

# GEOMETRY

3D SHAPES



# 3D SHAPES



3D shapes are everywhere!

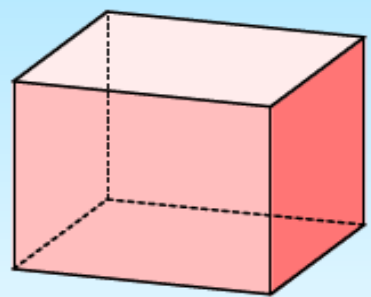
If you look around, you will see objects that are made from many different 3D shapes.

*How many can you identify?*

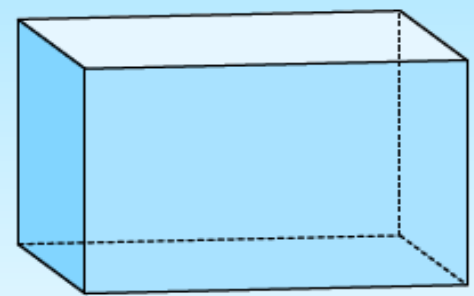


# 3D SHAPES

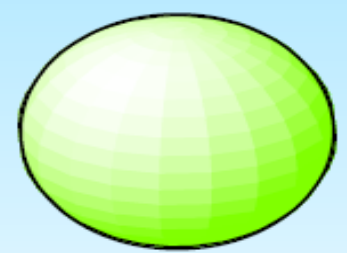
Here are some 3D shapes that you should know.



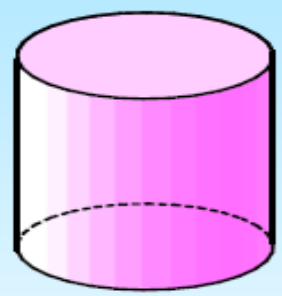
Cube



Cuboid



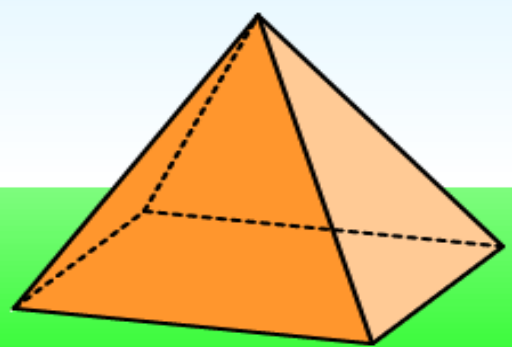
Sphere



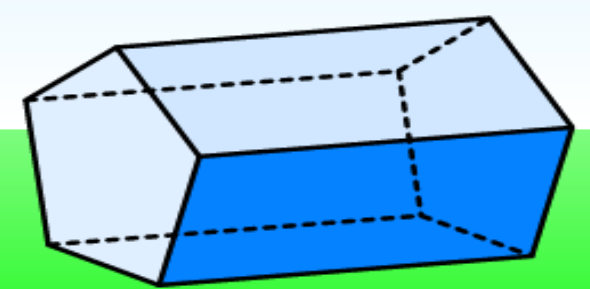
Cylinder



Cone



Pyramid



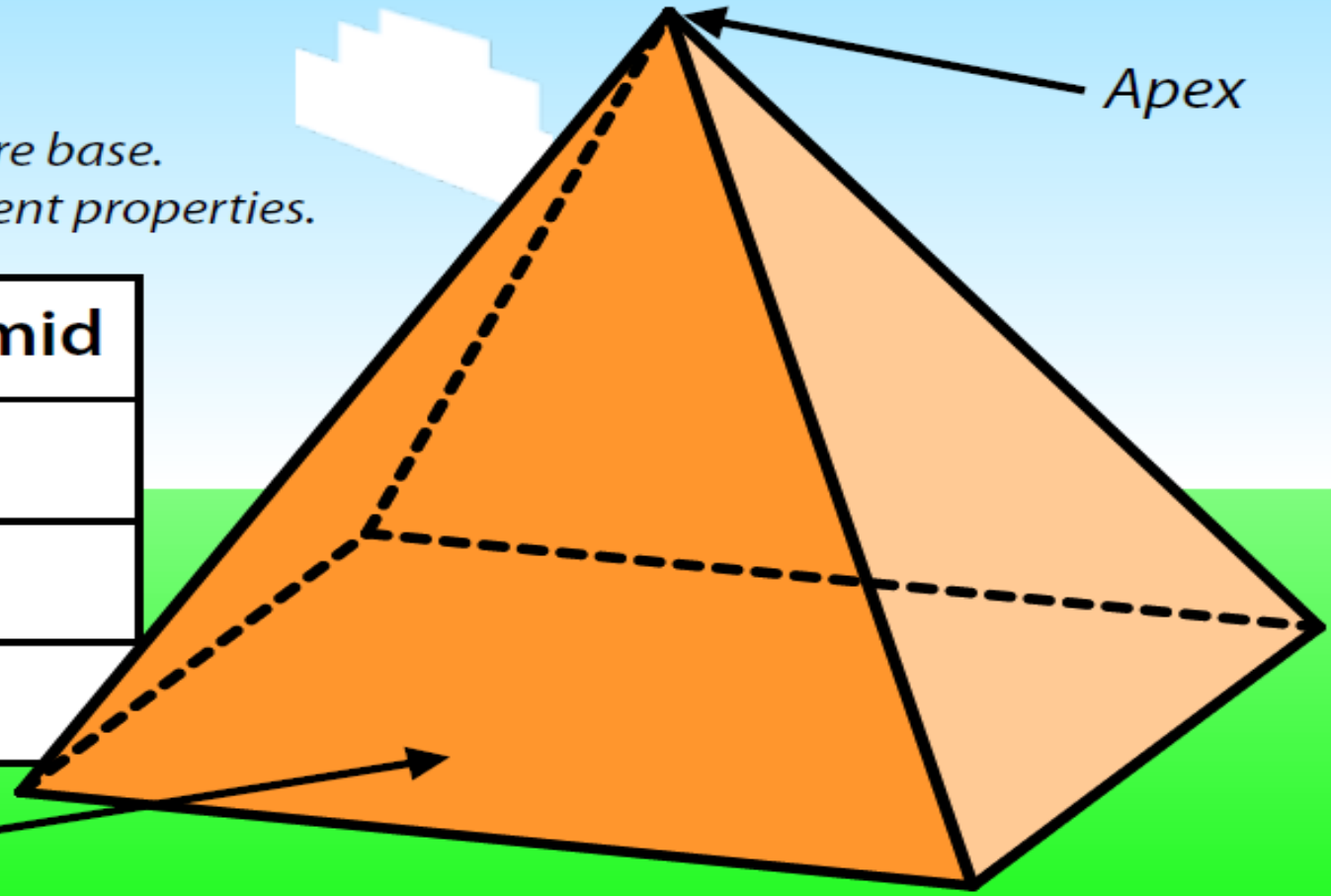
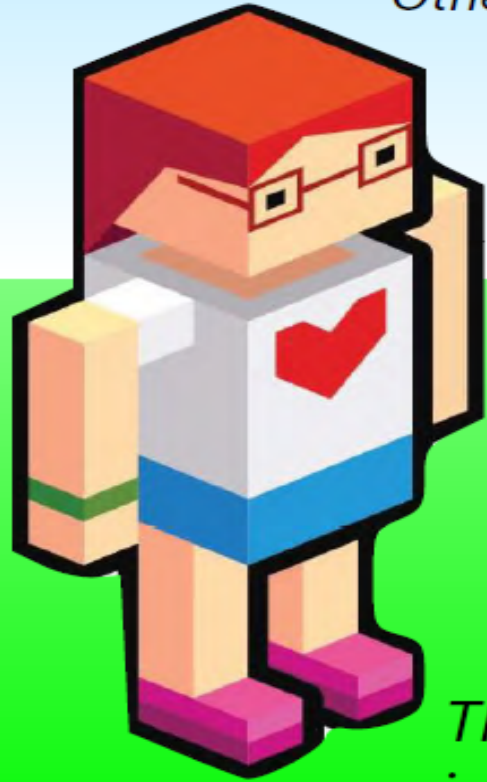
Prism

# PYRAMID

A pyramid has a flat base with triangles that meet to make a point at the top.

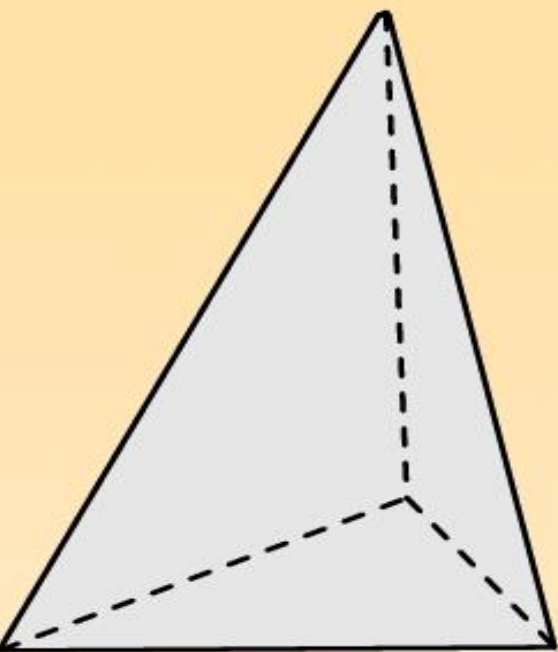
*This pyramid has a square base.  
Other pyramids will have different properties.*

Name	Pyramid
Faces	5
Edges	8
Vertices	5

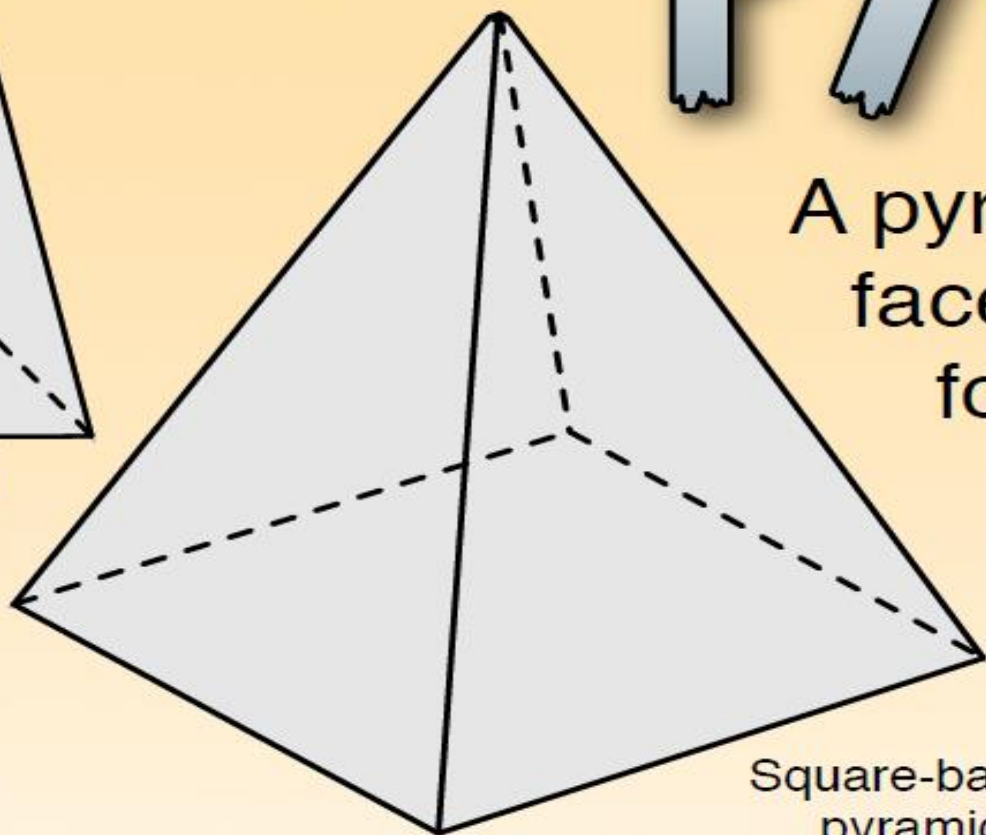


The base of a pyramid can be any shape with straight sides, including a triangle, square, rectangle, hexagon or octagon!

# PYRAMIDS




Triangle-based pyramid



Square-based pyramid

A pyramid has a flat base and faces that slope inwards to form a vertex at the top.

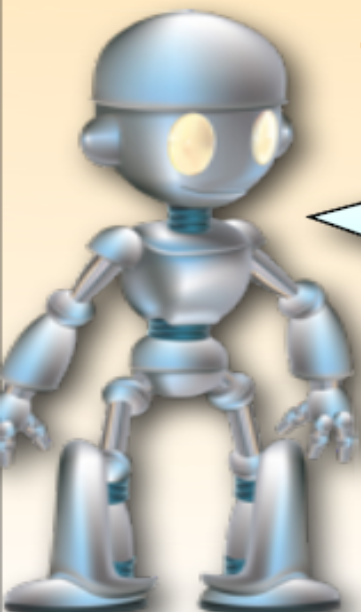
Pyramids are named according to the shape of their base.



The Great Pyramids of Egypt are the most famous pyramids in the world. Do you know what shape their bases are?

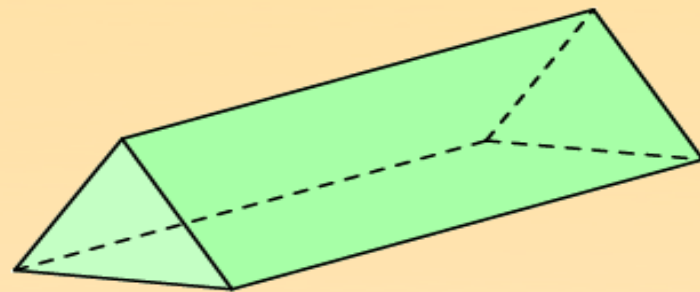
# PRISMS

The two opposite faces on a prism are always the same shape. A prism can be also cut into slices which are all the same shape.

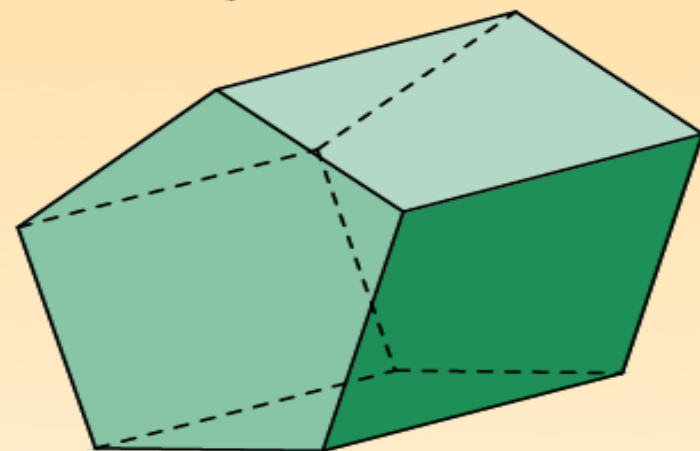


Did you know that that cubes and cuboids are rectangular prisms?

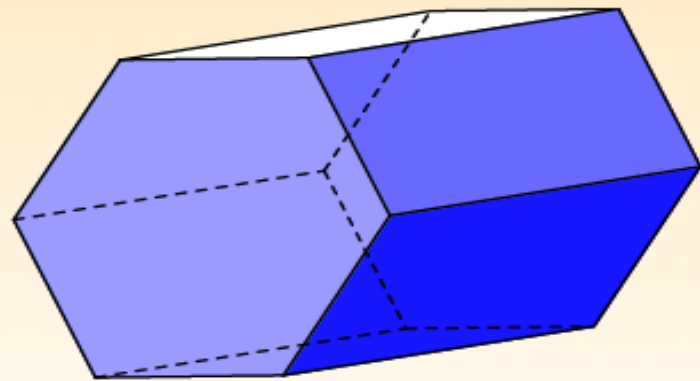
## TRIANGULAR PRISM



## PENTAGONAL PRISM



## HEXAGONAL PRISM

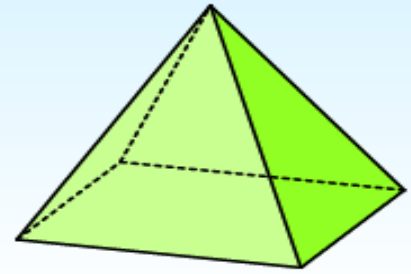
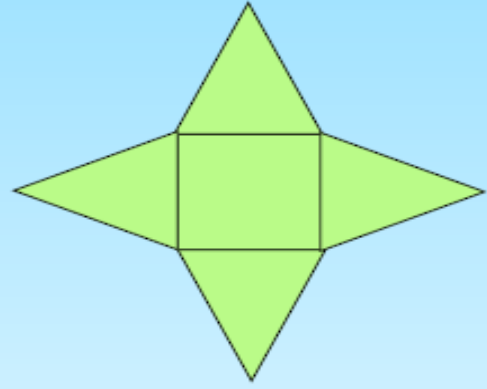
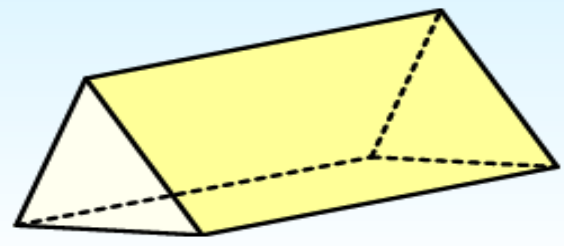
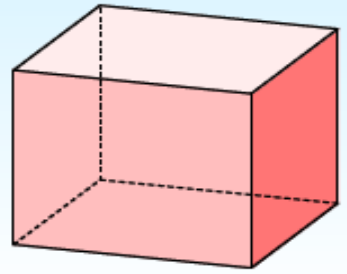
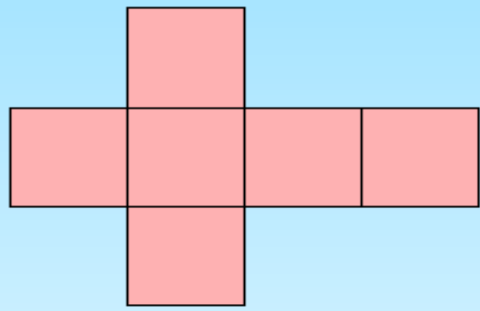


How many other prisms can you think of?

# NETS

A net is a flat shape that can be folded up to make a 3D shape.

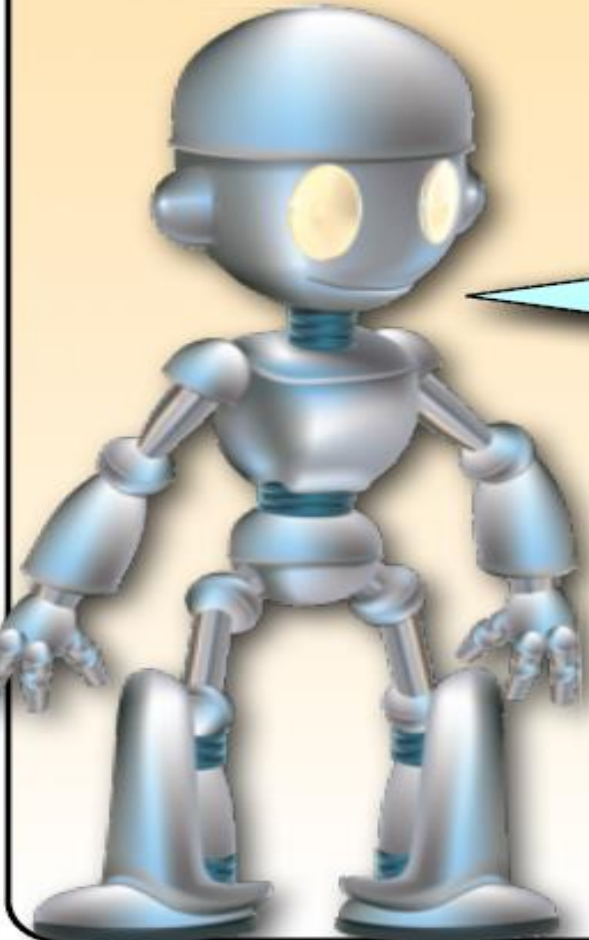
Here are a few examples.



*Sometimes, different nets can make the same shape!*

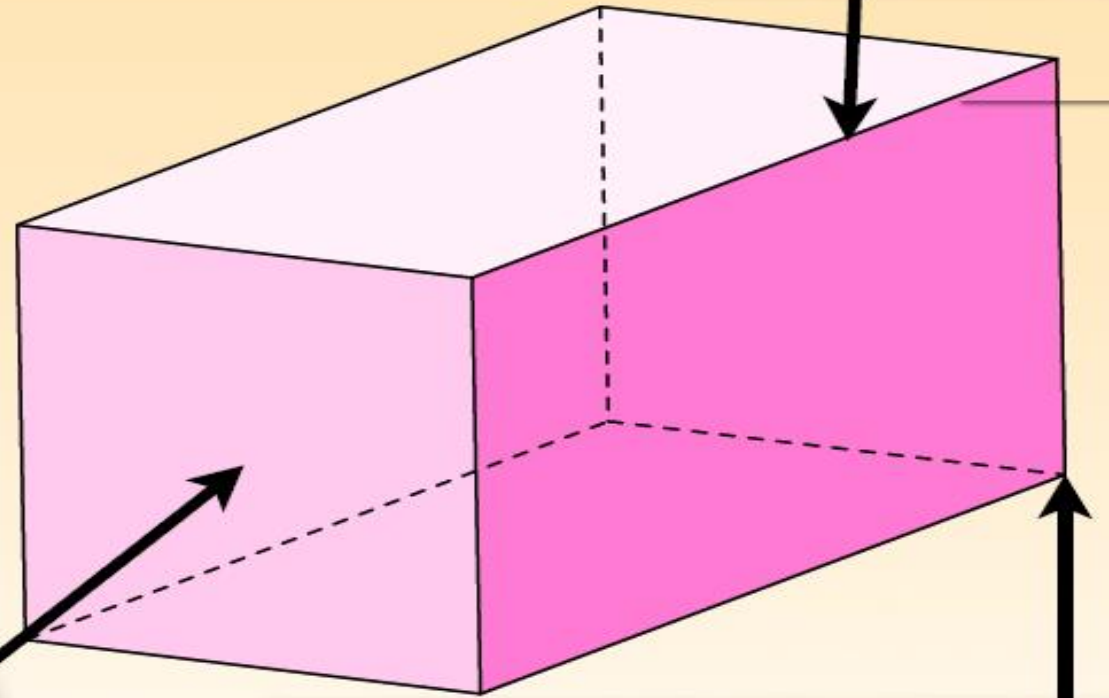


# 3D SHAPES



3D shapes have **faces**, **vertices** and **edges**.  
Do you know where they are?

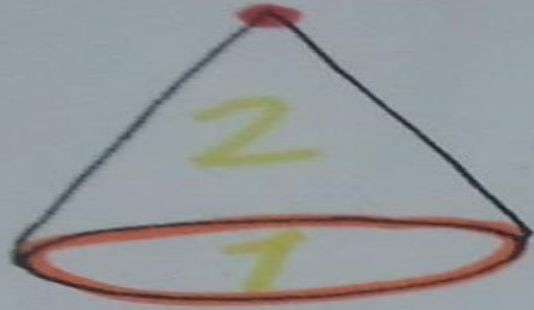
**Edges** are where the two faces meet.



**Faces** are the flat surfaces.

A **vertex** is another word for corner. The plural is **vertices**.

# 3-D Shapes



Cone

Faces: 2

Edges: 1

Vertices: 1

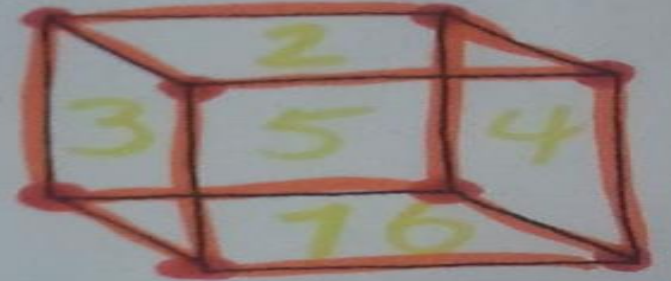


Cylinder

Faces: 3

Edges: 2

Vertices: 0



Cube

Faces: 6

Edges: 12

Vertices: 8

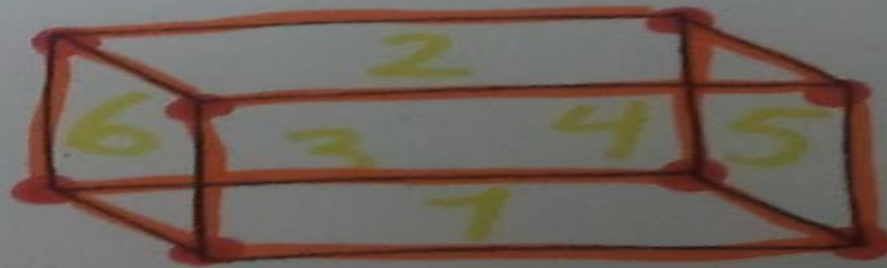


Pyramid

Faces: 5

Edges: 8

Vertices: 5

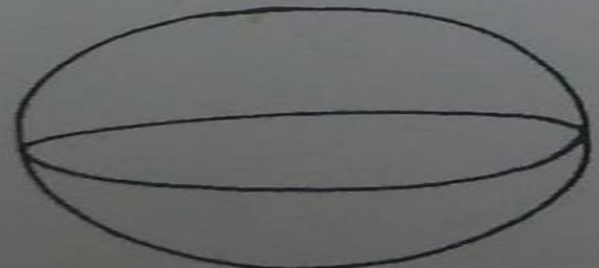


Rectangular Prism

Faces: 6

Edges: 12

Vertices: 8



Sphere

Faces: 1

Edges: 0

Vertices: 0

1  
0  
0