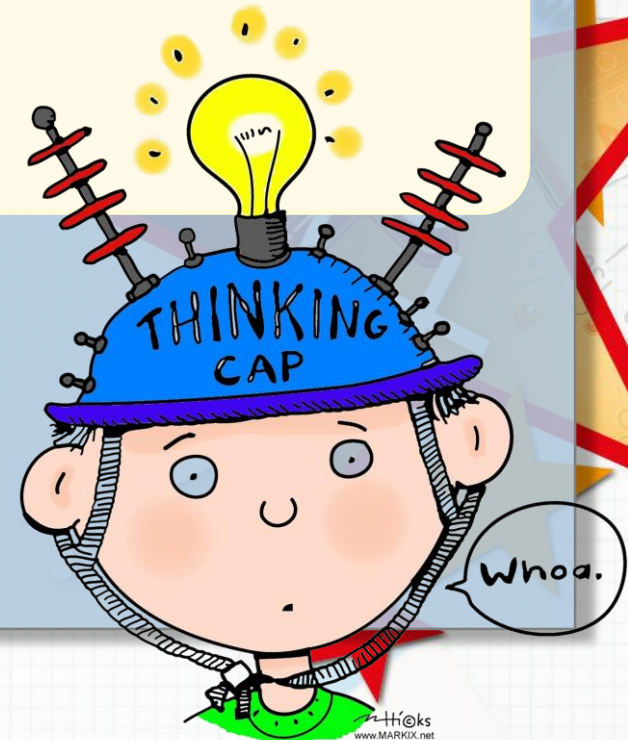


WALT identify 3D shapes from 2D models.

WILF:

- Identify 3D shapes, including cubes and cuboids, from 2D representations.
- Identify the nets of shapes



What is a 3D shape?

How many can you think of?

Watch this video:

<https://safeYouTube.net/w/XIIE>

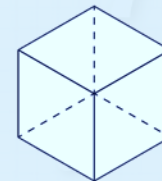
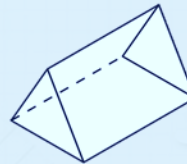
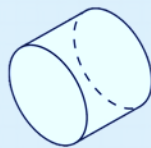


New slide

Introduction

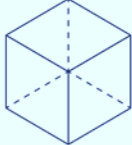
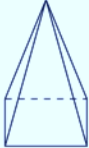
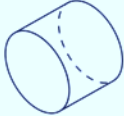
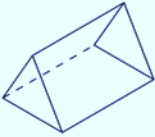
Complete the chart using your knowledge of 3D shapes.

Name	Image	Properties
		6 faces, 12 edges and 8 vertices
		5 faces, 8 edges and 5 vertices
		3 faces, 2 edges and 0 vertices
		5 faces, 9 edges and 6 vertices



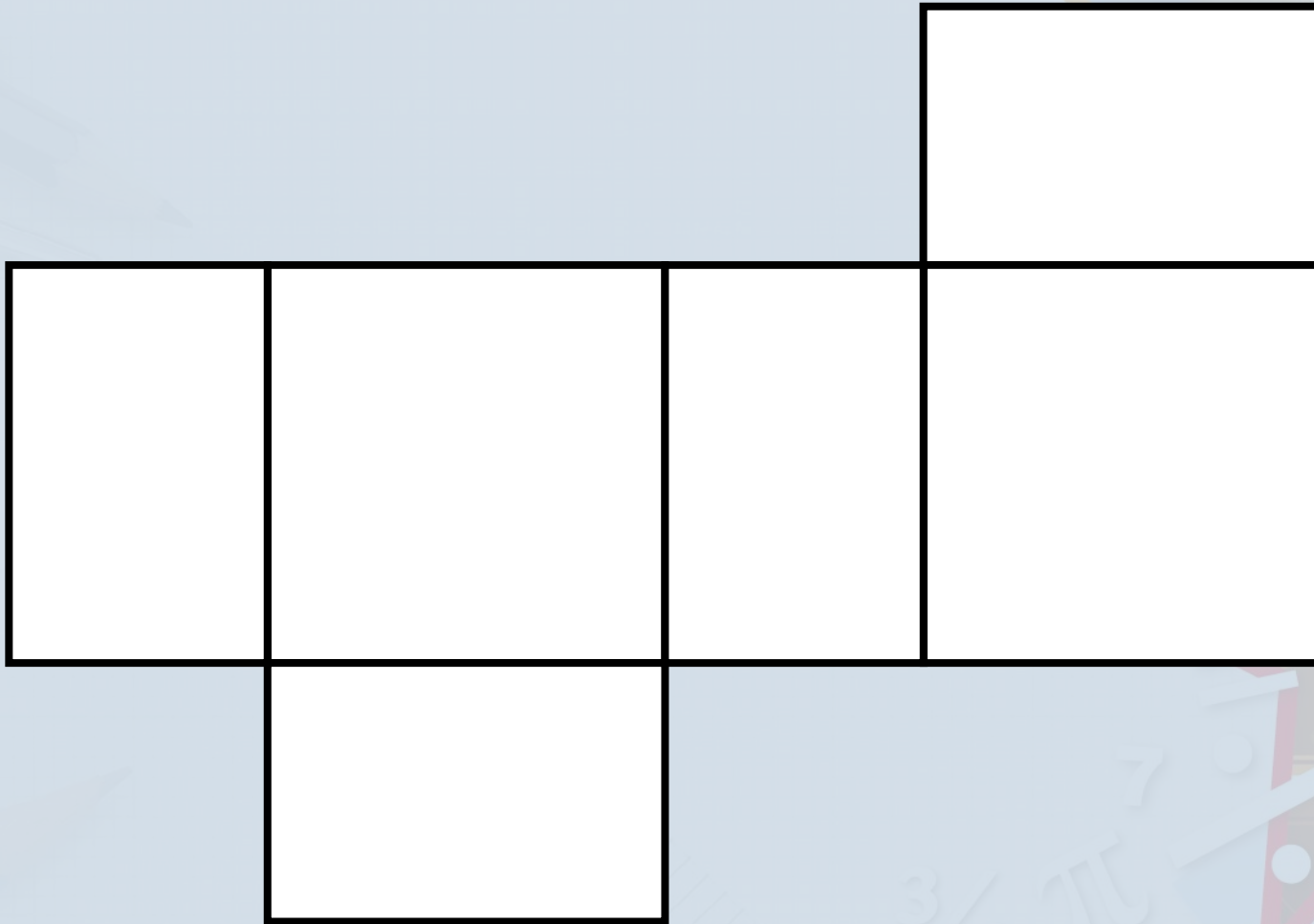
Introduction

Complete the chart using your knowledge of 3D shapes.

Name	Image	Properties
cube		6 faces, 12 edges and 8 vertices
square based pyramid		5 faces, 8 edges and 5 vertices
cylinder		2 faces, 2 edges and 0 vertices
triangular prism		5 faces, 9 edges and 6 vertices

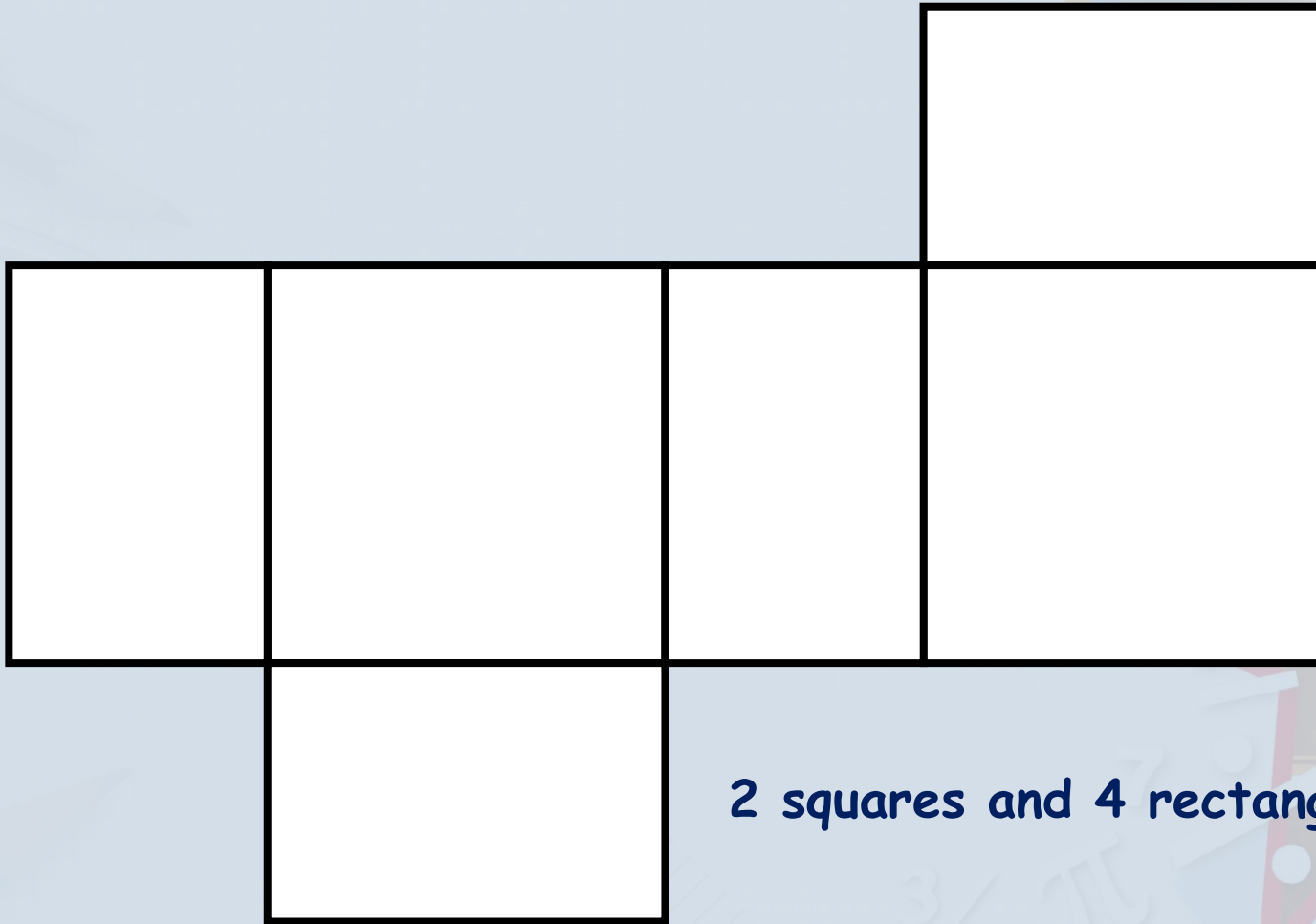
Varied Fluency 1

Count and name the 2D shapes in this net.



Varied Fluency 1

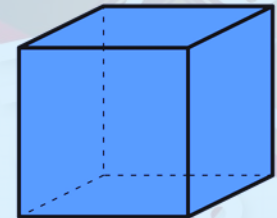
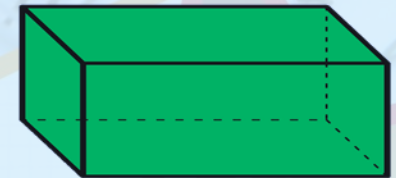
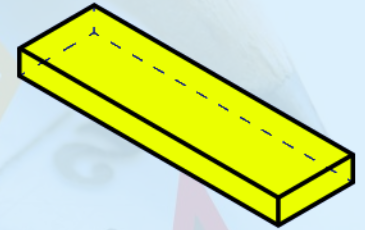
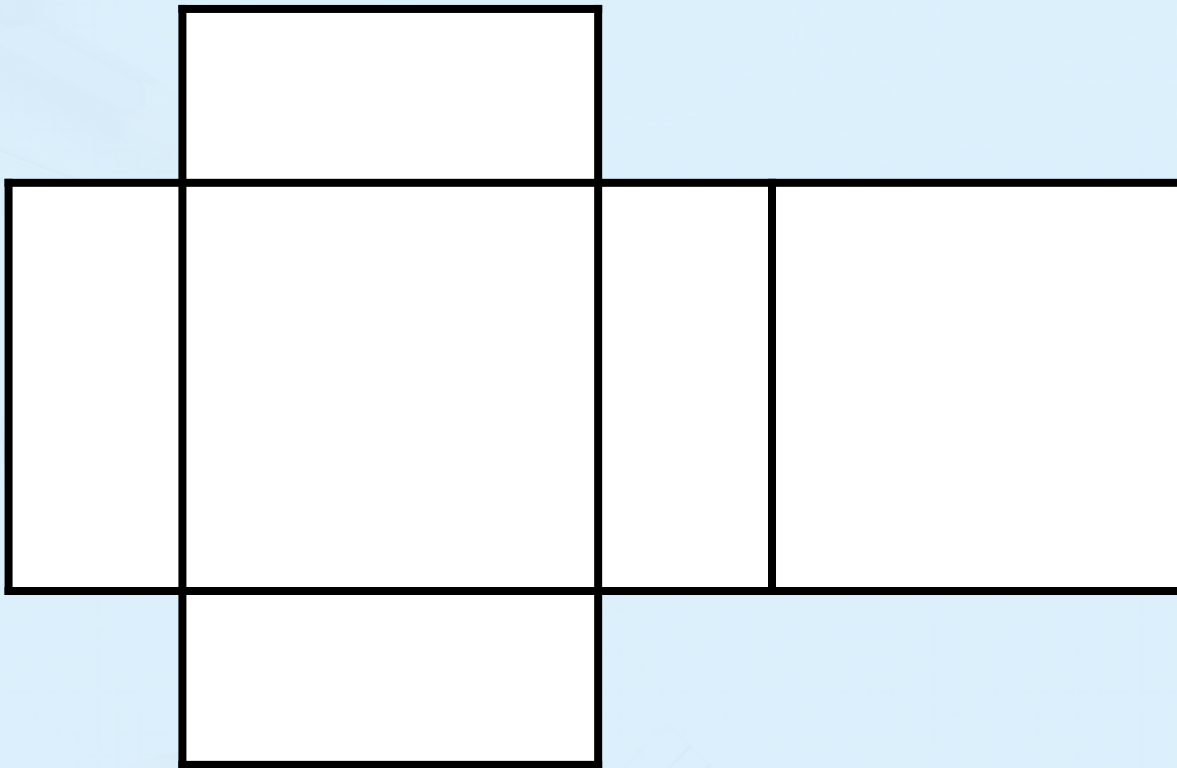
Count and name the 2D shapes in this net.



2 squares and 4 rectangles

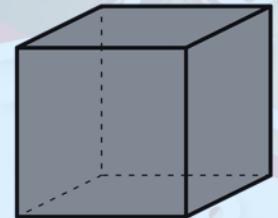
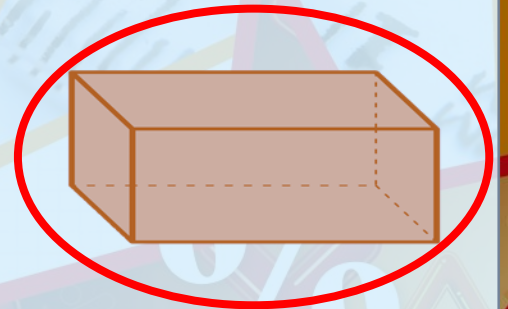
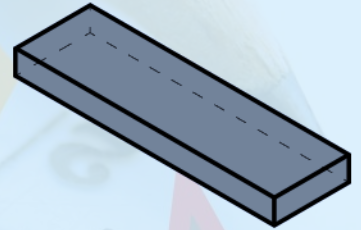
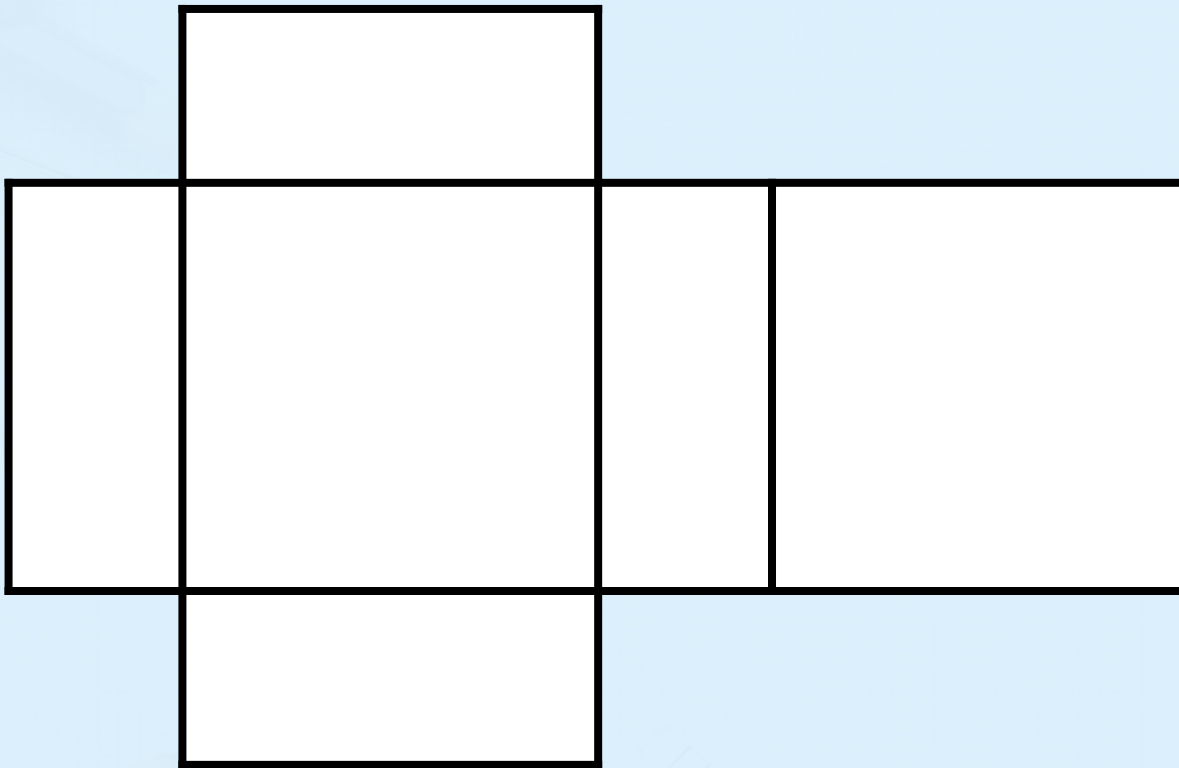
Varied Fluency 2

Match the net to the correct 3D shape.



Varied Fluency 2

Match the net to the correct 3D shape.



Varied Fluency 3

Which 3D shape does the statement describe?

My base is an octagon. I also have 8 sides which are triangles.

Varied Fluency 3

Which 3D shape does the statement describe?

**My base is an octagon. I
also have 8 sides which are
triangles.**

Octagonal pyramid

Varied Fluency 4

Match the faces to the correct 3D shapes.

5 rectangular faces

6 triangular faces

2 square faces

hexagonal pyramid

cuboid

pentagonal
prism

Varied Fluency 4

Match the faces to the correct 3D shapes.

5 rectangular faces

hexagonal pyramid

6 triangular faces

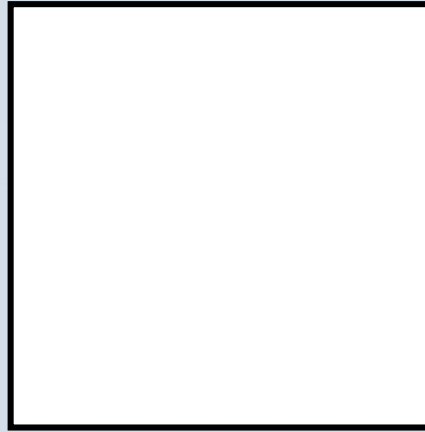
cuboid

2 square faces

pentagonal
prism

Problem Solving 1

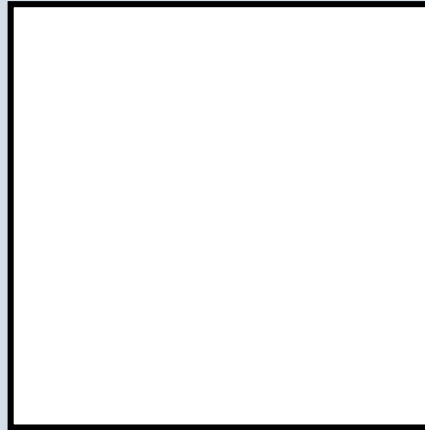
This is one shape from the net of a 3D shape.



Name three 3D shapes you could create.
List the other 2D shapes you would need to complete the shape.

Problem Solving 1

This is one shape from the net of a 3D shape.



Name three 3D shapes you could create.
List the other 2D shapes you would need to complete the shape.

Various possible answers including:

A cube. The net would need 5 more identical squares;

A square based pyramid. The net would need 4 triangles;

A cuboid. The net would need 1 more identical square and 4 identical rectangles.

Reasoning 1

Which of these 3D shapes could cast this shadow?



Square based
pyramid

hexagonal
prism

pentagonal
prism

Explain your answer.

Reasoning 1

Which of these 3D shapes could cast this shadow?



**Square based
pyramid**

hexagonal
prism

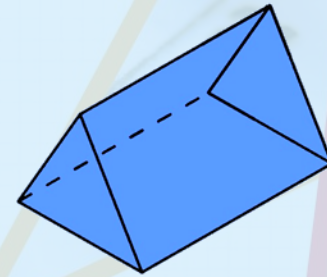
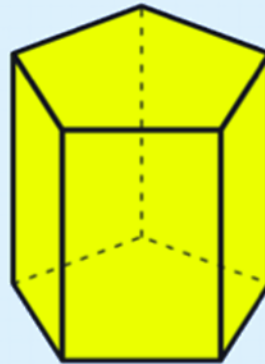
pentagonal
prism

Explain your answer.

Square based pyramid because it is the only shape that has triangular faces.

Reasoning 2

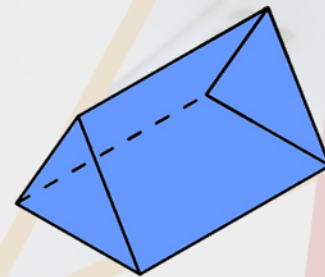
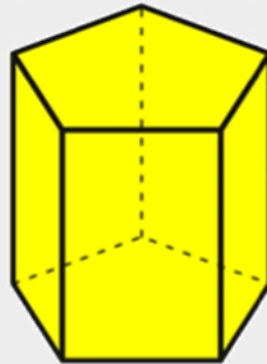
Considering the properties of the shapes below, which is the odd one out?



Explain your answer.

Reasoning 2

Considering the properties of the shapes below, which is the odd one out?



Various answers relating to properties of 3D shapes, for example:
Explain your answer.

The pentagonal prism because the other shapes have some triangular faces.

The octagonal based pyramid because the other shapes are prisms.