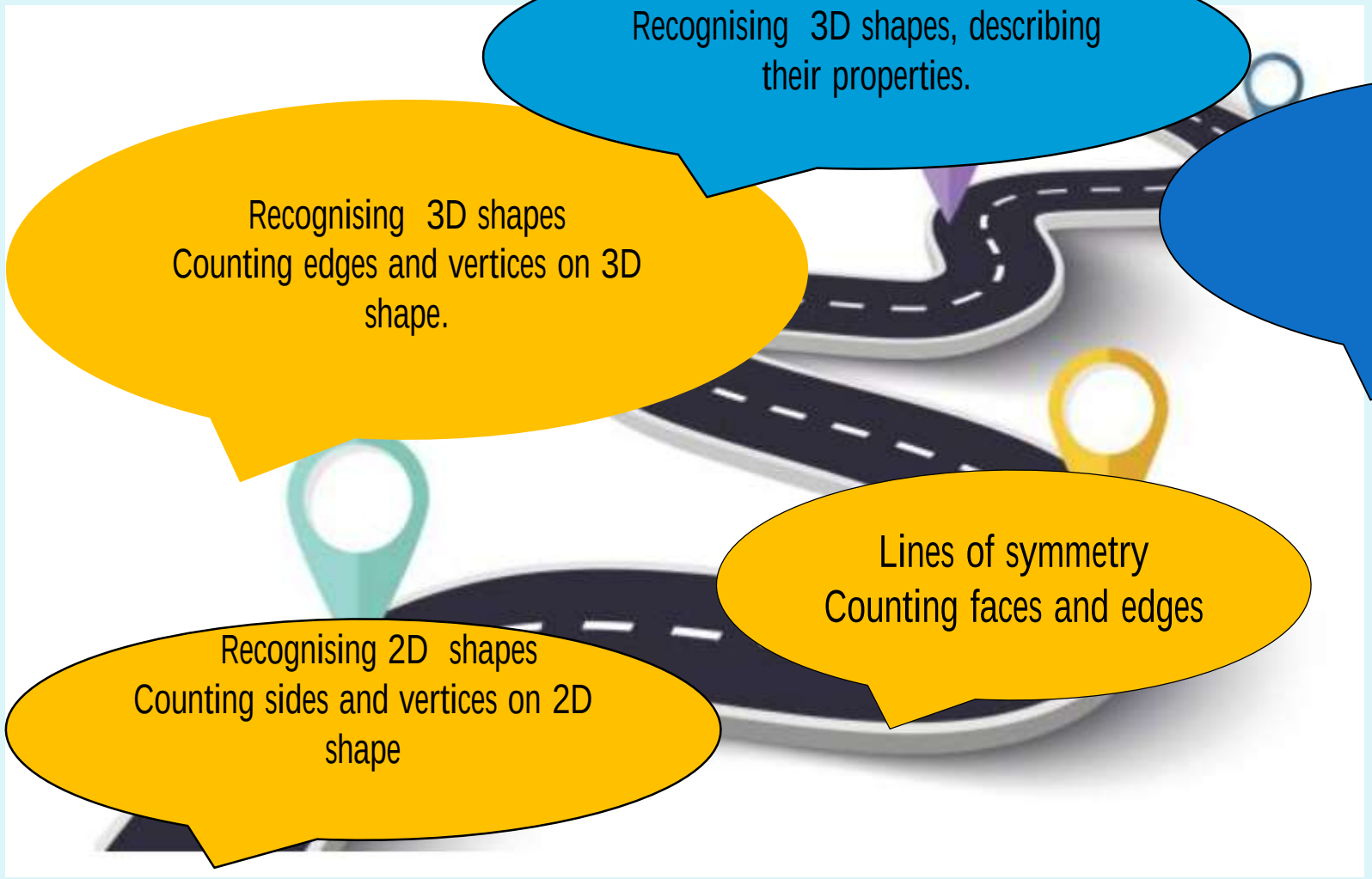
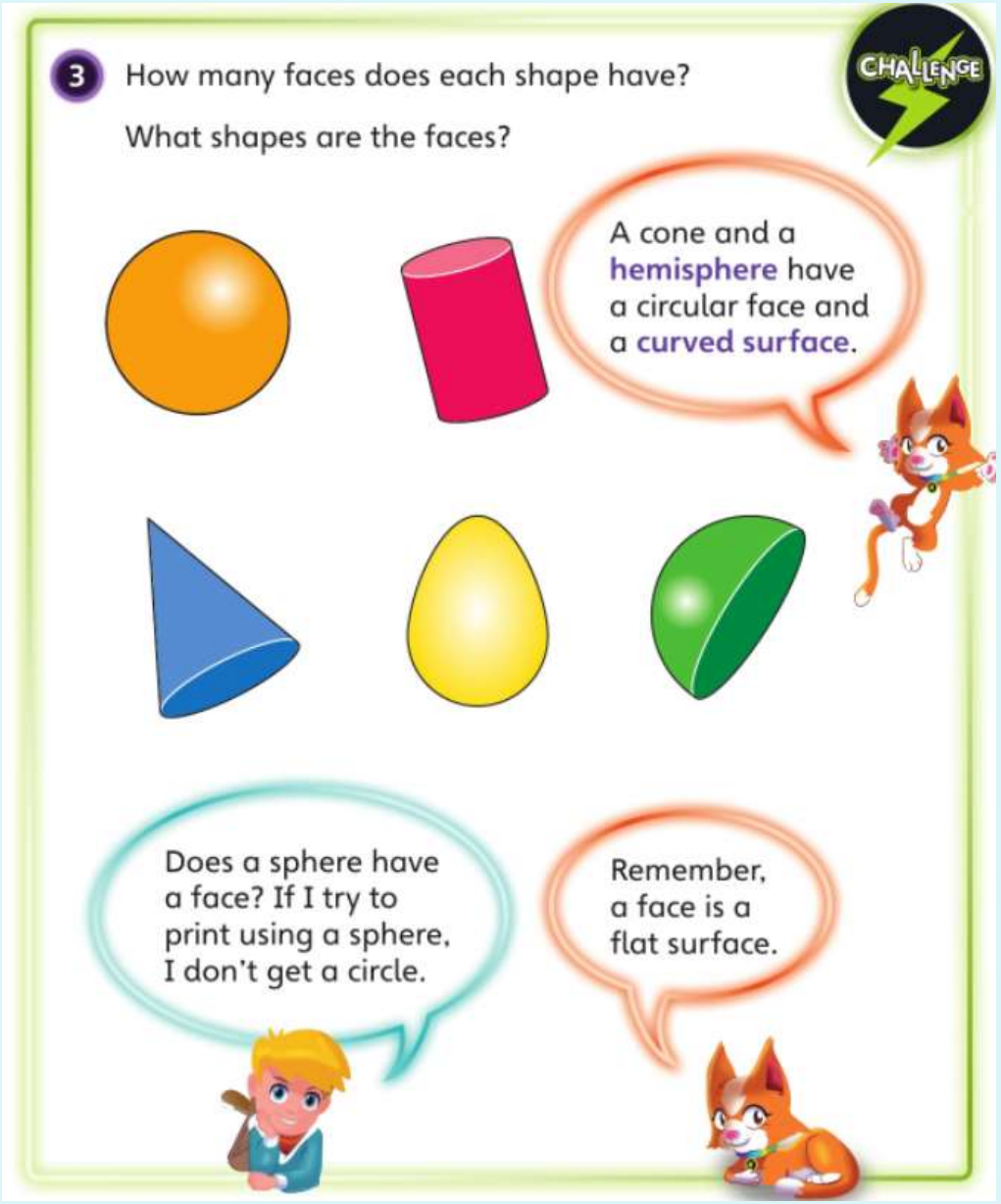
Our Maths Learning Journey

Key vocabulary:
- Half
- Quarter
- Third
- Equivalent
- Equal part
- Numerator
- Denominator
- Fraction
- Unit fraction
- Non-unit fraction
- Edges
- Vertices
- Faces



Challenge of the week



Mental Maths

Look at these coins:

What is the largest amount you can make using **three** of these coins?

04.03.2024

LQ: Can I recognise 3D shapes?

Steps to success

I can recognise 3D shapes.

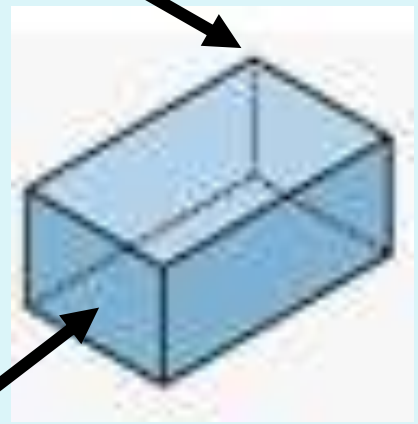
I can name 3D shapes.

I can compare and identify similarities and differences between 3D shapes.

Star words

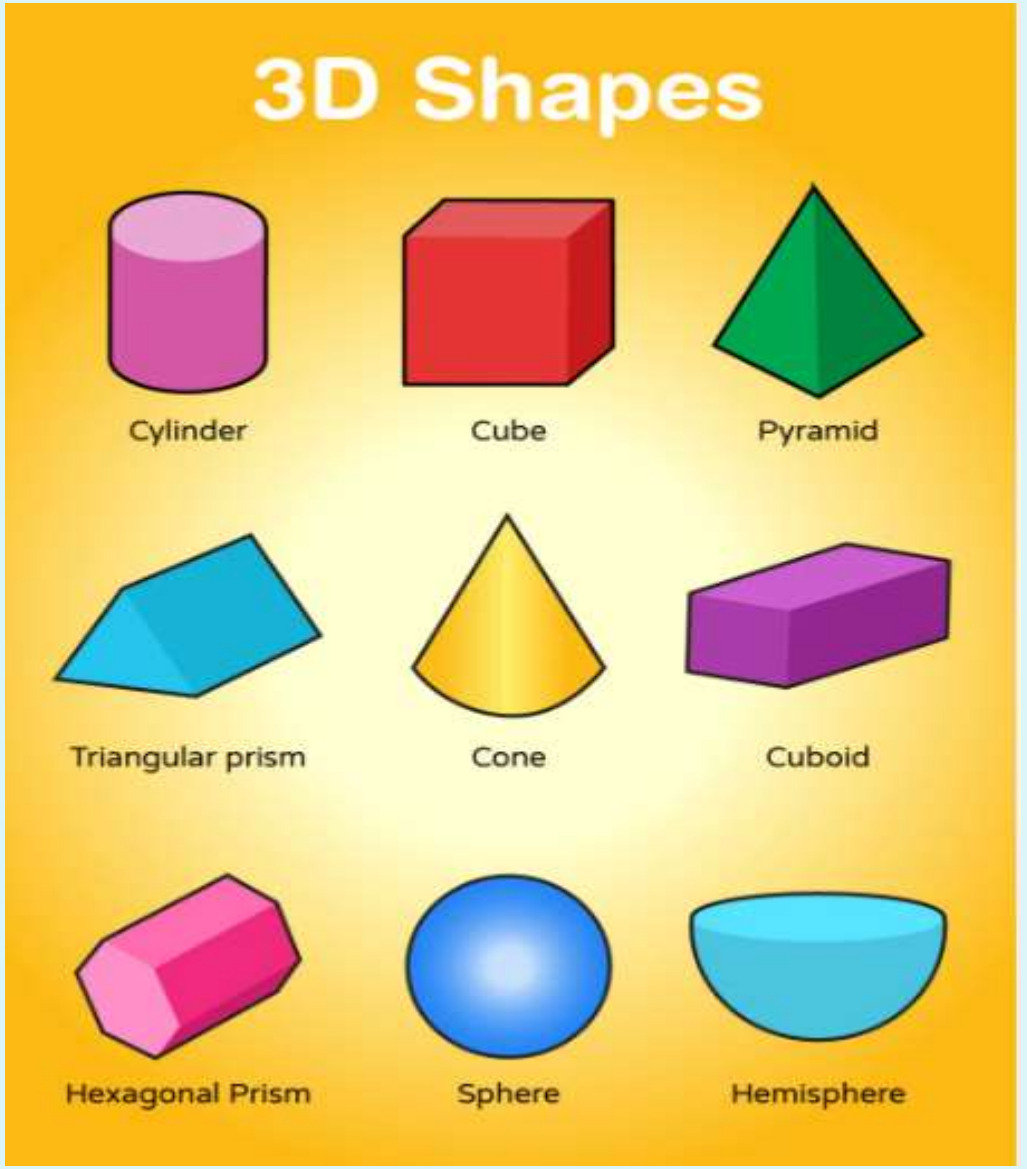
3D shapes

vertices



faces

edges



LQ: Can I recognize 3D shapes?

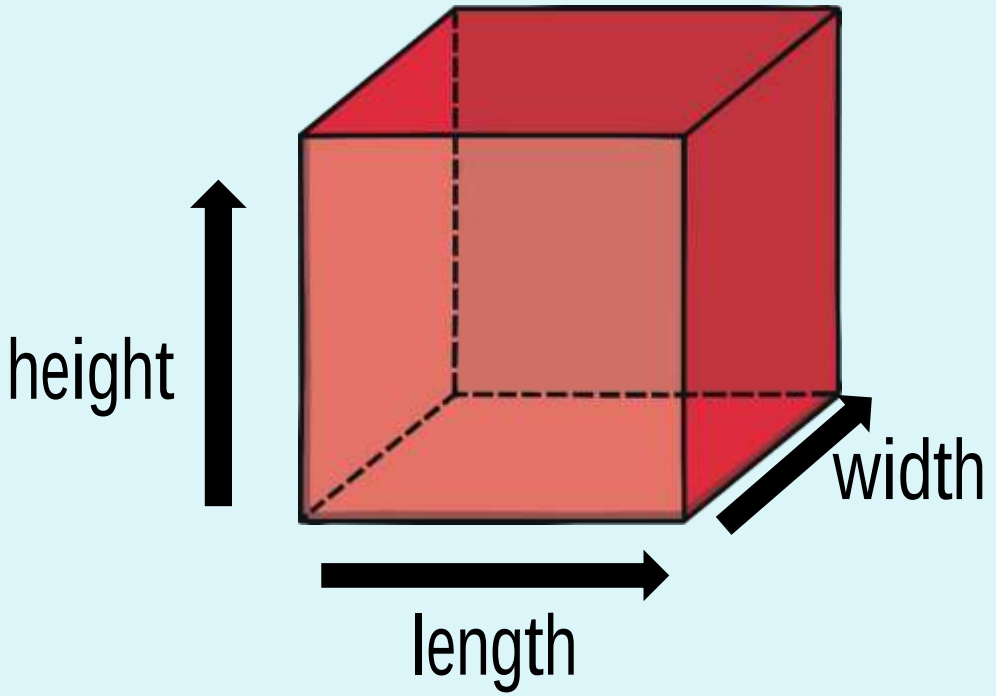
04.03.2024

https://www.youtube.com/watch?v=2cg-Uc556-Q

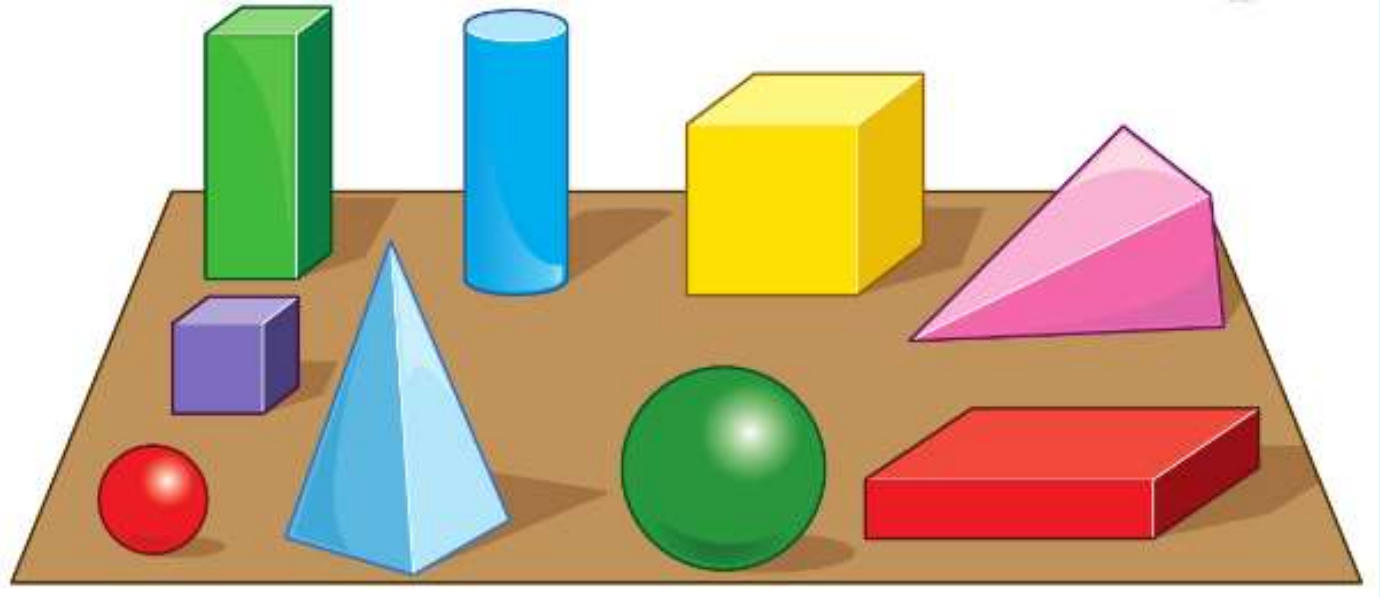
Today we are going to recap 3D shapes.
What do you remember from Year 1?

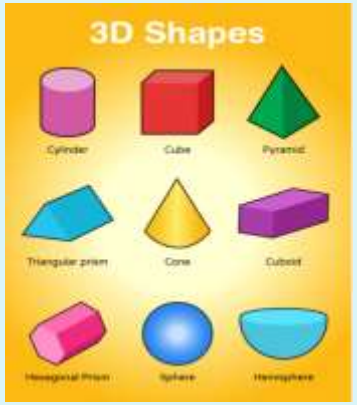
TPs: What is a 3D shape?

3D shapes are solid shapes. They are 3 dimensional meaning they have length, width and height.



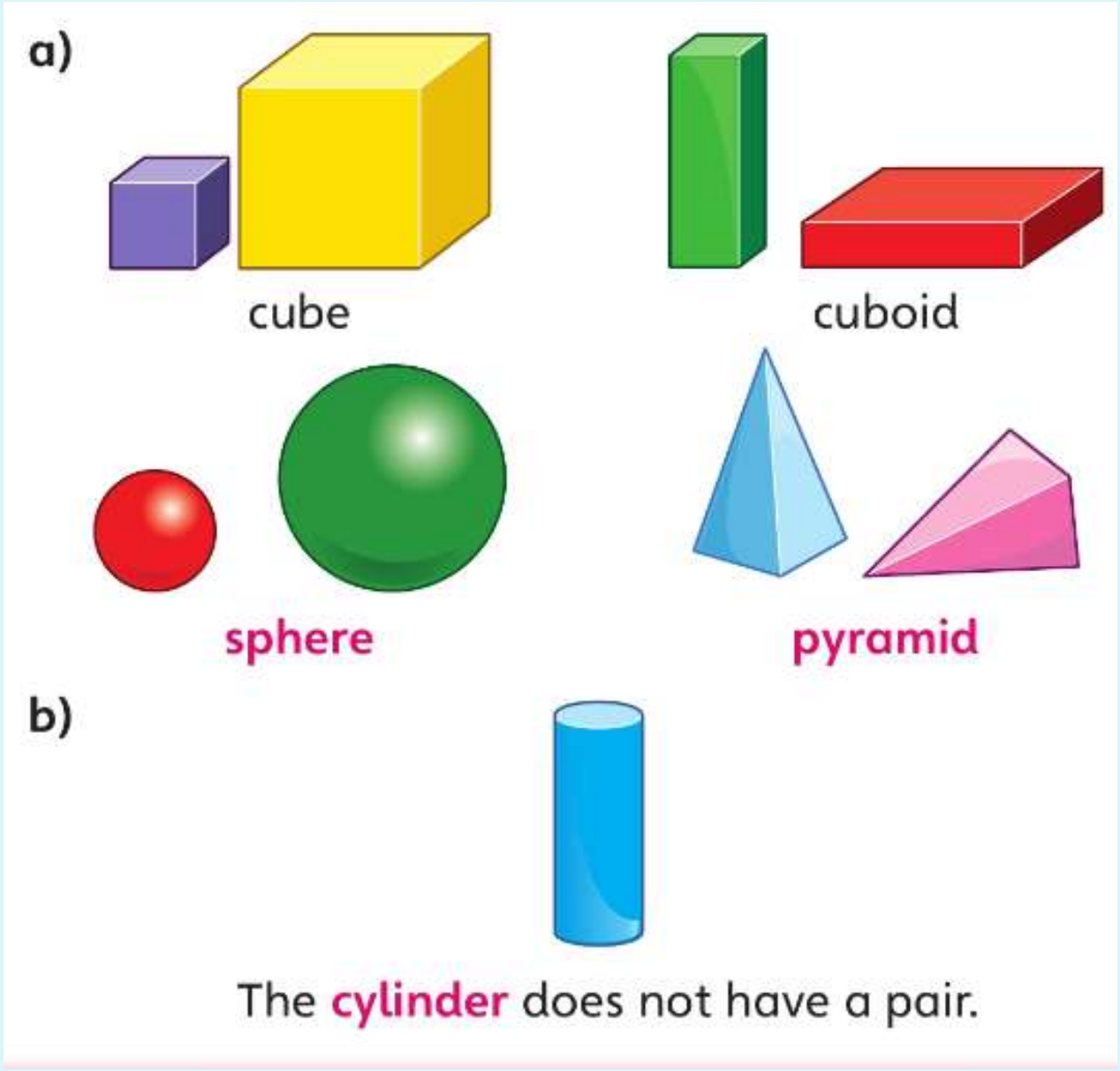
Let's name the shapes and pair them together.





TPs: What shape is the odd one out? Why?

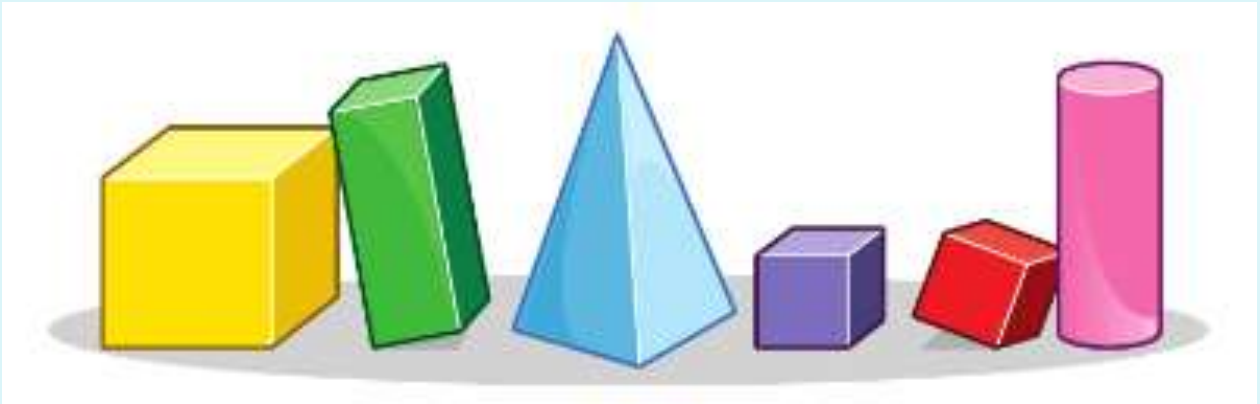
Adult to use 3D shapes to name and describe.



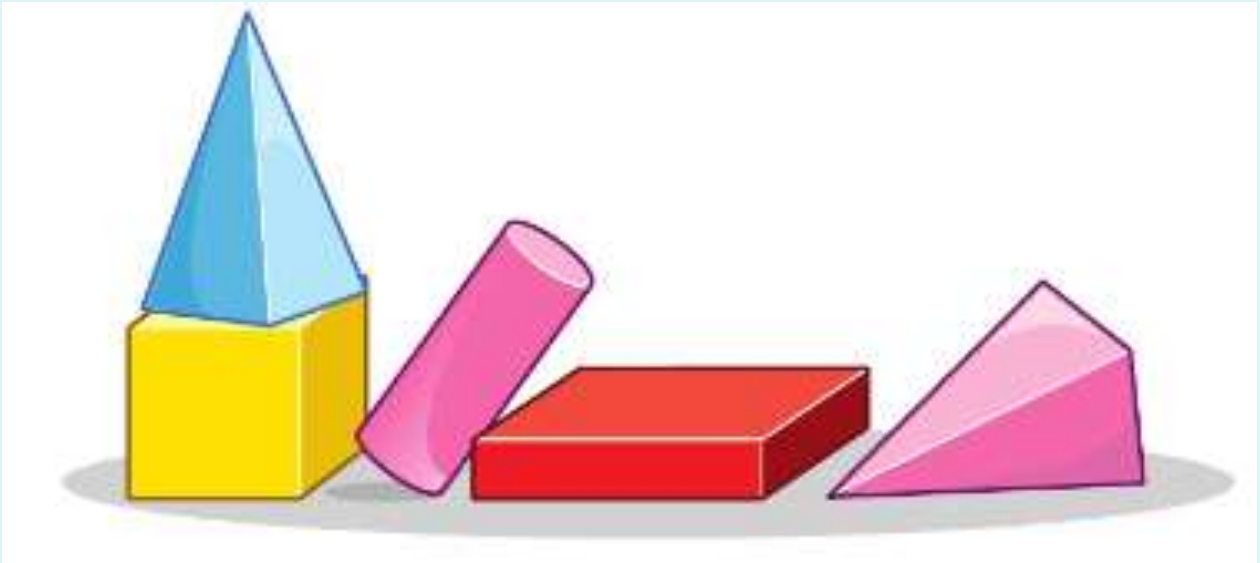
TPs: What is different about the cube and the cuboid?

Are they not the same?

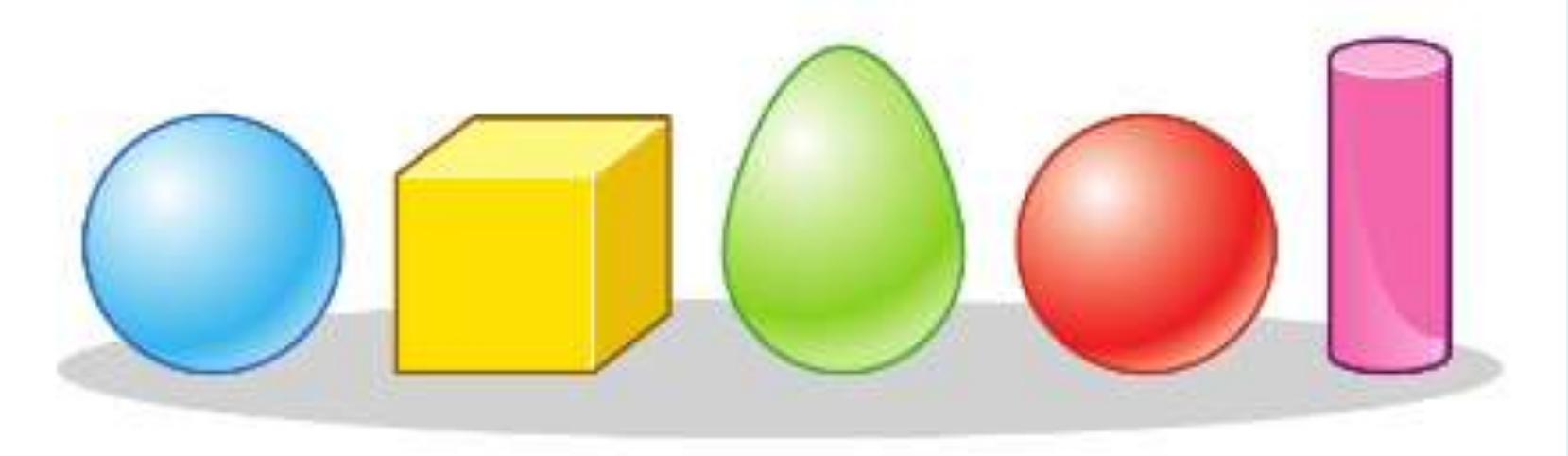
Circle the cubes.



How many pyramids are there?

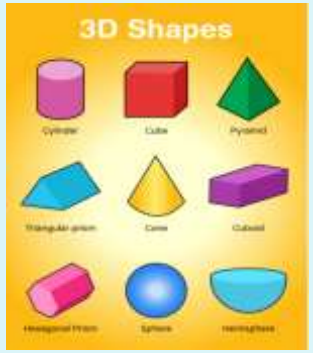


There are _____ pyramids.



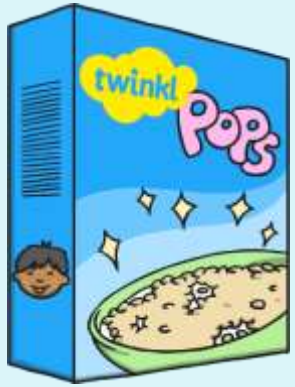
How many shapes are not spheres?

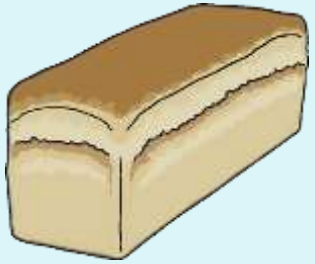
_____ shapes are not spheres.

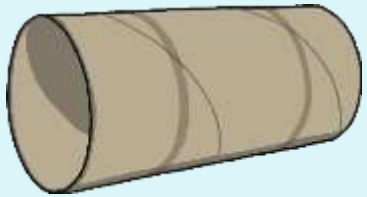


3D shapes are all around us and we can find them in everyday objects.

Let's say these 3D shape name together!







Self assessment

Can you name 3D shapes?

LQ: Can I recognize 3D shapes?

04.03.2024

Name the shapes.

LQ: Can I recognize 3D shapes?

04.03.2024

Your task

cube 	sphere 	cuboid 	cylinder 	cone 

Practical

Name and sort the 3D shapes and objects in the groups.

Self assessment

Do you understand the task?

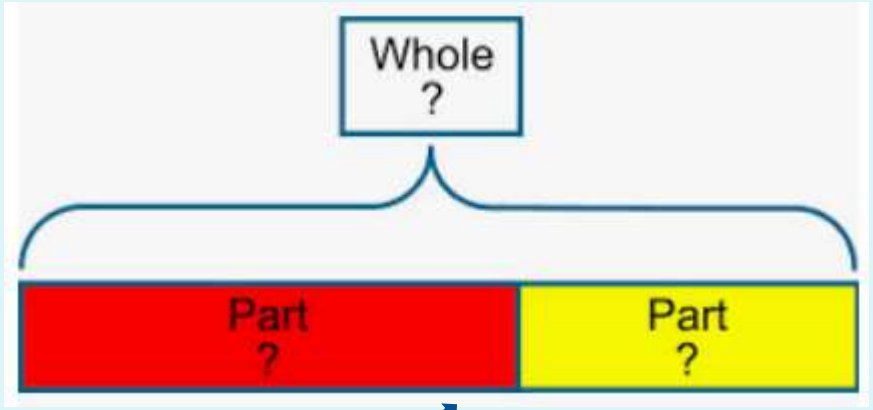
05.03.2024

Mental Maths

12		
4	4	4

We can use a bar model for division to help us work out the groups (parts).
This is another representation of recording.

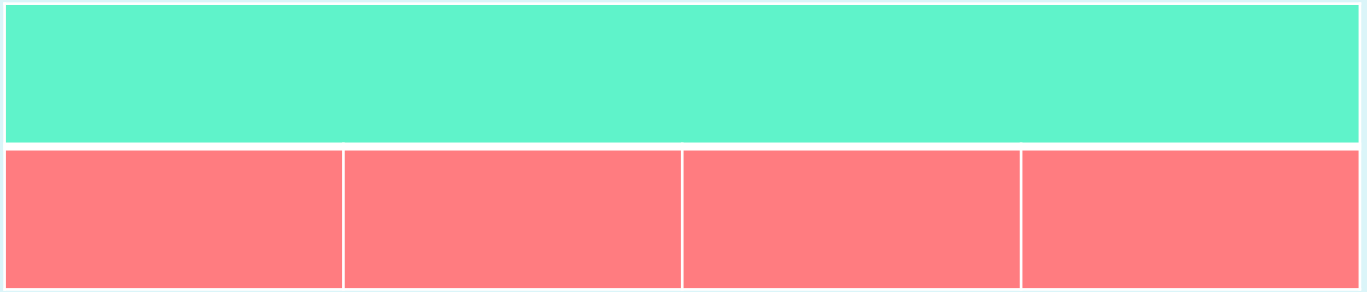
On the bar model there is one whole. This is where the whole number is written.



Below this are the parts. When we divide, there can be many parts.

Mental Maths

Let's share the 20 jewels between the 4 friends one by one.



20 ÷ 4 = ___

They get ___ each.

Draw a bar model and split the bottom bar into four parts.

05.03.2024

LQ: Can I count faces on 3D shapes?

Steps to Success:

I know what faces are.

I can count the faces of 3D shapes.

I can describe the 2D shapes within the 3D shape.

vertex

vertices

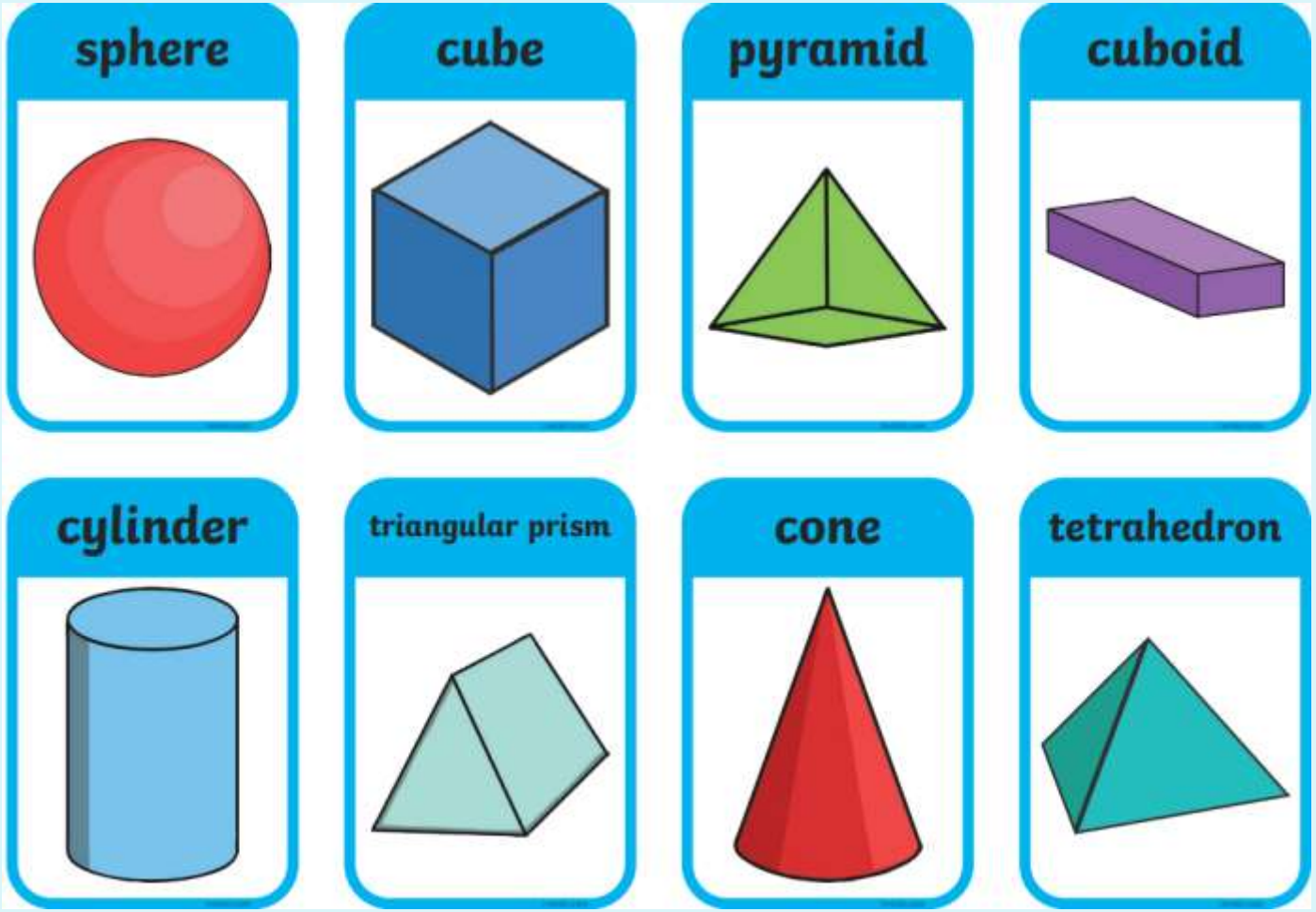
flat

curved

edges

faces

STAR WORDS



3D shapes

2D shapes

surface

05.03.2024

LQ: Can I count faces on 3D shapes?

TP – What do you remember about 3D shapes?

Stem sentence:

'3D shapes are…'

What does properties mean?

Stem sentence:

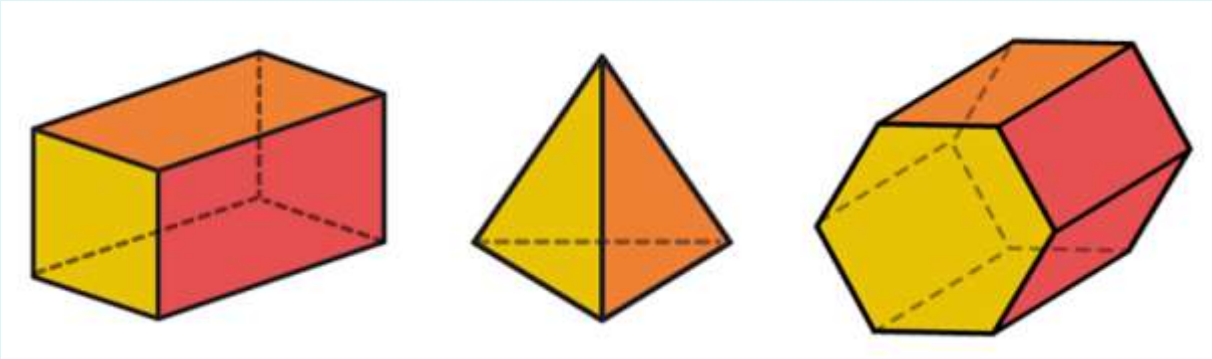
'Properties mean…'

05.03.2024

LQ: Can I describe the properties of 3D shapes?

Let's recap again about properties of 3D shapes.

https://www.youtube.com/watch?v=3-QwWFkz5hw



Self assessment

Do you understand what properties mean?

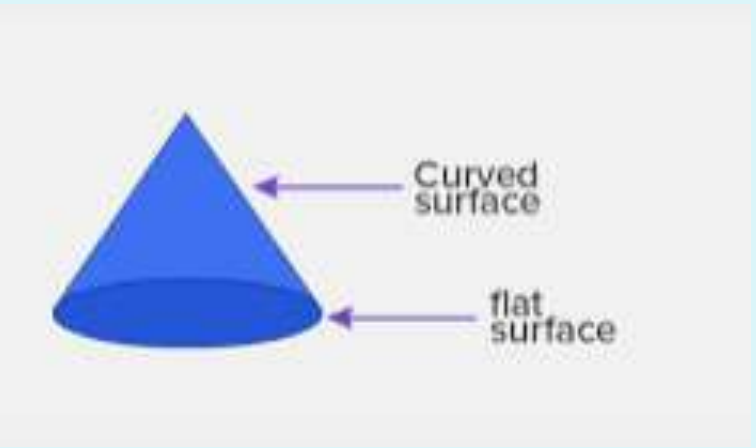
05.03.2024

LQ: Can I count faces on 3D shapes?

Today you are going to describe the faces of 3D shapes.
This is one of the properties of a 3D shape.

Let's recap

- 3D shapes are solid shapes. They are 3 dimensions – width, height and depth.
- Some 3D shapes have flat faces and some have curved surface.
- When two faces meets, it creates an edge.
- When two edges meet, it creates a vertex.
- Vertex is one. Vertices are more than one.



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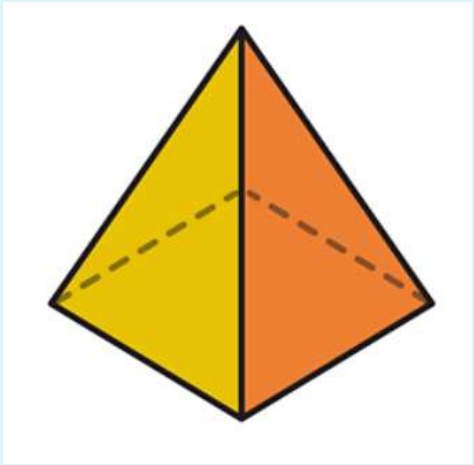
LQ: Can I count faces on 3D shapes?

Describe the properties of a square based pyramid on your table.



Triangular

Square

TP –How many faces does this shape have?

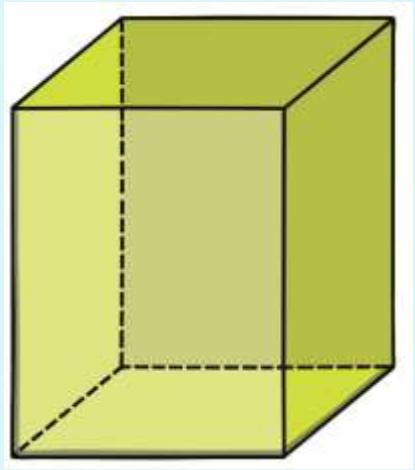
How do you know?

What 2D shapes are the faces?

05.03.2024

LQ: Can I count faces on 3D shapes?

Describe the properties of cuboid.



TP – How many faces does this shape have?

How do you know? What 2D shapes are the faces?

Square

Rectangle

Self assessment

Do you understand what faces are on 3D shapes?

05.03.2024

LQ: Can I count faces on 3D shapes?

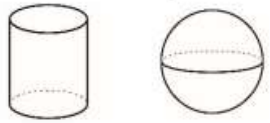
Complete the tasks in your book.

1.
Complete the table.

Shape	Name	Number of faces
	_u_e	
	p_r_m_d	
	cu_oi_	
	py_a_ _d	
	s_ _e_e	0

Match the 3D shape to its faces.

2.
Look at the shapes.



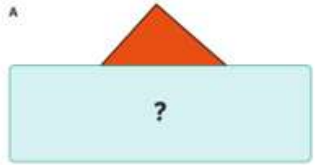
Bella says,

Both of the shapes are cylinders.

Do you agree? Explain your reasoning.

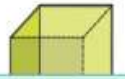
3.
Sort the shapes below.
Which is the odd one out?

A



?

B

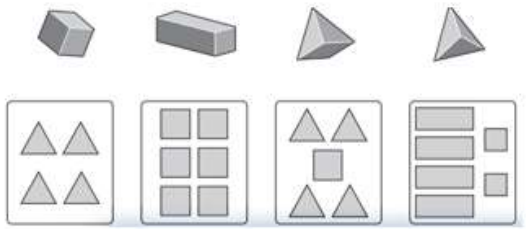


?

1.

Shape	Name	Number of faces
	_u_e	
	p_r_m_d	
	cu_oi_	
	py_a_ _d	
	s_ _e_e	0

Match the 3D shape to its faces



Self assessment

Do you understand what to do?

06.03.2024

Mental Maths

12		
4	4	4

We can use a bar model for division to help us work out the groups (parts).
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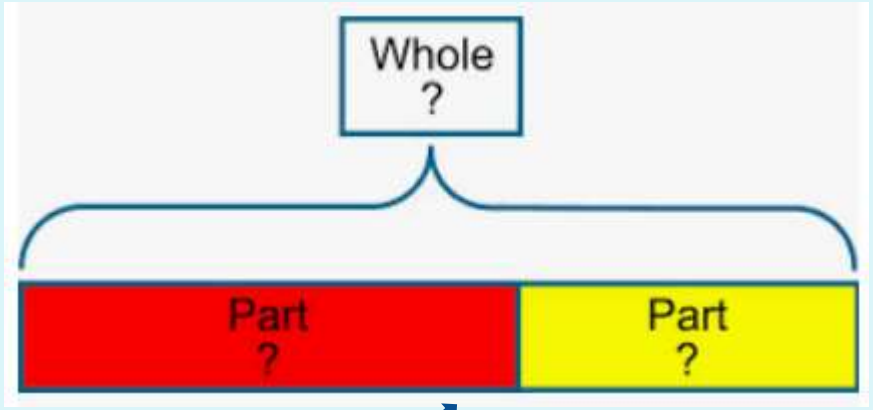
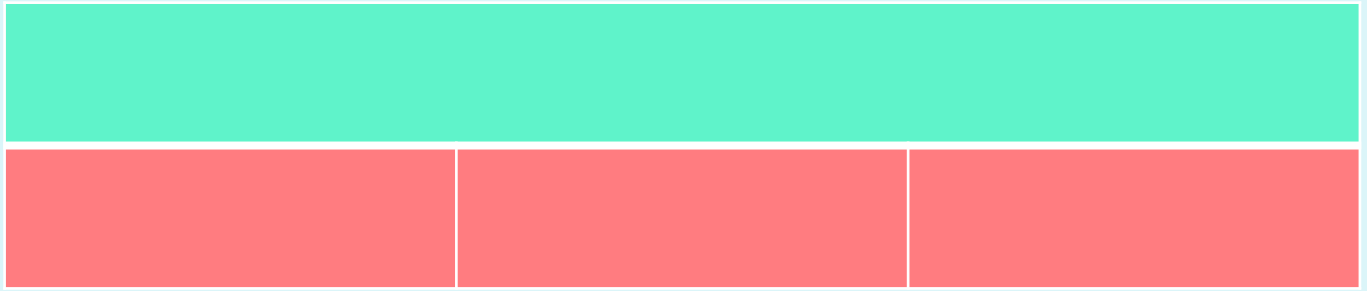


Below this are the parts. When we divide, there can be many parts.

Mental Maths

Let's share the 18 jewels between the 3 friends one by one.



___ ÷ ___ = ___

They get ___ each.

Draw a bar model and split the bottom bar into three parts.

06.03.2024

LQ: Can I count edges on 3D shapes?

Steps to Success:

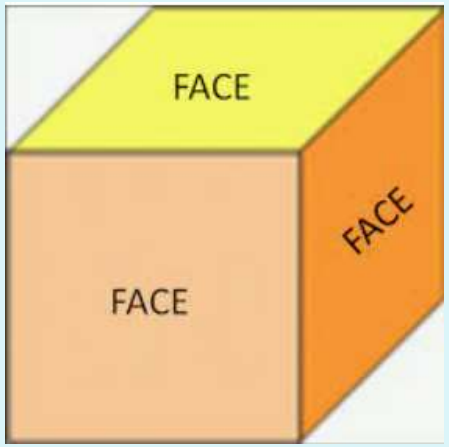
I know what edges are.

I can count the edges of 3D shapes.

I can describe some properties of 3D shape.

STAR WORDS

3D shapes

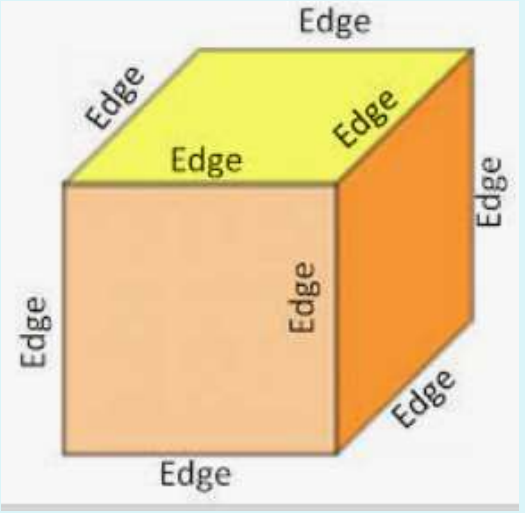


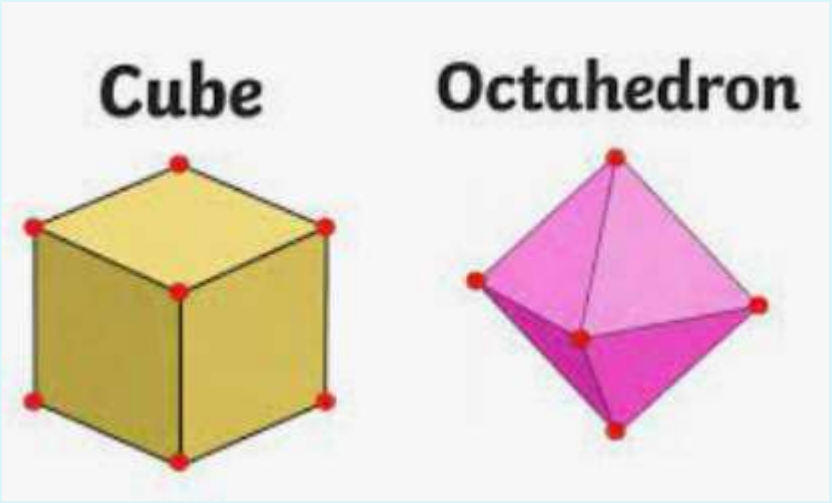
2D shape

flat

faces

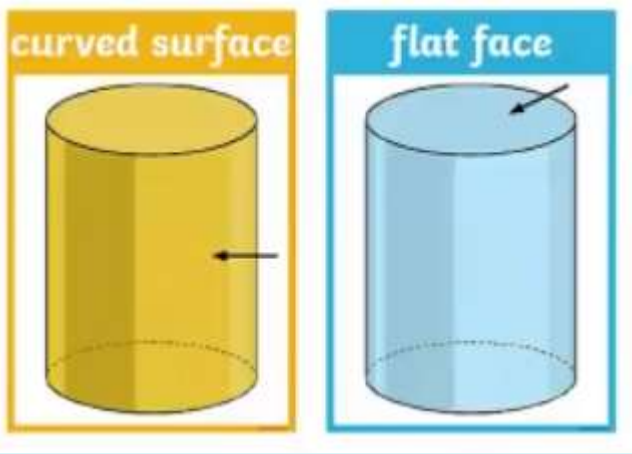
edges





vertices

Vertex (1)



curved surface

06.03.2024

LQ: Can I count edges on 3D shapes?

TP – What do you remember about 3D shapes?

Stem sentence:

'3D shapes are…'

What do properties mean?

Stem sentence:

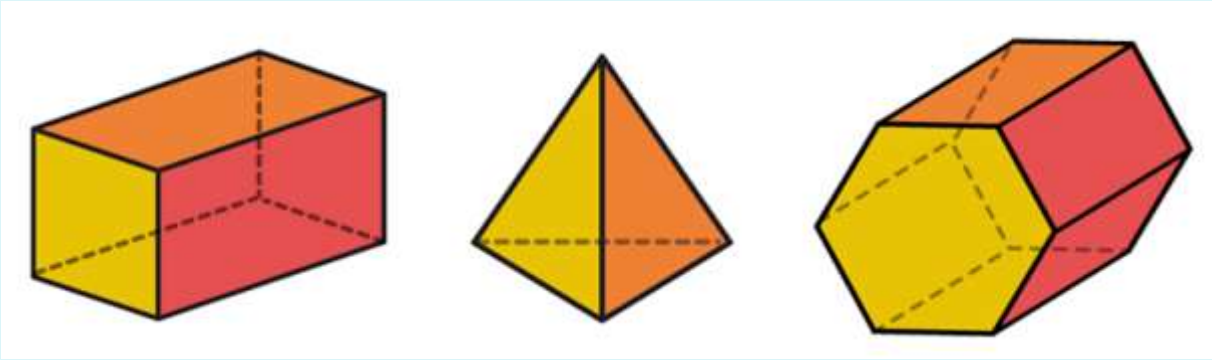
'Properties mean…'

06.03.2024

LQ: Can I count edges on 3D shapes?

Let's recap again about properties of 3D shapes.

https://www.youtube.com/watch?v=3-QwWFkz5hw



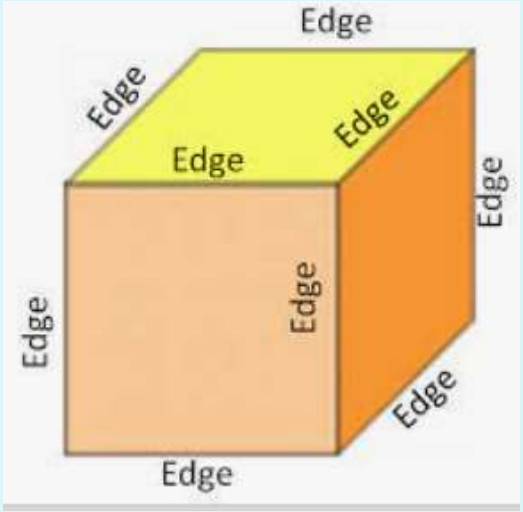
Self assessment

Do you understand what properties mean?

06.03.2024

LQ: Can I count edges on 3D shapes?

Today you are going to count edges of 3D shapes.
This is one of the properties of a 3D shape.



Let's recap

- 3D shapes are solid shapes. They are 3 dimensions – width, height and depth.
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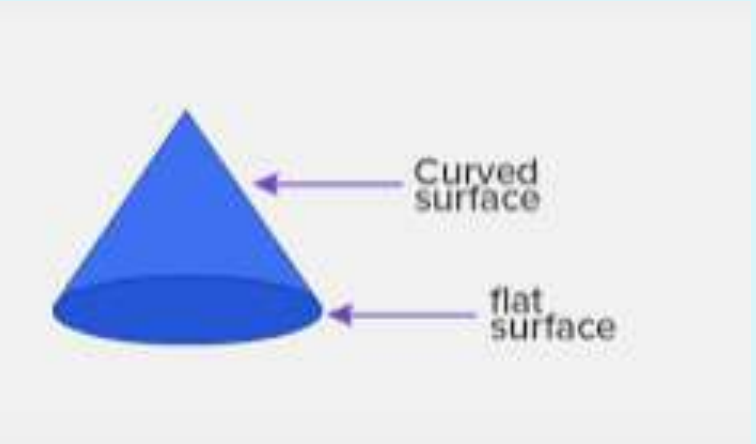


06.03.2024

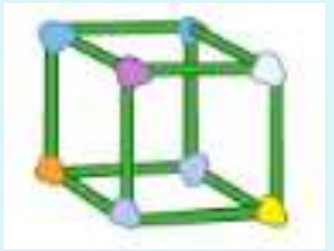
LQ: Can I count edges on 3D shapes?

Hassan wants to make his own 

TP: How many straws does he need?

There are three different  : small, medium and large.





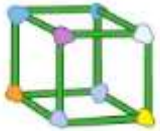
TP: What stays the same and what changes?

06.03.2024

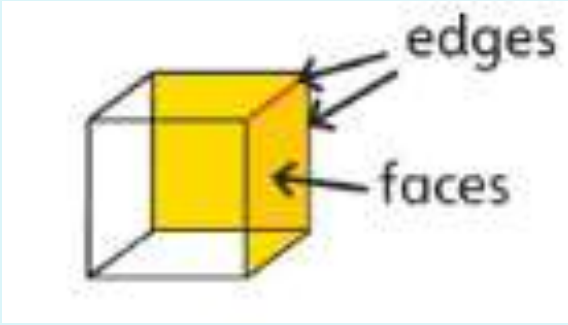
LQ: Can I count edges on 3D shapes?

I can see only the edges of the shape.

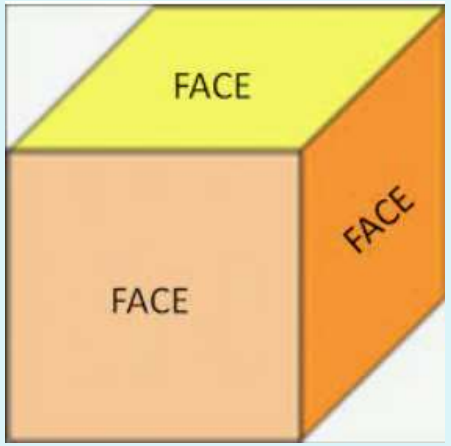
TP: What does it look like?

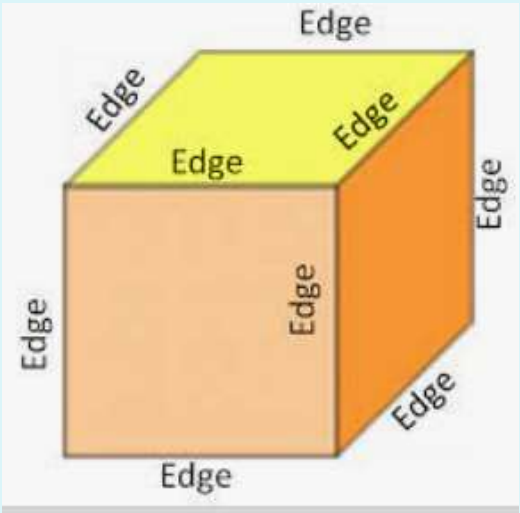


It looks like a cube but it does not have any faces. I wonder what it is.



A 3D shape has edges where two faces meet.

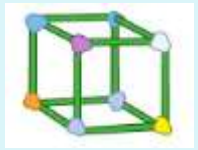


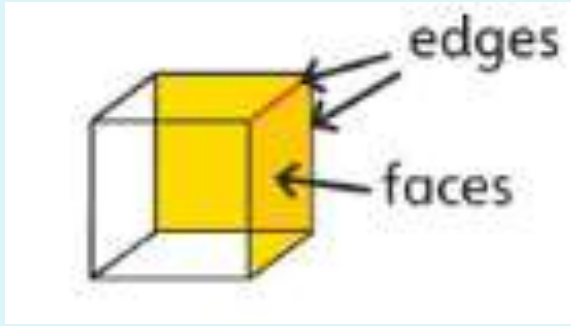


06.03.2024

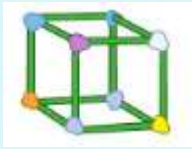
LQ: Can I count edges on 3D shapes?

Now use the given straws and make the cube.

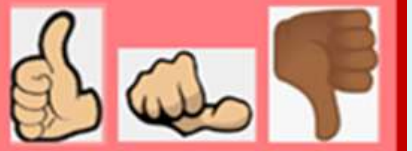




TP: How many straws did you use?
How many edges does the cube have?

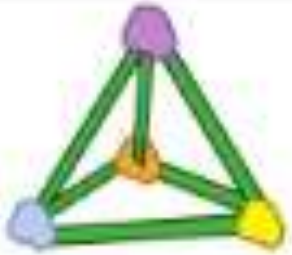
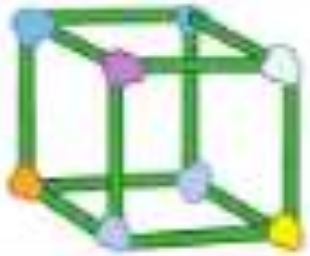
A cube has 12 edges. In  there is one straw for each edge. We need 12 straws to make a 

Self assessment
Do you understand what edges are and how to count them on 3D shapes?

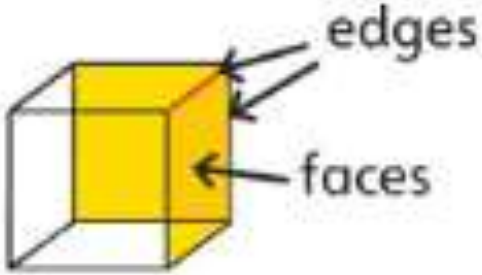


06.03.2024

LQ: Can I count edges on 3D shapes?

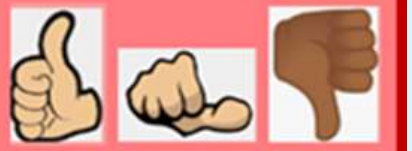
Shape	Number of straws needed
	
	
	

The last shape has a triangle at each end. It is called a triangular prism.



Self assessment

Do you understand how to count them on 3D shapes?



06.03.2024

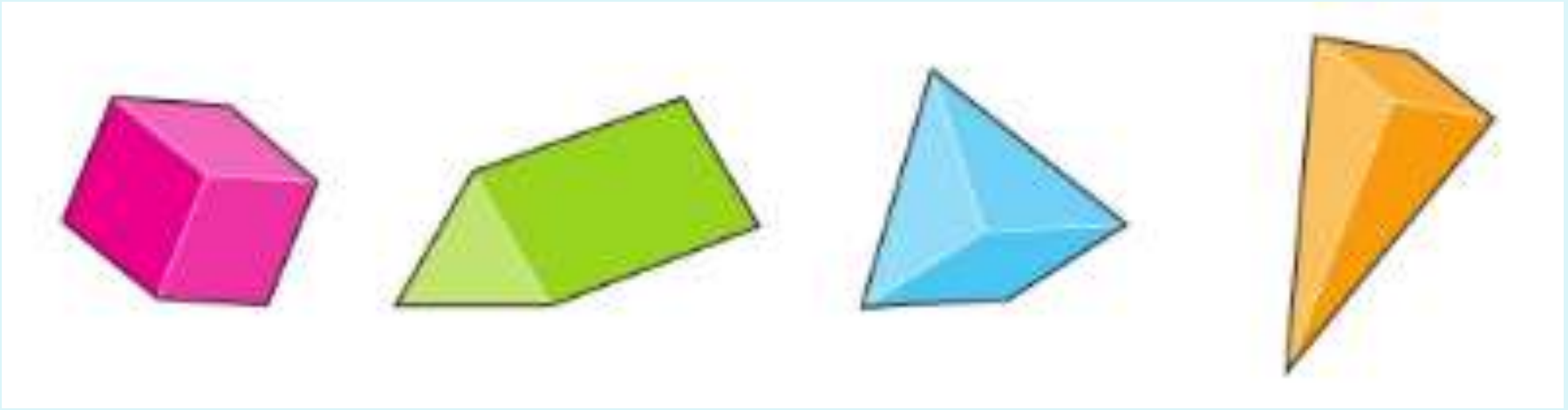
Practical/ take photos

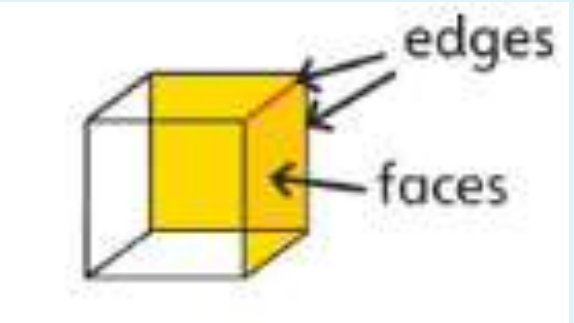
LQ: Can I count edges on 3D shapes?

Sam has eight straws to make the edges of a 3D shape.

TP: Which shape can she make?

Work with your partner and make 3D shape using only 8 straws.

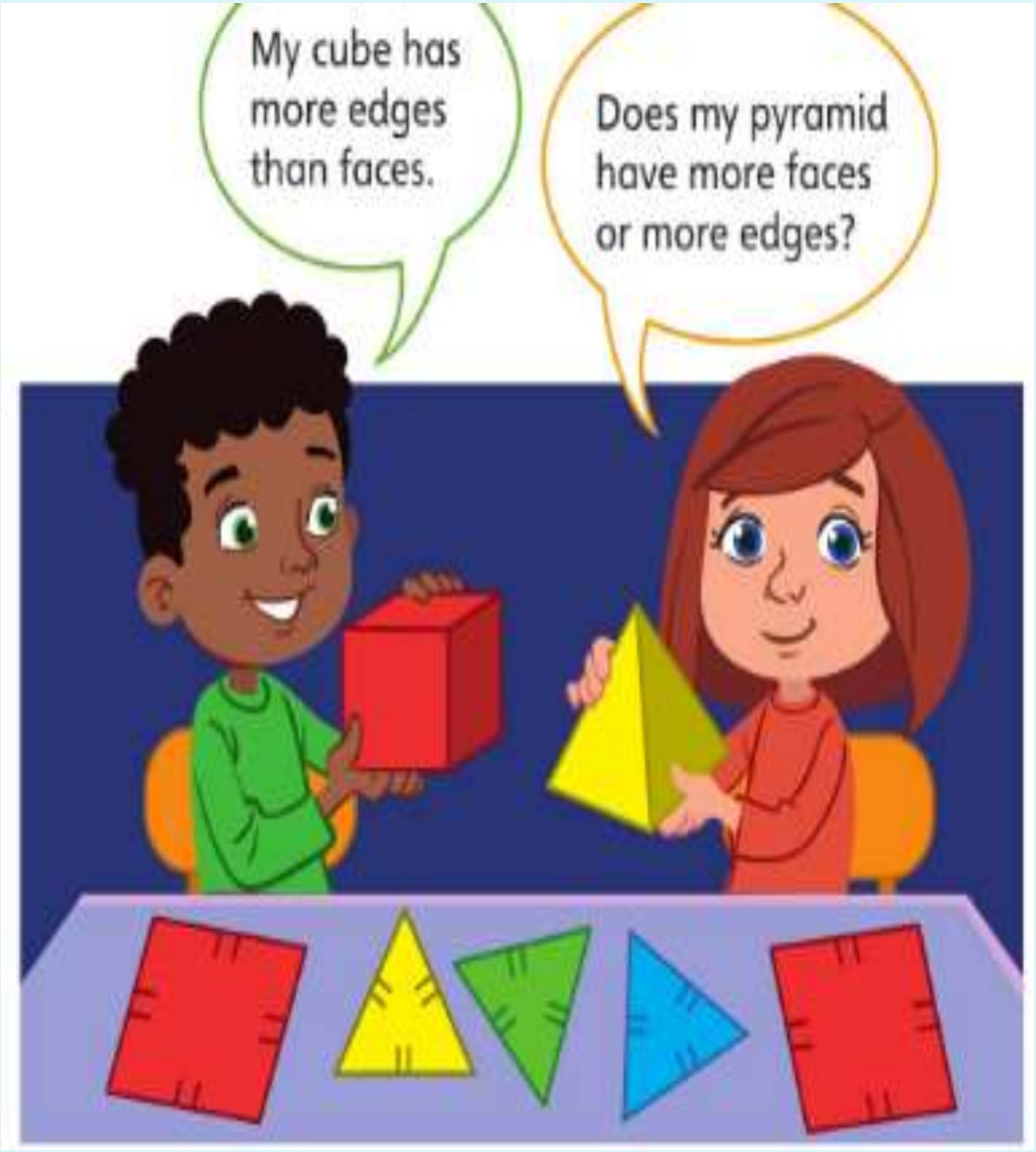




06.03.2024

Take photos

LQ: Can I count edges on 3D shapes?



Next step:

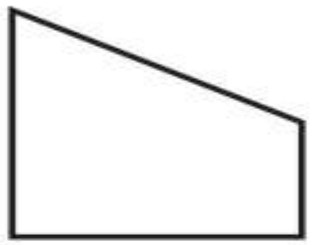
Malik and Abbie are making shapes from construction materials.

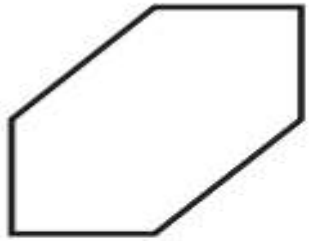
Does a 3D shape always have more edges than faces?

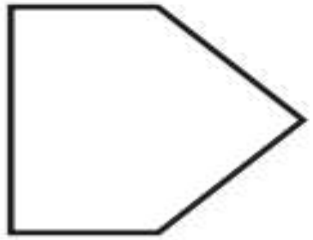
07.03.2024

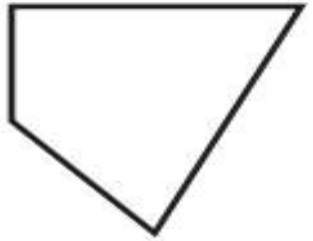
Mental Maths

Tick the **pentagon**.









07.03.2024

LQ: Can I count edges on 3D shapes?

Steps to Success:

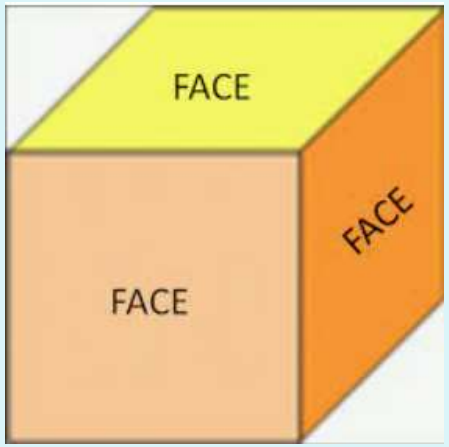
I know what edges are.

I can count the edges of 3D shapes.

I can describe some properties of 3D shape.

STAR WORDS

3D shapes

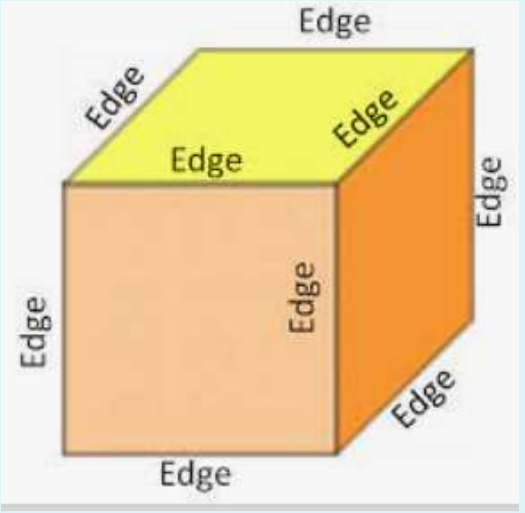


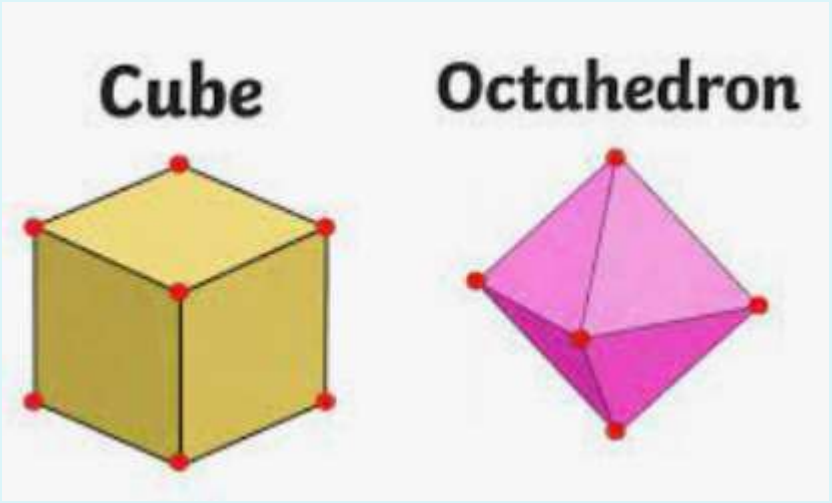
2D shape

flat

faces

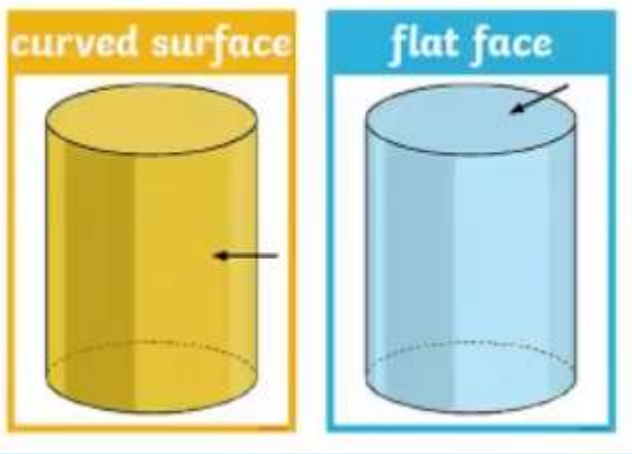
edges





vertices

Vertex (1)



curved surface

07.03.2024

LQ: Can I count edges on 3D shapes?

TP – What do you remember about 3D shapes?

Stem sentence:

'3D shapes are…'

What does properties mean?

Stem sentence:

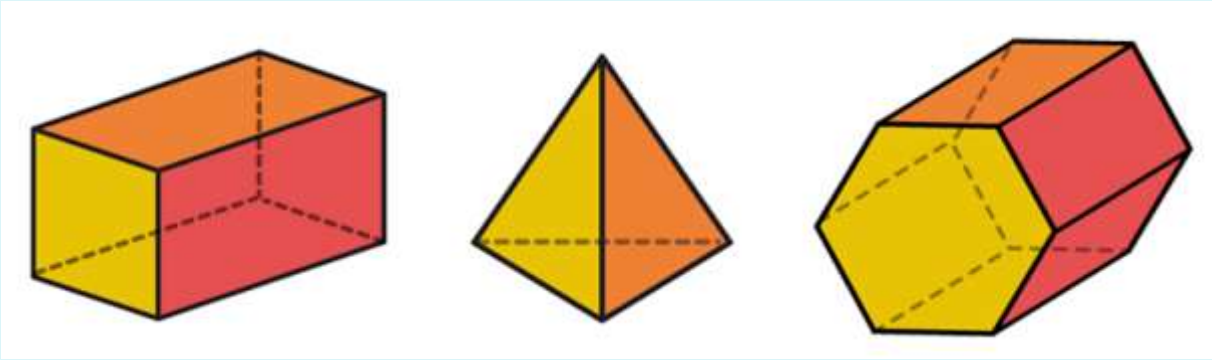
'Properties mean…'

07.03.2024

LQ: Can I count edges on 3D shapes?

Let's recap again about properties of 3D shapes.

https://www.youtube.com/watch?v=3-QwWFkz5hw



Self assessment

Do you understand what properties mean?

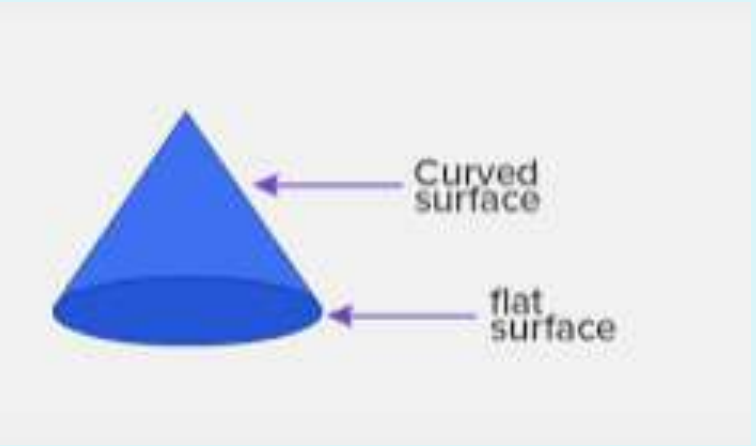
07.03.2024

LQ: Can I count edges on 3D shapes?

Today you are going describe the edges of 3D shapes.
This is one of the properties of a 3D shape.

Let's recap

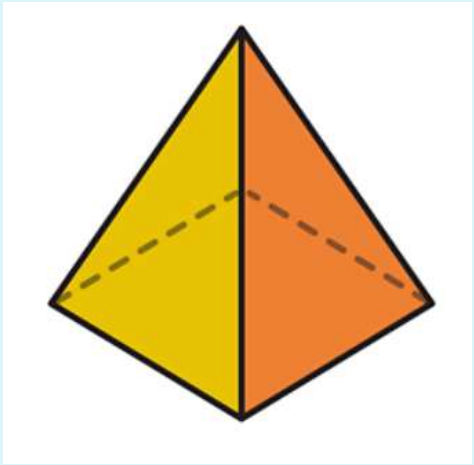
- 3D shapes are solid shapes. They are 3 dimensions – width, height and depth.
- Some 3D shapes have flat faces and some have curved surface.
- When two faces meets, it creates an edge.
- When two edges meet, it creates a vertex.
- Vertex is one. Vertices are more than one.



07.03.2024

LQ: Can I count edges on 3D shapes?

Describe the properties of a square base pyramid on your table.



Triangular

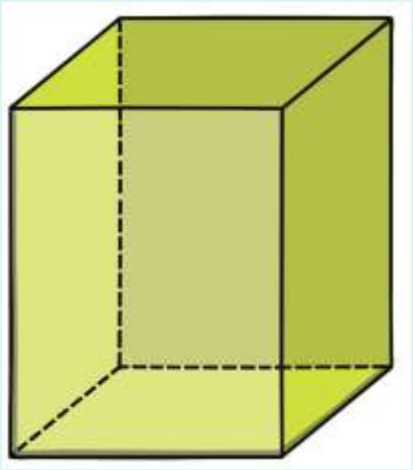
Square

TP –How many edges does this shape have?
How many faces does this shape have?
How do you know?
What 2D shapes are the faces?

07.03.2024

LQ: Can I count edges on 3D shapes?

Describe the properties of cuboid.



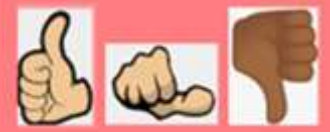
TP – How many edges does this shape have?
How many faces does this shape have?
How do you know? What 2D shapes are the faces?

Square

Rectangle

Self assessment

Do you understand how to count faces and edges 3D shapes?



07.03.2024

LQ: Can I count edges on 3D shapes?

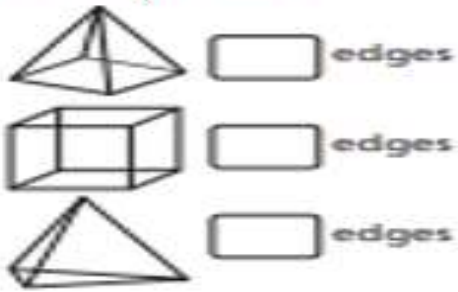
Complete the tasks in your book.

Self assessment

Do you understand what to do?

1.

a. How many edges does each shape have?



edges

edges

edges

b.

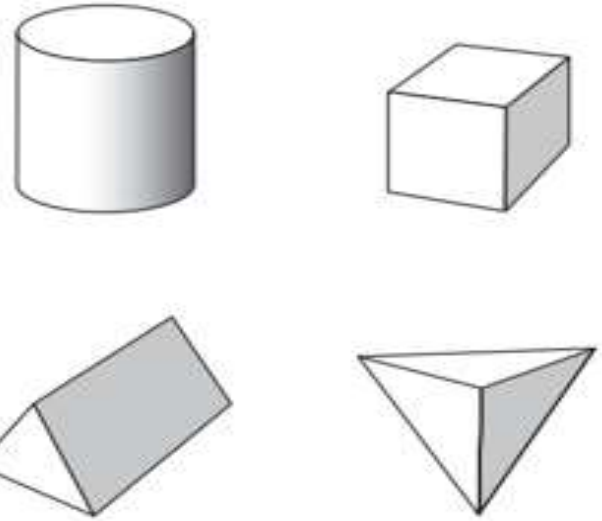
A ..... has 6 faces and 12 edges.

A .....has 5 faces and 9 edges.

A ..... has 5 faces and 8 edges.

2.

Tick 2 shapes that have more than 8 edges.



3.

Maddy made five  using sticks.

How many sticks did she use in total?

Sentence starter:

Maddy used .....

b) Gabriel used 50 sticks to make 

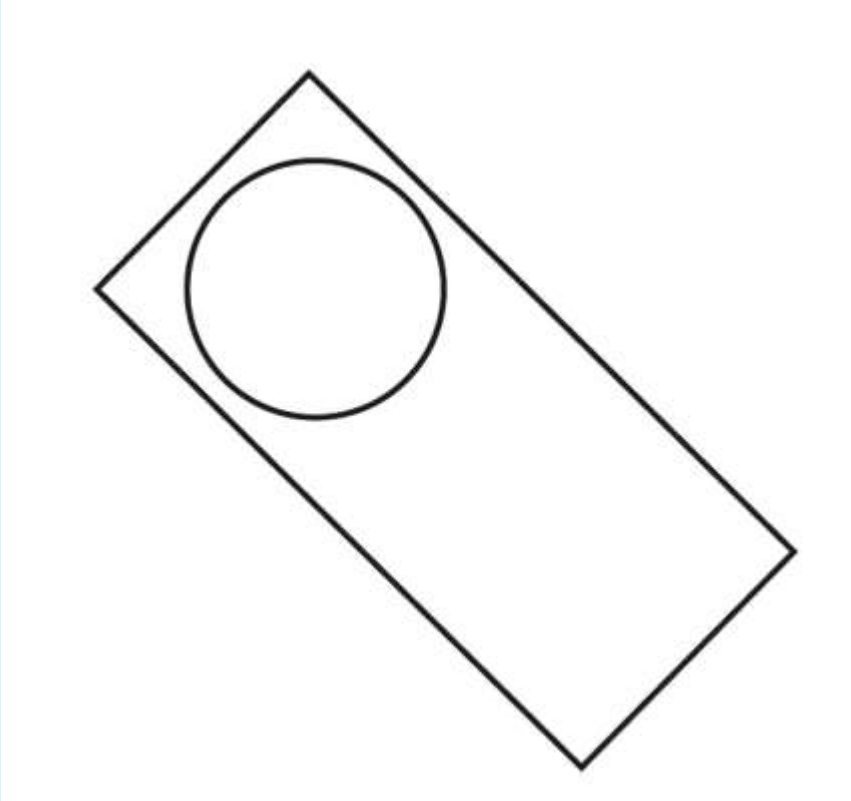
How many did he make?

Sentence starter:

Gabriel made .....

08.03.2024

Mental Maths



Tick the names of the **two** shapes in this picture.

Tick **two**.

- triangle ☐
- square ☐
- rectangle ☐
- circle ☐
- hexagon ☐

08.03.2024

LQ: Can I count vertices on 3D shapes?

Steps to Success:

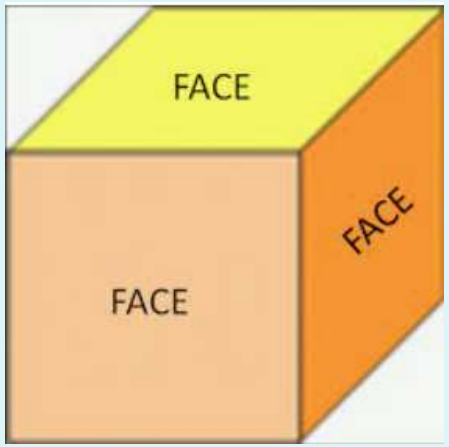
I know what vertices are.

I can count the vertices of 3D shapes.

I can describe properties of 3D shape.

STAR WORDS

3D shapes

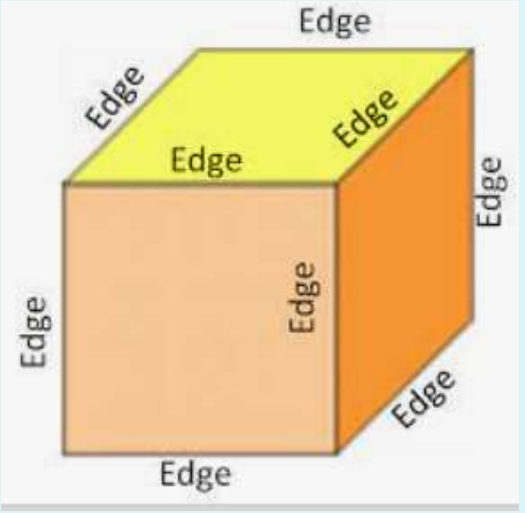


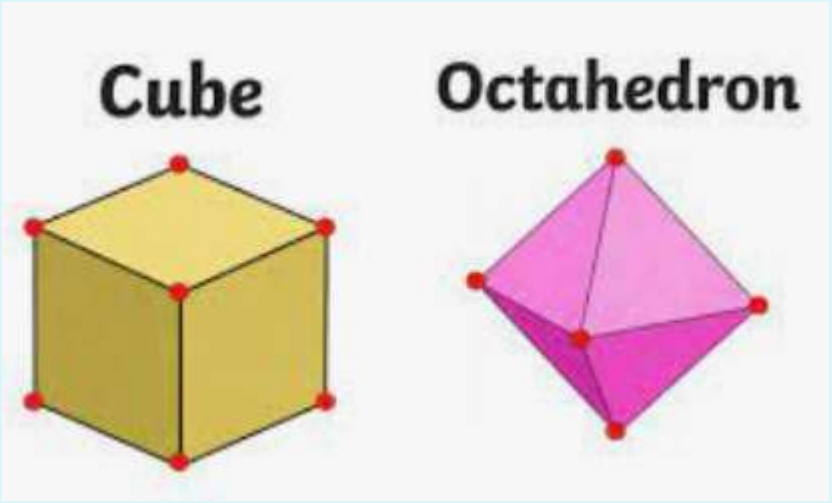
2D shape

flat

faces

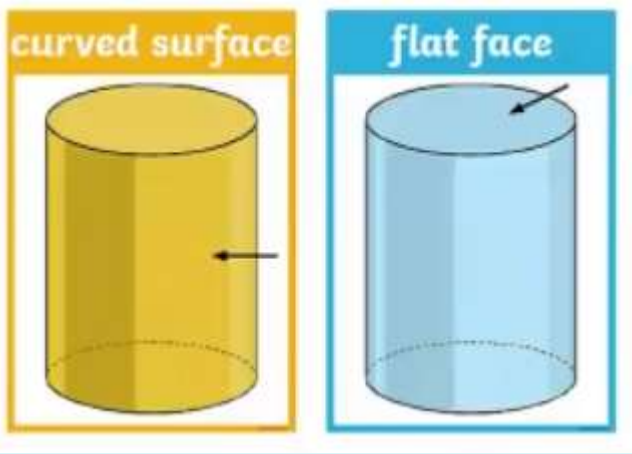
edges





vertices

Vertex (1)



curved surface

08.03.2024

LQ: Can I count vertices on 3D shapes?

TP – What do you remember about 3D shapes?

Stem sentence:

'3D shapes are…'

What does properties mean?

Stem sentence:

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08.03.2024

LQ: Can I count vertices on 3D shapes?

Let's recap again about properties of 3D shapes.

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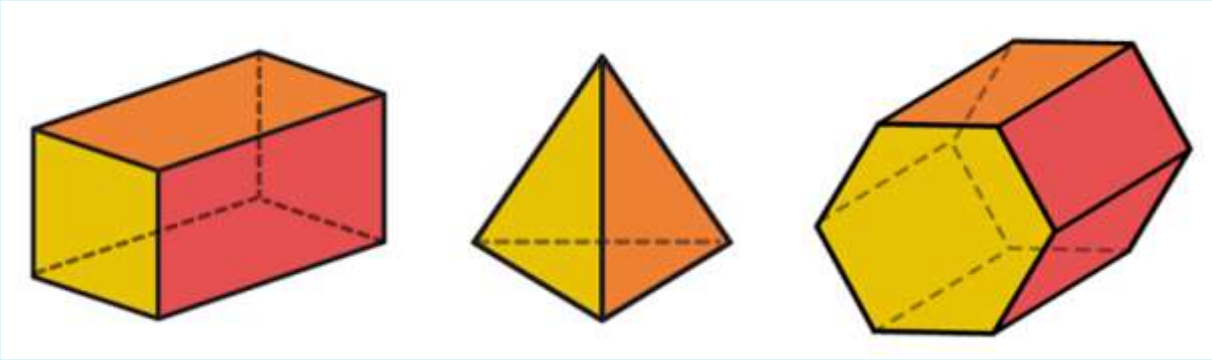

Self assessment

Do you understand what properties mean?

08.03.2024

LQ: Can I count vertices on 3D shapes?

Today you are going to count vertices of 3D shapes.
This is one of the properties of a 3D shape.

Let's recap

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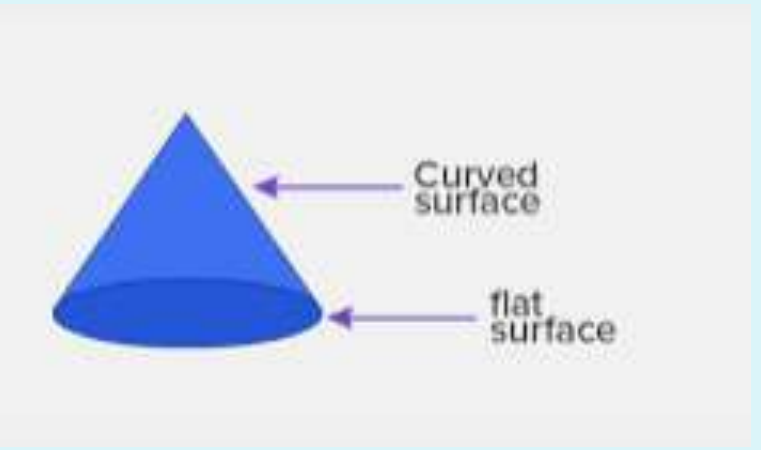

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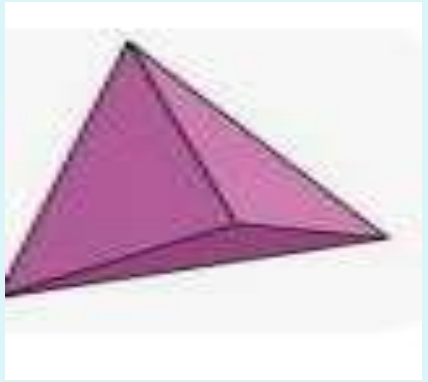
LQ: Can I count vertices on 3D shapes?



Eva is making a triangle-based pyramid.

TP: How many marshmallows does she need?

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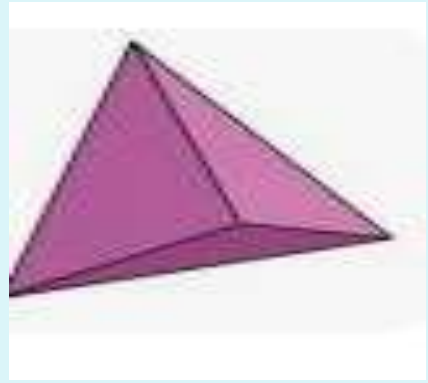
LQ: Can I count vertices on 3D shapes?



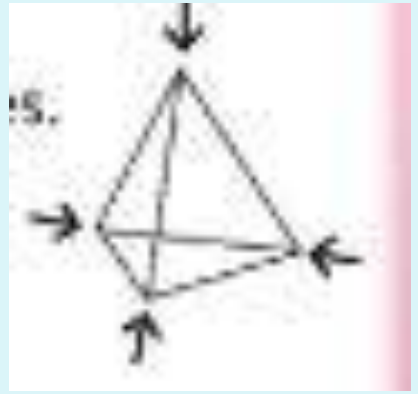
Eva is making a triangle-based pyramid.

Eva makes the base first.

Eva uses 3 sticks and joins them at one vertex at the top.

There is a marshmallow at each vertex.

A pyramid with a triangle base has four vertices. Eva needs four marshmallows for this pyramid.



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LQ: Can I count vertices on 3D shapes?

Now you are going to make square based pyramid.

TP: How many sticks will you need? How many marshmallows will you need?

A pyramid with a square base has five vertices.
You need five marshmallows for this pyramid.

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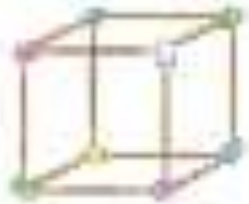
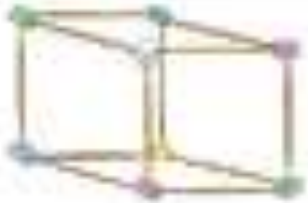
LQ: Can I count vertices on 3D shapes?

TP: How many vertices does each shape have?

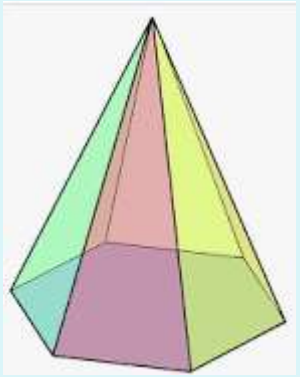
Shape	Number of vertices
	
	
	

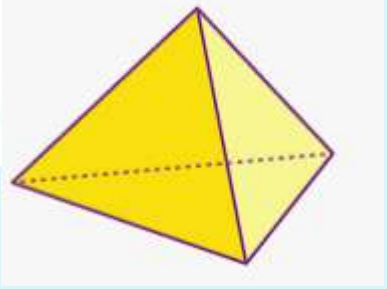
08.03.2024

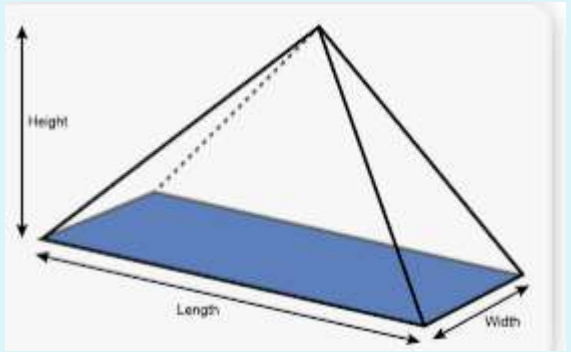
Take photos

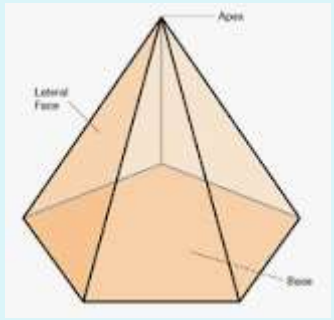
LQ: Can I count vertices on 3D shapes?

Now we are going to make different pyramids. Each pyramid has a different base. Choose one.









08.03.2024

LQ: Can I count vertices on 3D shapes?

Next step