net would not work. His rectangle is not wide enough to match the circumferences of his circles. Tom's net would not work. His circles are not the same size. Katya's net would work.

5. Leia is thinking about 3D shapes.



I will always need a sector of a circle to make a circular-based cone.

Is she correct? Explain your answer.

Leia is right. As the base will always be a circle, the other face of the cone will always need a curved edge which is part of a circle's circumference.

6. Marshall is thinking about 3D shapes.



I will always need an equilateral triangle to make a pentagonal-based pyramid.

Is he correct? Explain your answer.

Marshall is wrong. It is also possible for identical isosceles triangles to be used.