



# Maths – Monday 1<sup>st</sup> February

# Retrieval practice:



Joe and Laurel are discussing the pattern below.

Joe

The fifteenth shape will be a square.

Laurel

The fifteenth shape will be a pentagon.

Who is correct? Prove it.

# Retrieval practice:



Joe and Laurel are discussing the pattern below.



The fifteenth shape will be a square.

The fifteenth shape will be a pentagon.



Who is correct? Prove it.

**Joe is correct because the fifth shape is a square and the tenth shape is a square. This means every fifth shape is a square.**



# WALT: Count faces in 3D shapes

2D shape properties:

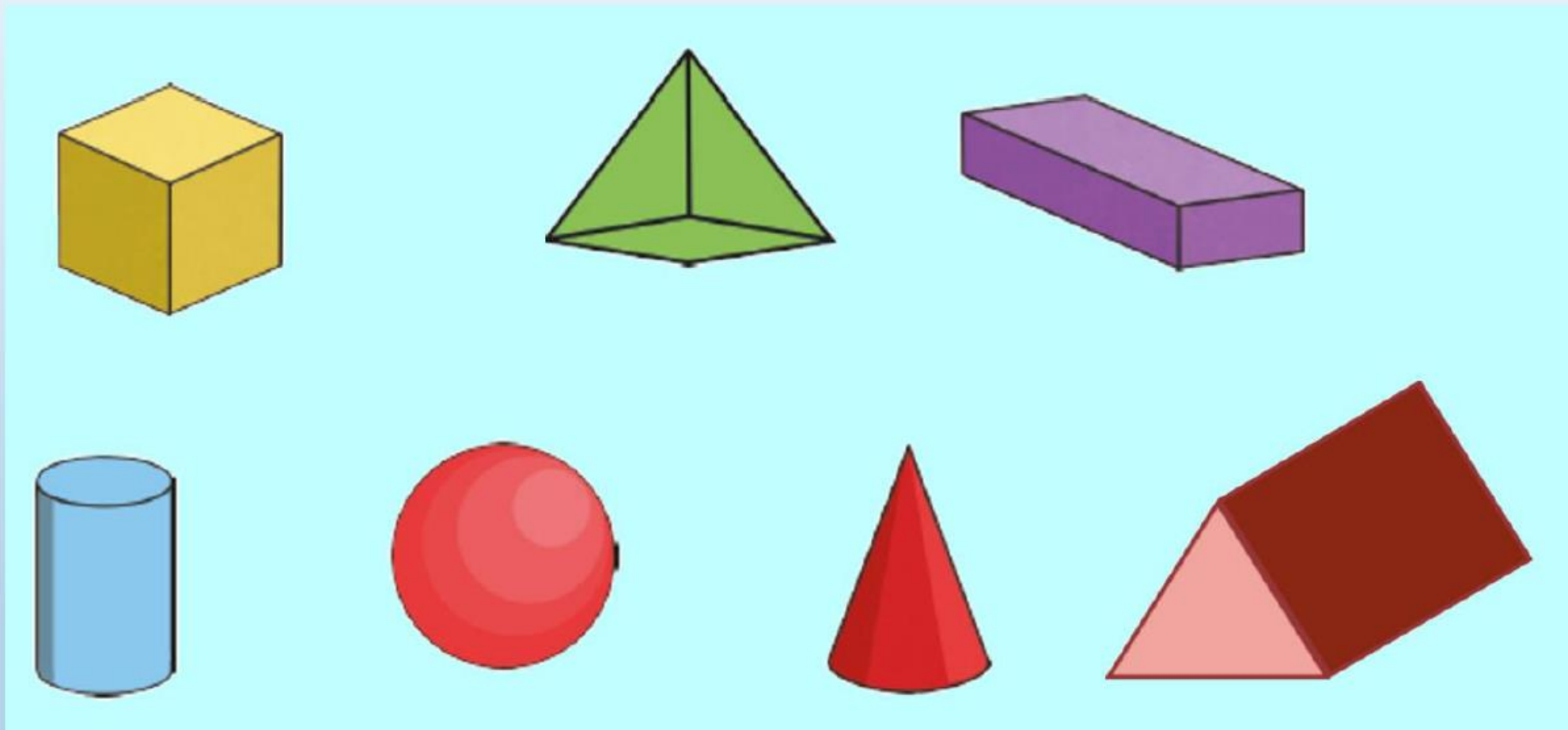
- Sides
- Vertices

3D shape properties:

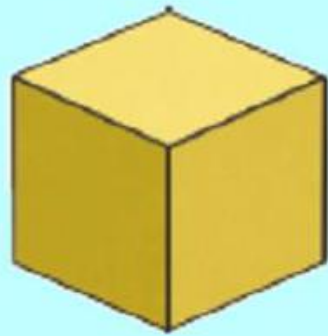
- Faces
- Edges
- Vertices



Can you match the names to the shapes?



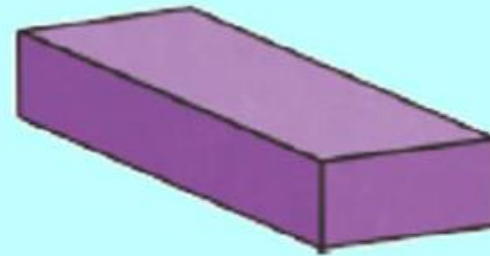
cuboid, sphere, cone, cube, cylinder, square based  
pyramid, triangular prism



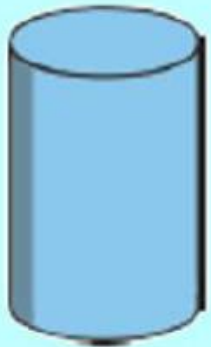
cube



square based pyramid



cuboid



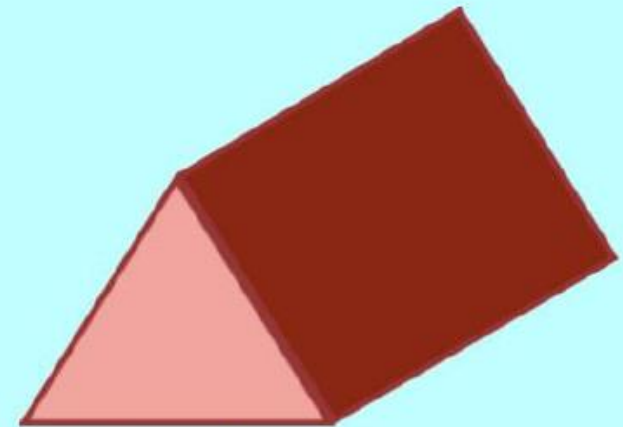
cylinder



sphere



cone



triangular prism

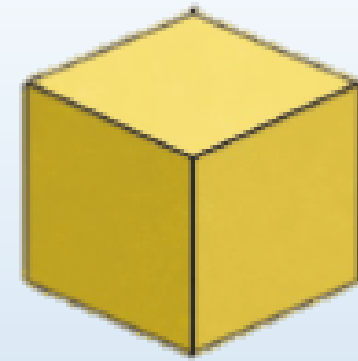


# What is a face?

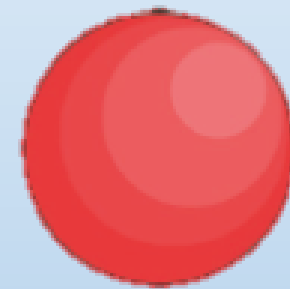
- A face is a property of a 3D shape.
- 3D shapes have flat and curved surfaces.
- The flat surfaces are called 'faces'.



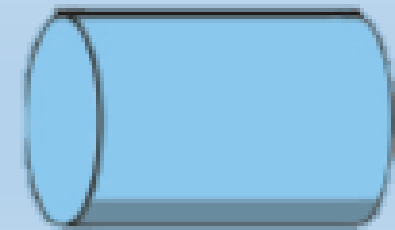
- Some shapes only have flat surfaces (faces)



- Some shapes only have a curved surface

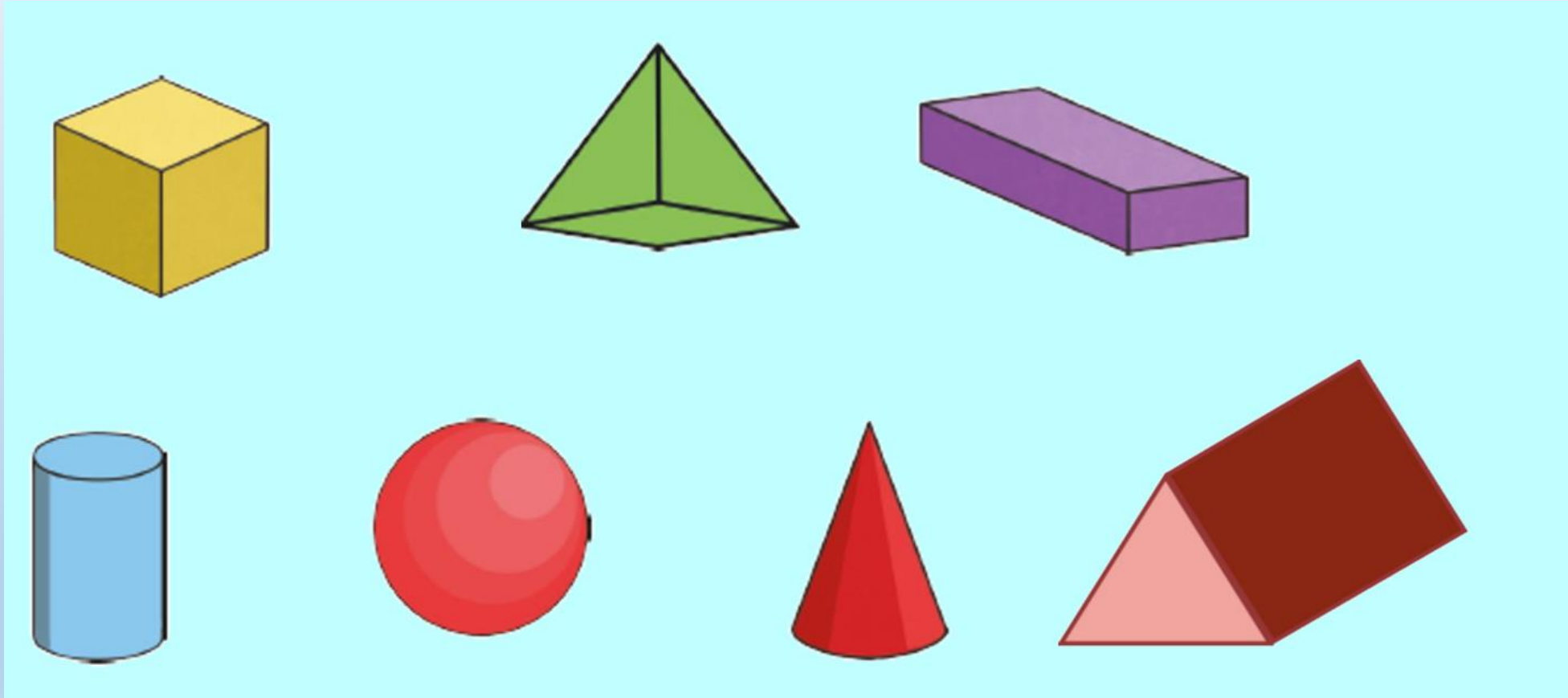


- Some shapes have flat faces and curved surfaces

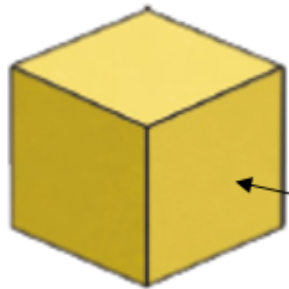




Can you spot the (flat) faces and curved surfaces in these 3D shapes?



# Can you recognise the 2D shapes in the faces of 3D shapes?



The shape of this face is a square



The shape of this face is a circle



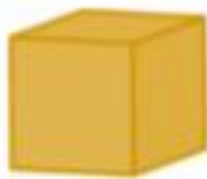
Look at these 3-D shapes:



Which 2-D shapes can you see on the surface of each one?



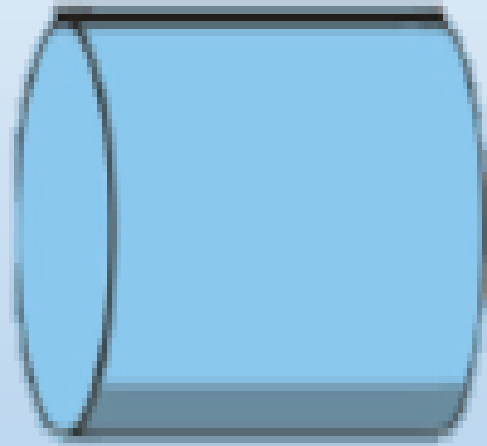
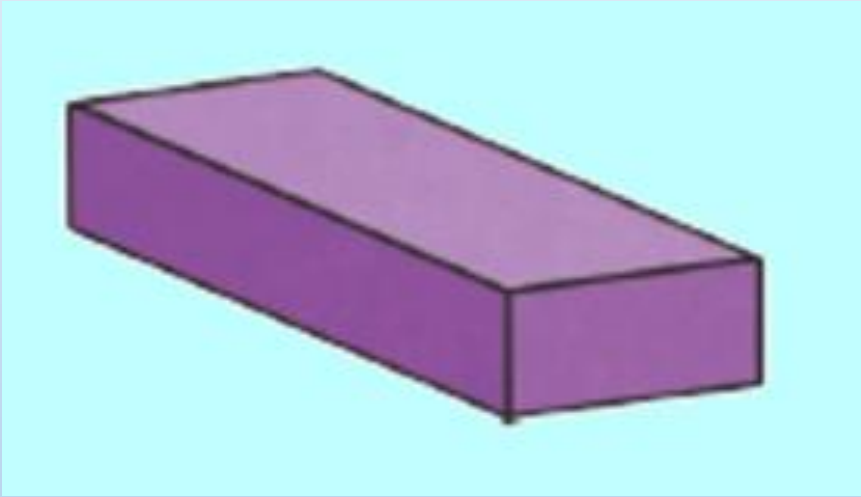
Look at these 3-D shapes:



Which 2-D shapes can you see on the surface of each one?



Can we count the faces?





# One to discuss



Teddy says my 3-D shape has 6 faces.  
Mo says he must have a cube.  
Is Mo correct?  
Explain your answer.

# One to discuss



Teddy says my 3-D shape has 6 faces.  
Mo says he must have a cube.  
Is Mo correct?  
Explain your answer.

No because Teddy  
could have a cube  
or a cuboid.



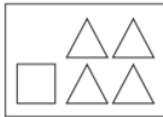
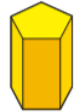
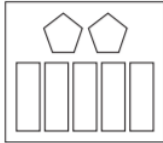
# Your task today







## Count faces on 3D shapes



1 Match the shapes to the faces.



2 Complete the table.

Shape	Name	Number of faces
		
		
		
		

3  My shape has one curved surface.

What shape is Jack describing? \_\_\_\_\_

4 Match the description to the shape.

1 circular face and 1 curved surface



2 circular faces and 1 curved surface



4 triangular faces



5  A cube is the only 3D shape with 6 faces.

Alex has made a mistake.

Name another 3D shape that has 6 faces.

\_\_\_\_\_

6 Dexter has 5 of the same 3D shapes.



In total, my shapes have 10 circular faces.

What shapes has Dexter got?

Dexter has got 5 \_\_\_\_\_

7 Dora wants to put a sticker on each face of some cubes.

She has 60 stickers.

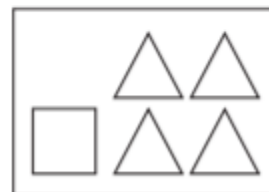
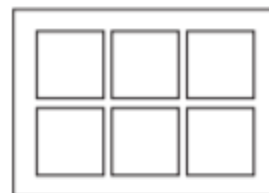
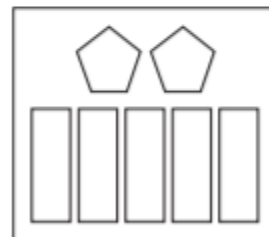
How many cubes can she cover in stickers?

Dora can cover  cubes in stickers.

# Count faces on 3D shapes







1 Match the shapes to the faces.



2 Complete the table.



Shape	Name	Number of faces
		
		
		
		



3



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How many cubes can she cover in stickers?



Dora can cover  cubes in stickers.