

Let's have a go at these equations!

Engage

$17 + 32$

$56 - 43$

$\frac{3}{4} \text{ of } 28$

$10 \times 9$

$30 \div 6$

**Key Learning:** identify 2D shapes on the faces of 3D shapes

Introduce  
(5 mins)

**Success criteria:**

- I can name different 3D shapes.
- I can identify a 3D shape from its properties.
- I can identify the 2D shapes (square, triangle, rectangle, circle) on the faces of a 3D shape.



faces      triangular prism      cuboid  
pyramid      cylinder      cone      cube



Let's play Top Trumps!

Introduce  
(5 mins)

Using the 3D Top Trumps cards we made last lesson, we are going to play the game to remind ourselves of the features of different 3D shapes!

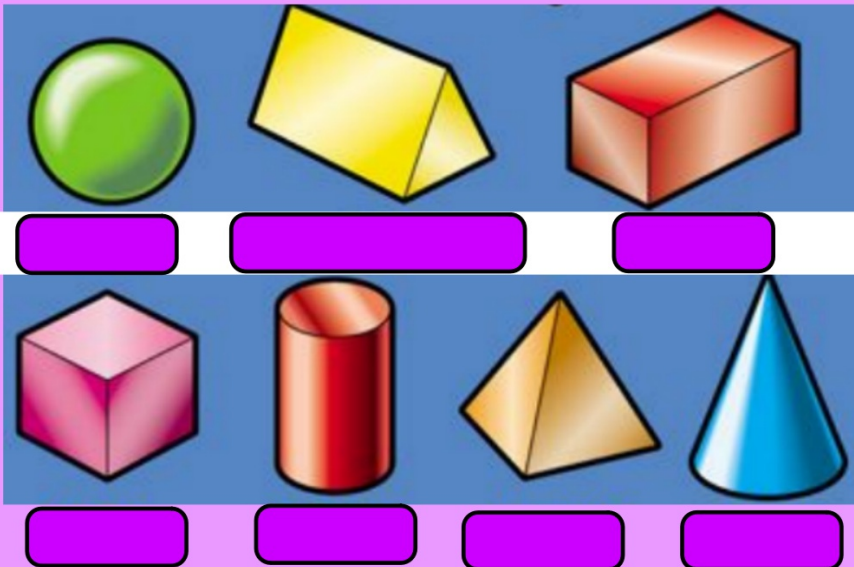


Let's  
Recap

What are these 3D Shapes called?

Introduce  
(5 mins)

use physical  
shapes



Can you spot any 2D shapes in these 3D shapes?

Introduce  
(5 mins)

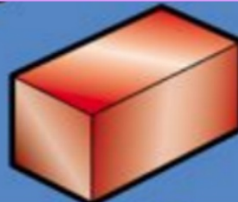
use physical  
shapes



**Sphere**



**Triangular Prism**



**Cuboid**



**Cube**



**Cylinder**



**Pyramid**



**Cone**



## Tinker Time!

Practise  
and  
consider

Sit in a circle around the edge of the carpet.

Pass the feely bag around the circle.

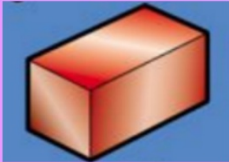
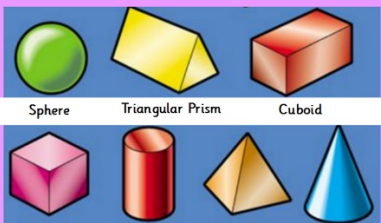
When the music stops, that child will reach in to the bag and describe the 3D shape.

**What 2D Shapes can you see within the 3D Shape?**

Introduce  
(5 mins)

I am thinking of a 3D shape. It has 12 edges, 8 vertices and 6 faces. It has 2 squares and 4 rectangles in it.

What could my shape be?



**A cuboid!**

Introduce  
(5 mins)

I am thinking of a 3D shape. It has 8 edges, 5 vertices and 5 faces. It has 4 triangles and 1 square in it.

What could my shape be?



pyramid



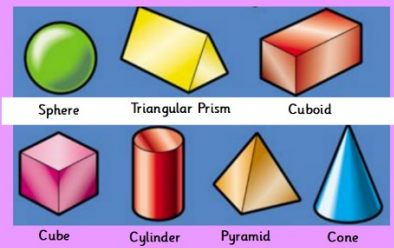
What 3D Shapes could I make with...

Introduce  
(5 mins)



**A triangle?**

**Triangular prism**



**Pyramid**

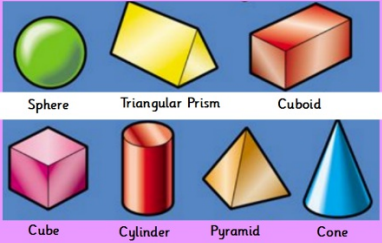
What 3D Shapes could I make with...

Introduce  
(5 mins)



A rectangle?

Triangular prism



Cuboid



Mrs Granger thinks you can make these shapes from a circle:



Which one of these shapes can you **not** make with a circle?

**A sphere! Because a 2D shape has to be flat.**

Use your knowledge to complete the table

Properties	Name of 3d shape	Picture
2 triangles faces 3 rectangles faces		
2 squares faces 4 rectangles faces		
6 square faces		
2 circle faces		
4 triangles faces 1 square face		
1 circle face		
0 2d faces		

Independent

What do all of these 3d shapes have in common?

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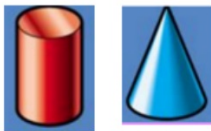
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Mr Ogden has worked out that a cube has 6 rectangles. Is he correct? Explain your answer.



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4.1.2022

Deepening

**Key Learning:** Identify 2d shapes in 3d shapes.

I'm thinking of a 3d shape. It has a square face. What 3d shape could I be thinking of? Give all the possibilities.

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What is the same about these 2 shapes?



What is different about them?

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## Reflection



### **Time for you to be the teacher.**

1. Think of a 3d shape
2. Describe it using 2d shapes to your partner
3. Can they correctly guess it.

