Year 5 Summer 2 Week 8 Lesson 2

Can I identify different 3D shapes from their 2D representations?

Fast Five - Answers on the next slide.

1. 26 x 85 =
2.   ?
  + <u>2357</u>
    <u>8836</u>
     1 1
3. 88 ÷ 4 =
4. Find ⅓ of 54
5. ¼ + ⅙ =

Fast Five - Answers.

1. 26 x 85 = 2210
2. 6479
 + 2357
   ‾‾‾‾
   8836
   ‾‾‾‾
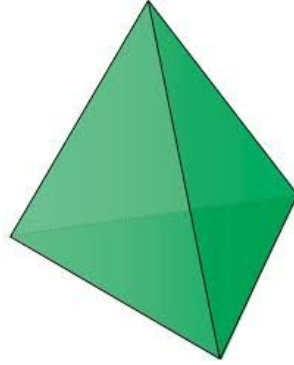   1 1
3. 88 ÷ 4 = 22
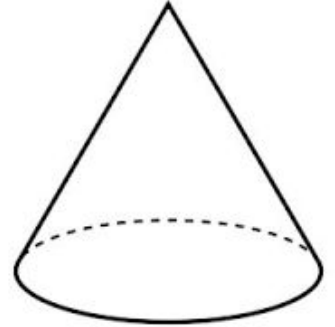4. Find ⅓ of 54 = 18
5. ¼ + ⅙ = 5/12

Different 3D shapes

Cube
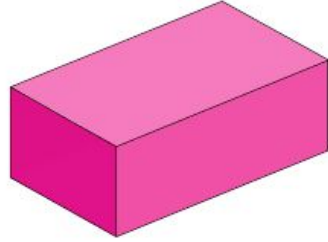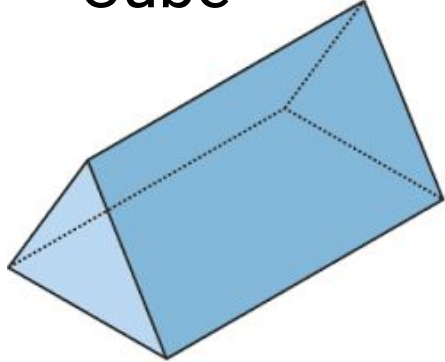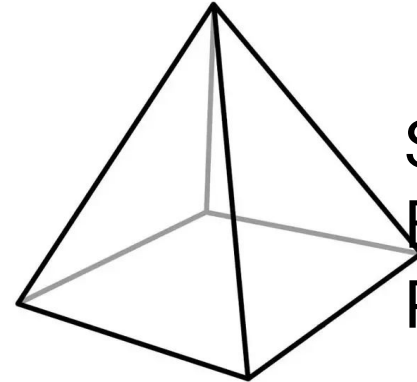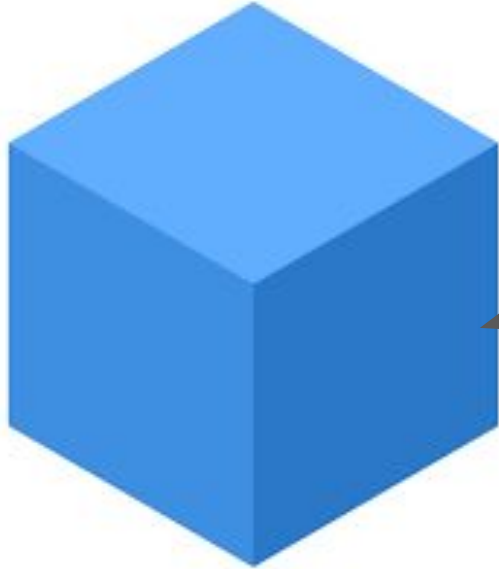
Cuboid

Triangular Based Pyramid
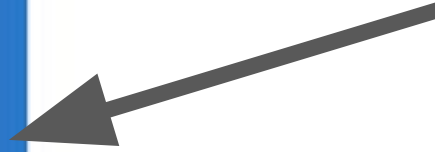
Cone

Triangular Prism

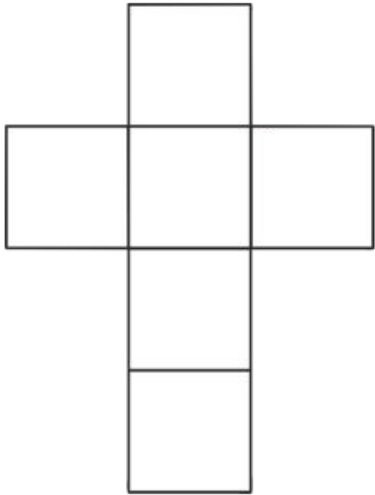Cylinder

Square Based Pyramid

Cube

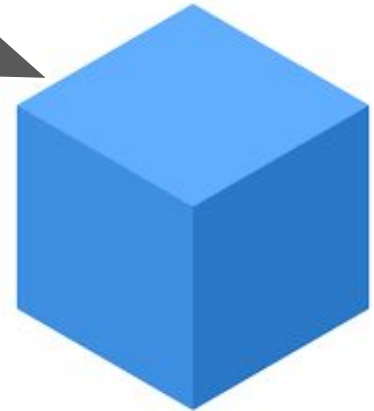I know this is a cube because it is made up of square faces.

Cube

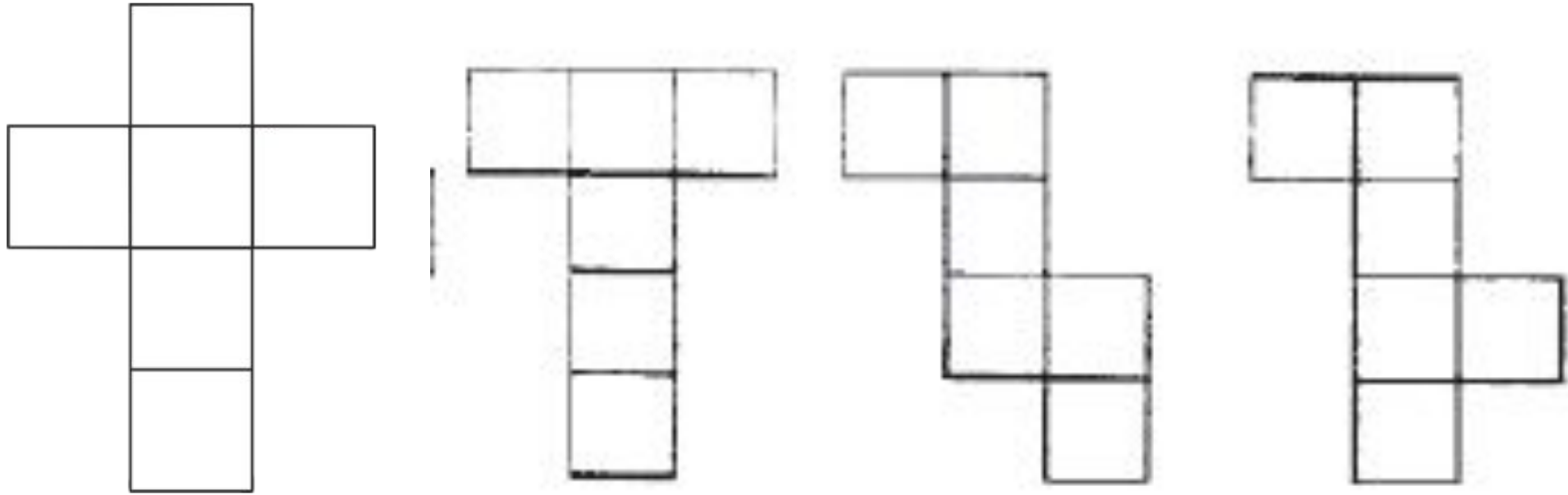We can also look at a Cube as it's 2D shape faces. This is called a net.

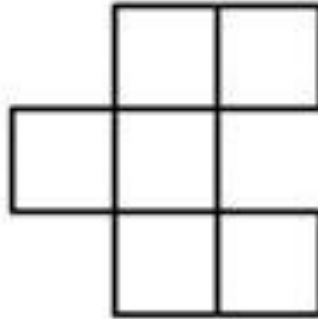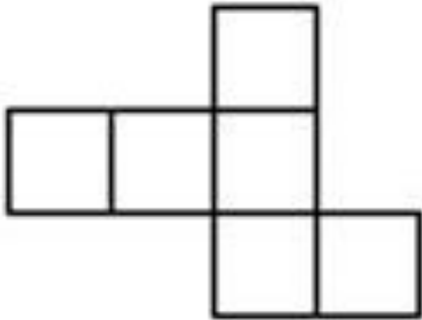When all the faces are put together they make a 3D shape.

Cube

A Cube net can be laid out in different ways. They all make the same 3D shape. They just look different.
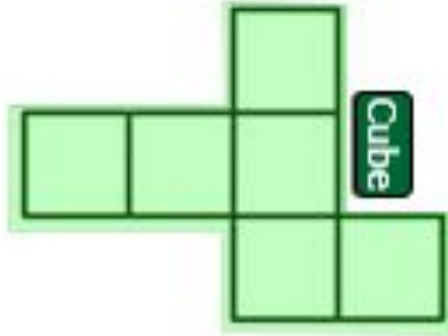
Cube

Just because a net has 6 square faces, doesn't mean it can make a Cube. You must think about whether the net can be folded to make a Cube. Look at the following, which net makes a Cube? Answer on the next slide.
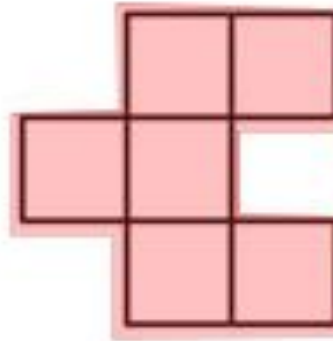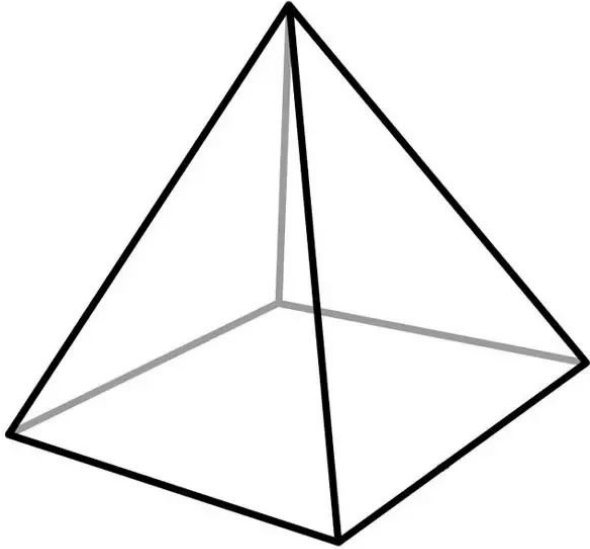
Cube

One makes a Cube because all faces can be folded to form a Cube. The other doesn't make a Cube because if you were to fold the shape, some of the faces overlap.
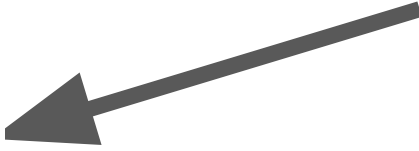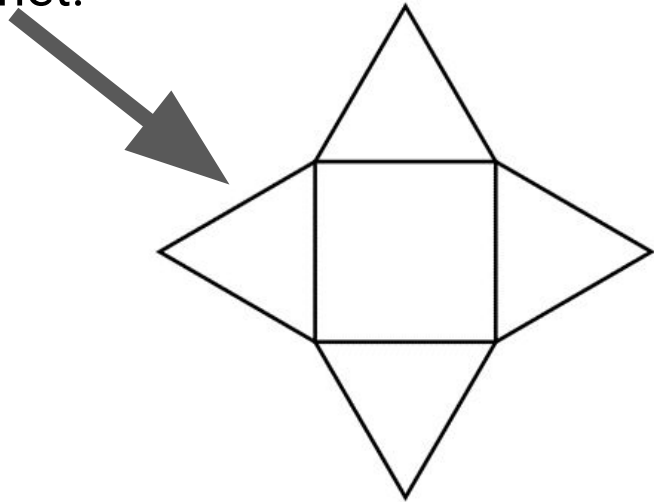

Not a cube

Square based pyramid

I know this is a Square Based Pyramid because it is made up of triangular faces and has a square face at the bottom.
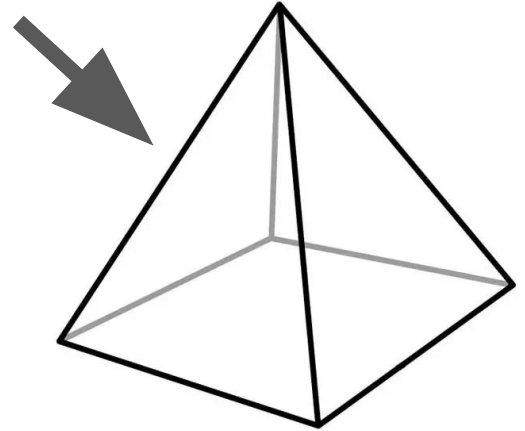
Square Based Pyramid

We can also look at a Square Based Pyramid as it's 2D shape faces. This is called a net.
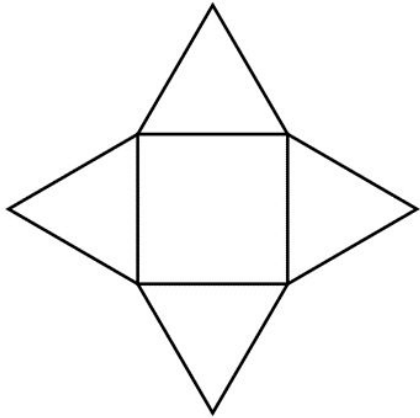
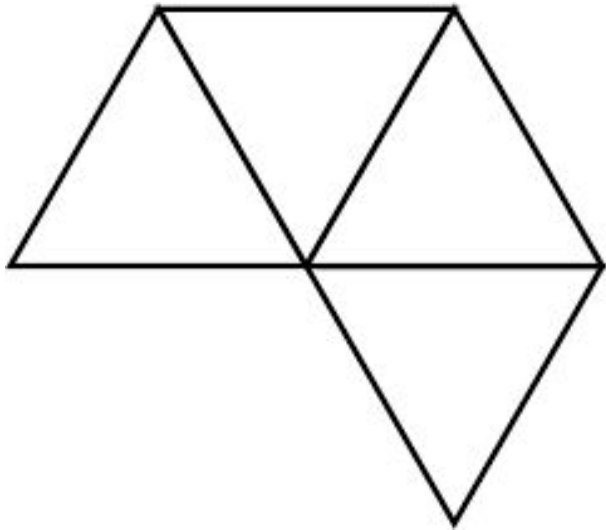When all the faces are put together they make a 3D shape.
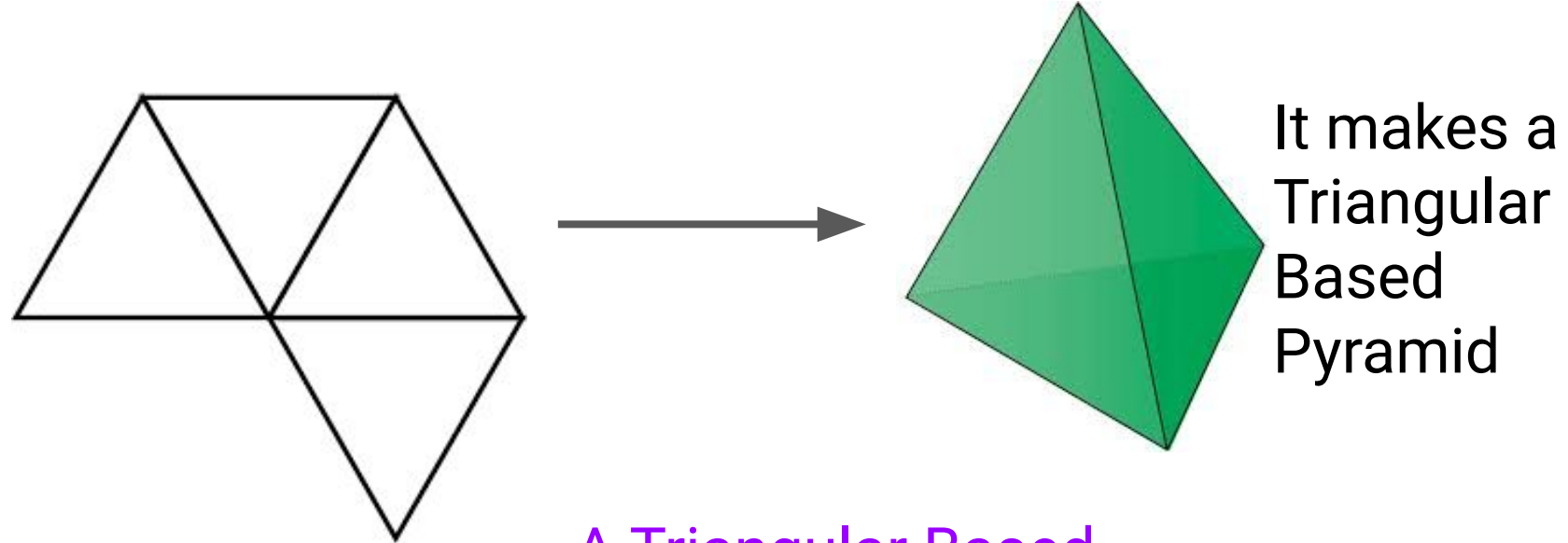
Square Based Pyramid

A Square Based Pyramid net can be laid out in different ways. They all make the same 3D shape. They just look different.

Can you name this shape from their net? Answer on the next slide.

Can you name this shape from their net?

It makes a Triangular Based Pyramid

A Triangular Based Pyramid can also be called a Tetrahedron.

Activity:

Red: Looking at nets, can you work out the different 3D shapes.

Yellow: Looking at different nets for given shapes. Do they all make the 3D shape?

Green: How many different ways can you draw a net for a Cube?