

Space and 3D Shape

Learning Objective:

To be able to identify and describe 3D shapes and their properties.





What is a 3D shape?

**How is it
different to a 2D
shape?**

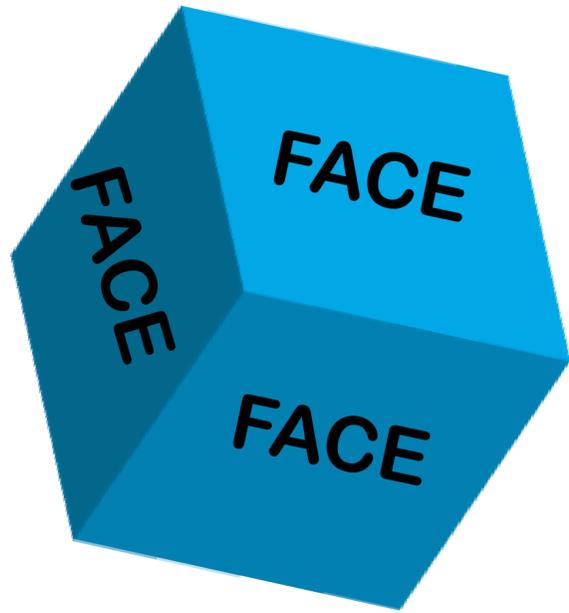


How many 3D shapes can you name? Write your ideas in the box.

A large, empty rectangular box with a blue border, intended for writing answers to the question above.

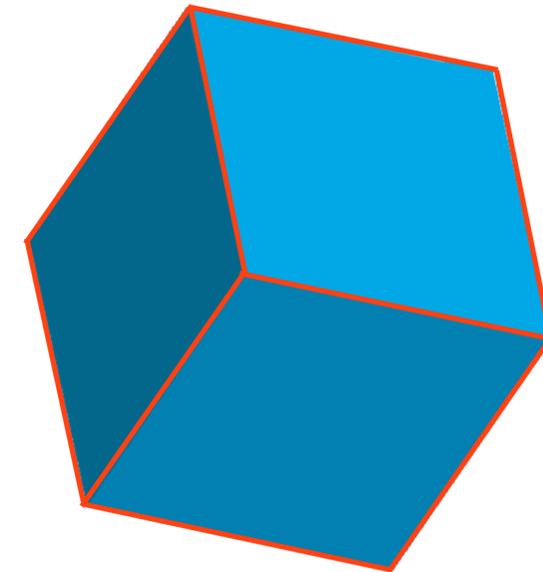


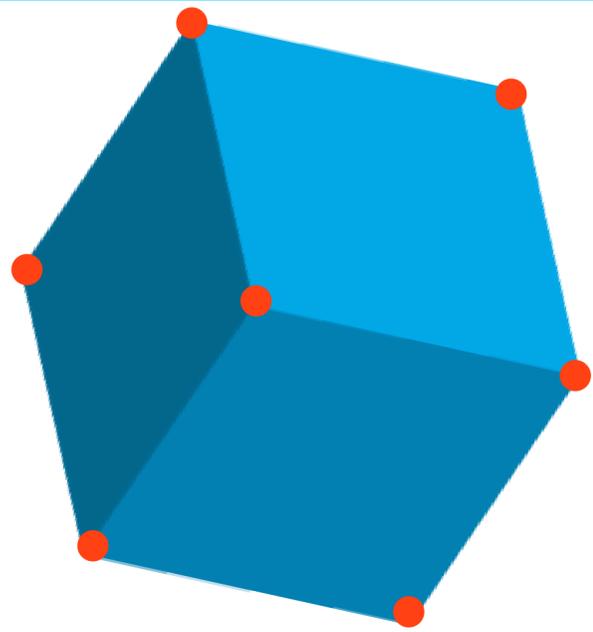
When we describe 3D shapes, we think about what features they have.
3D shapes have **FACES**, **EDGES** and **VERTICES**.



This shape is a cube.
The flat parts of the shape are the **FACES**.

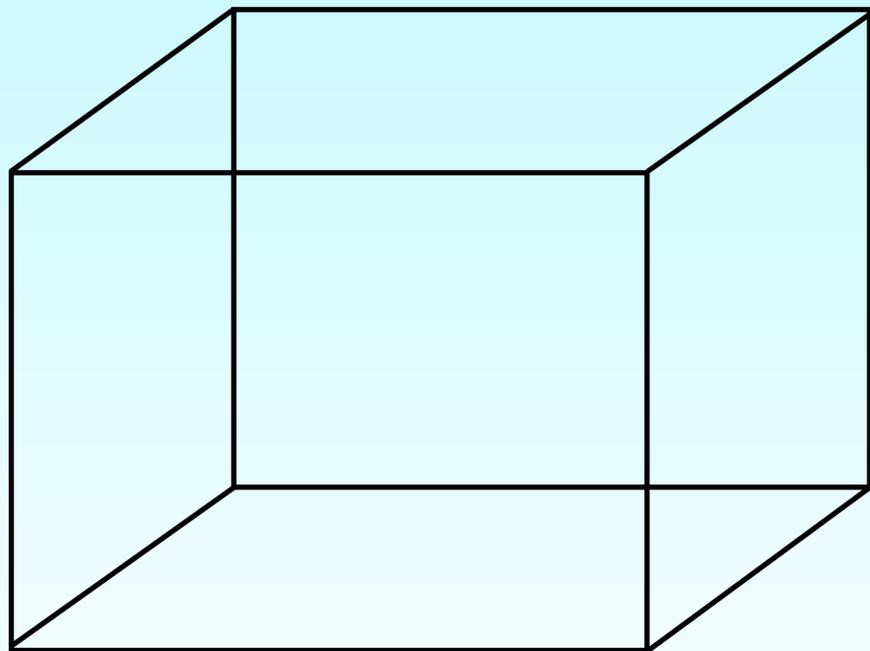
The lines where the faces meet are called the **EDGES**.





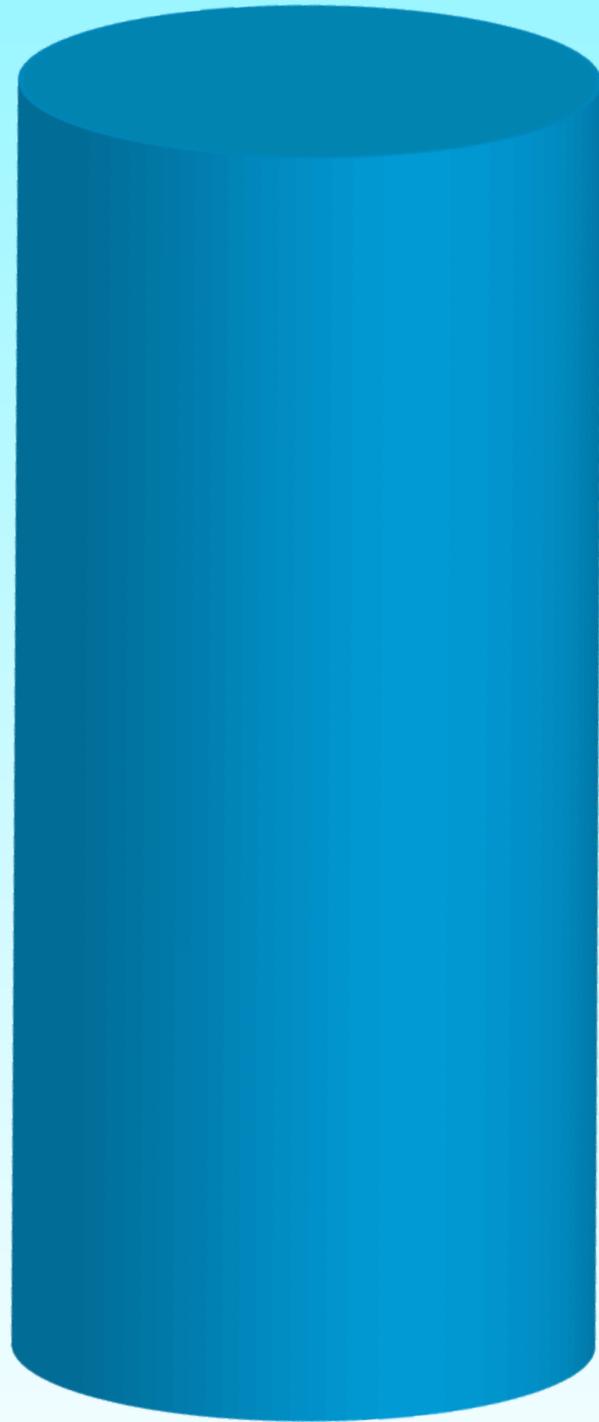
The point where edges meet is called a **VERTEX**. A vertex is like a corner. If there is more than one vertex they are called **vertices**.

Altogether, a cube has 6 faces, 12 edges and 8 vertices.



Can you see them all?





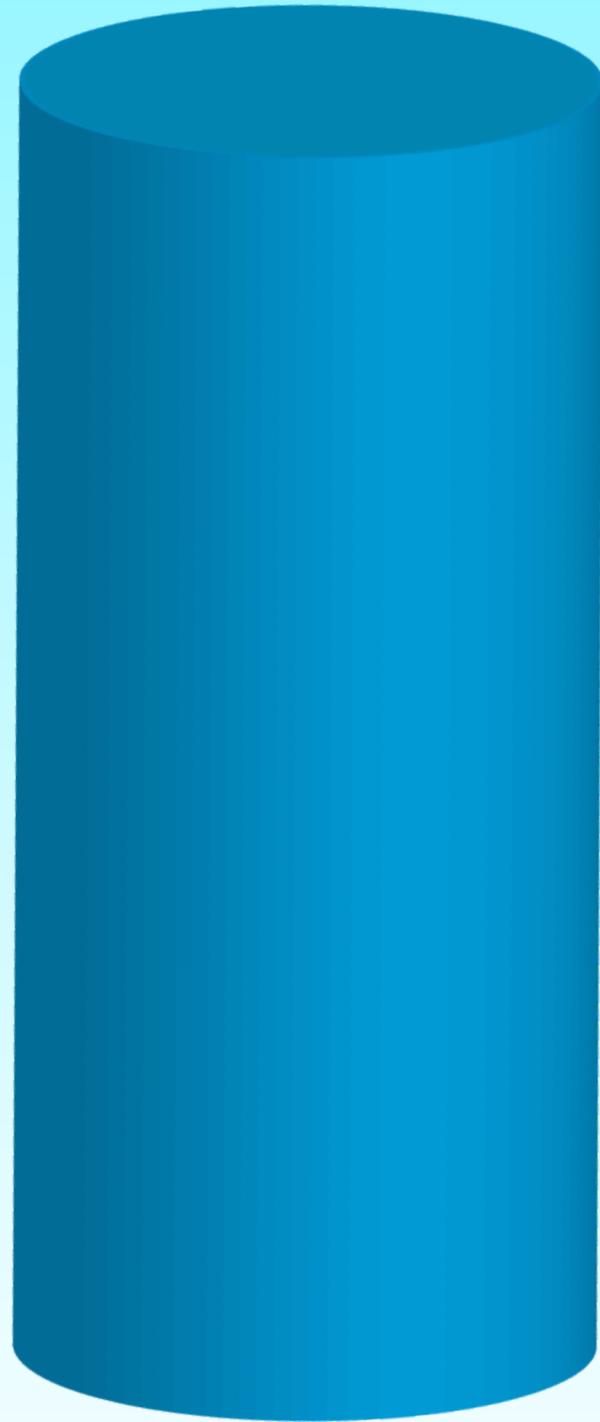
Faces: 3

Edges:

Vertices: 0

**How many
edges does this
shape have?**



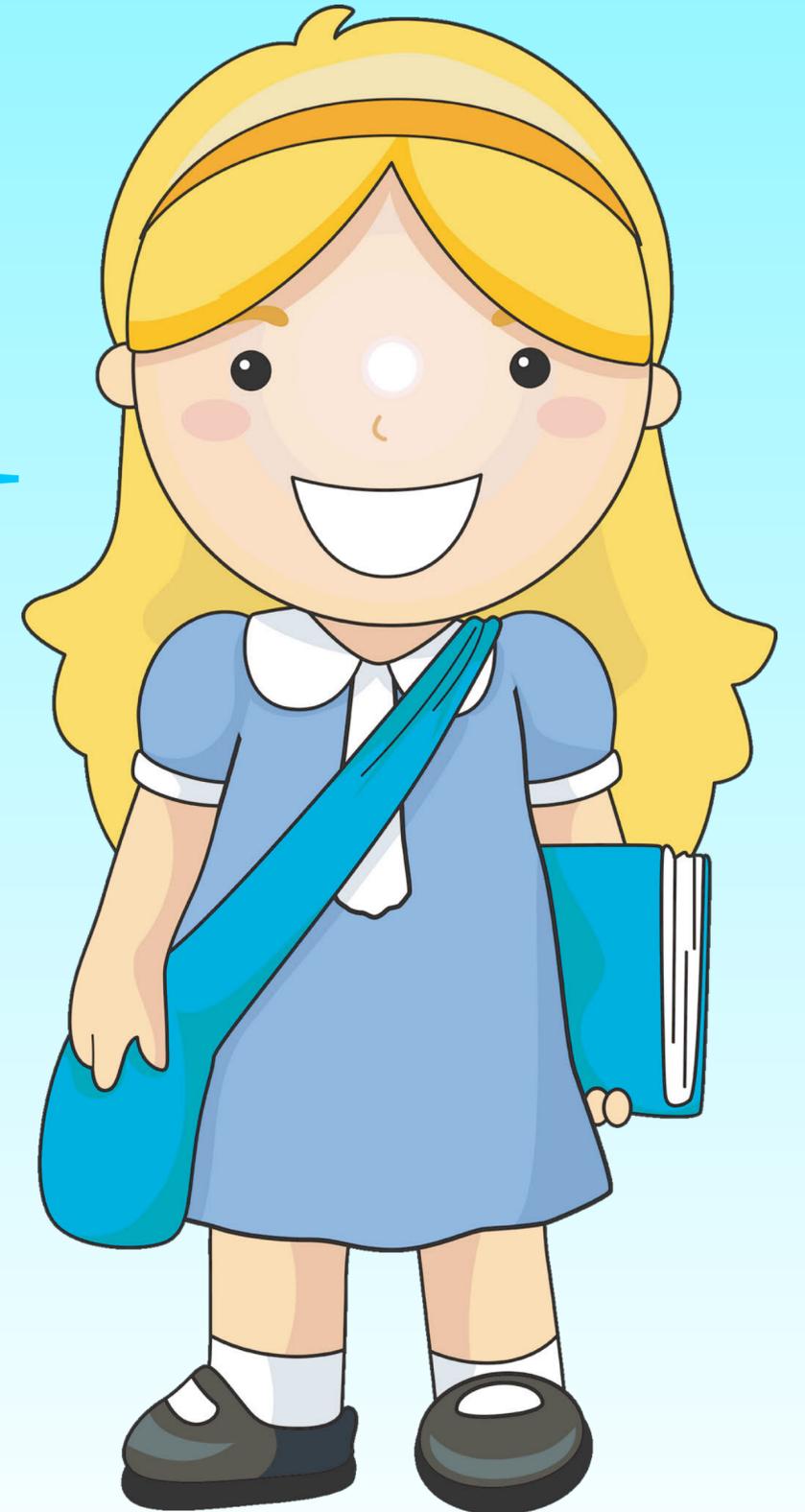


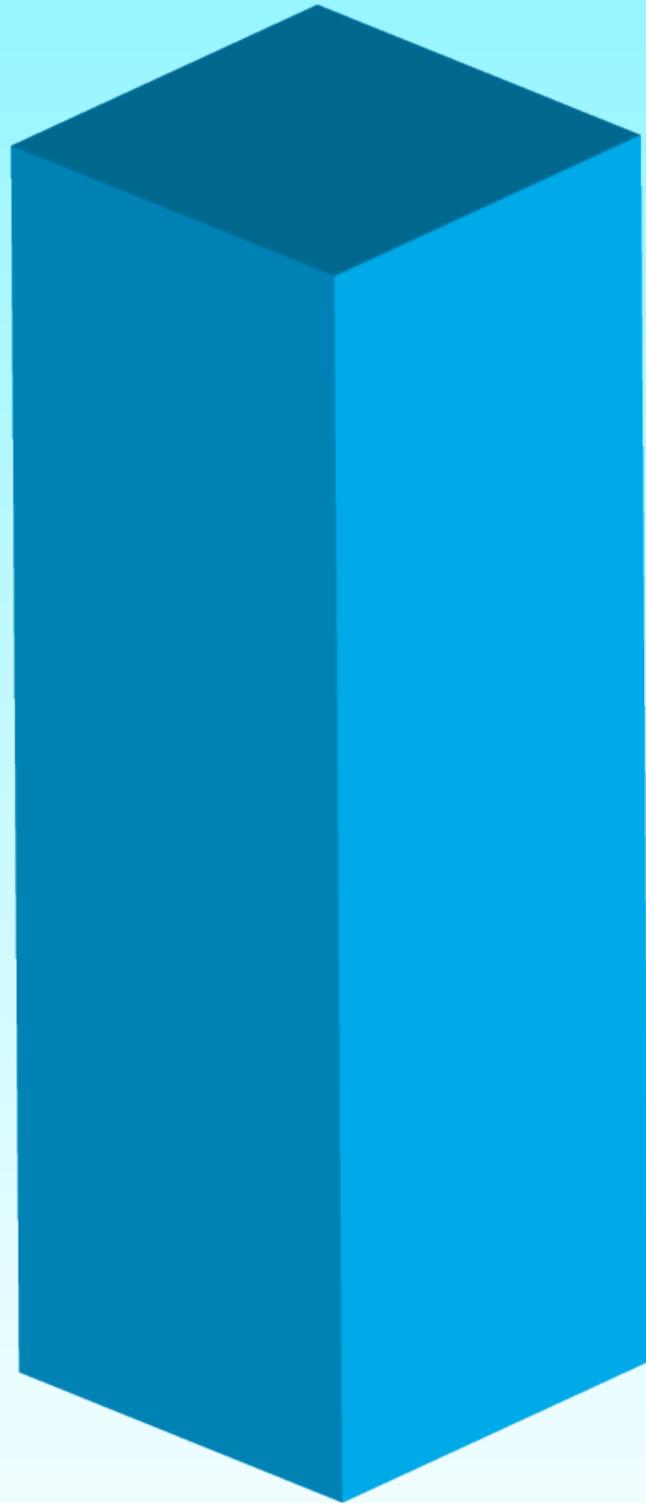
Did you get it right?

Faces: 3

Edges: 2

Vertices: 0



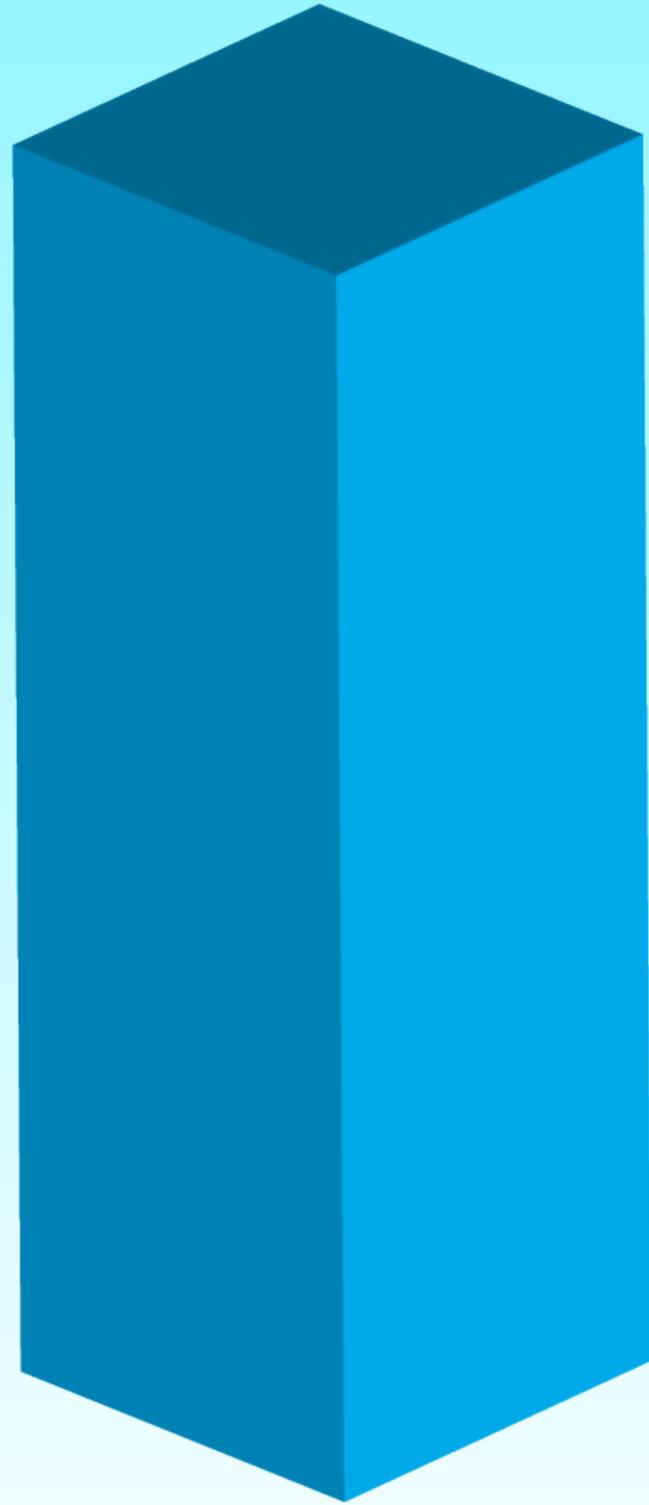


Faces: 6

Edges: 12

Vertices:

**How many
vertices does
this shape
have?**

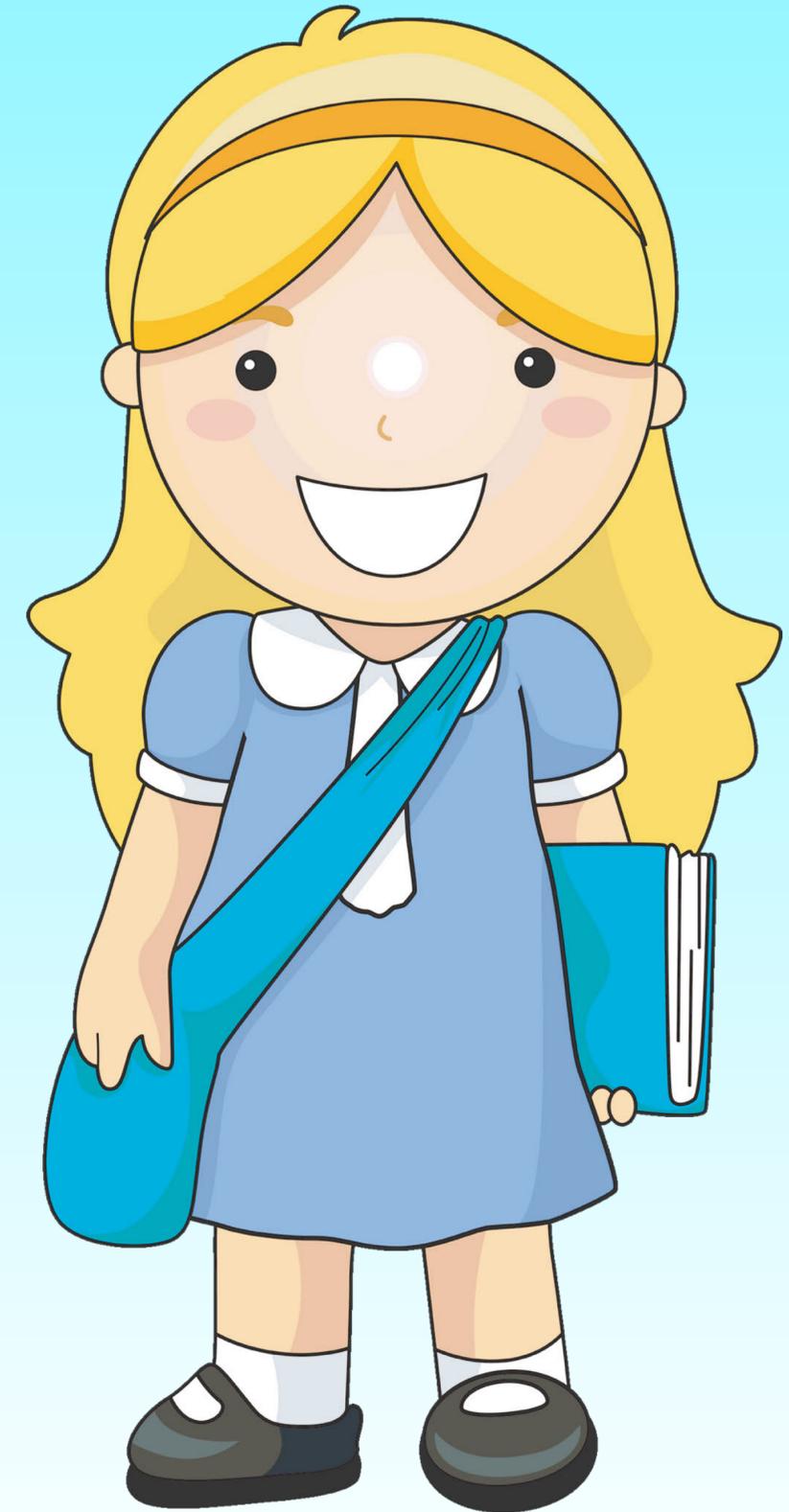


**Did you get it
right?**

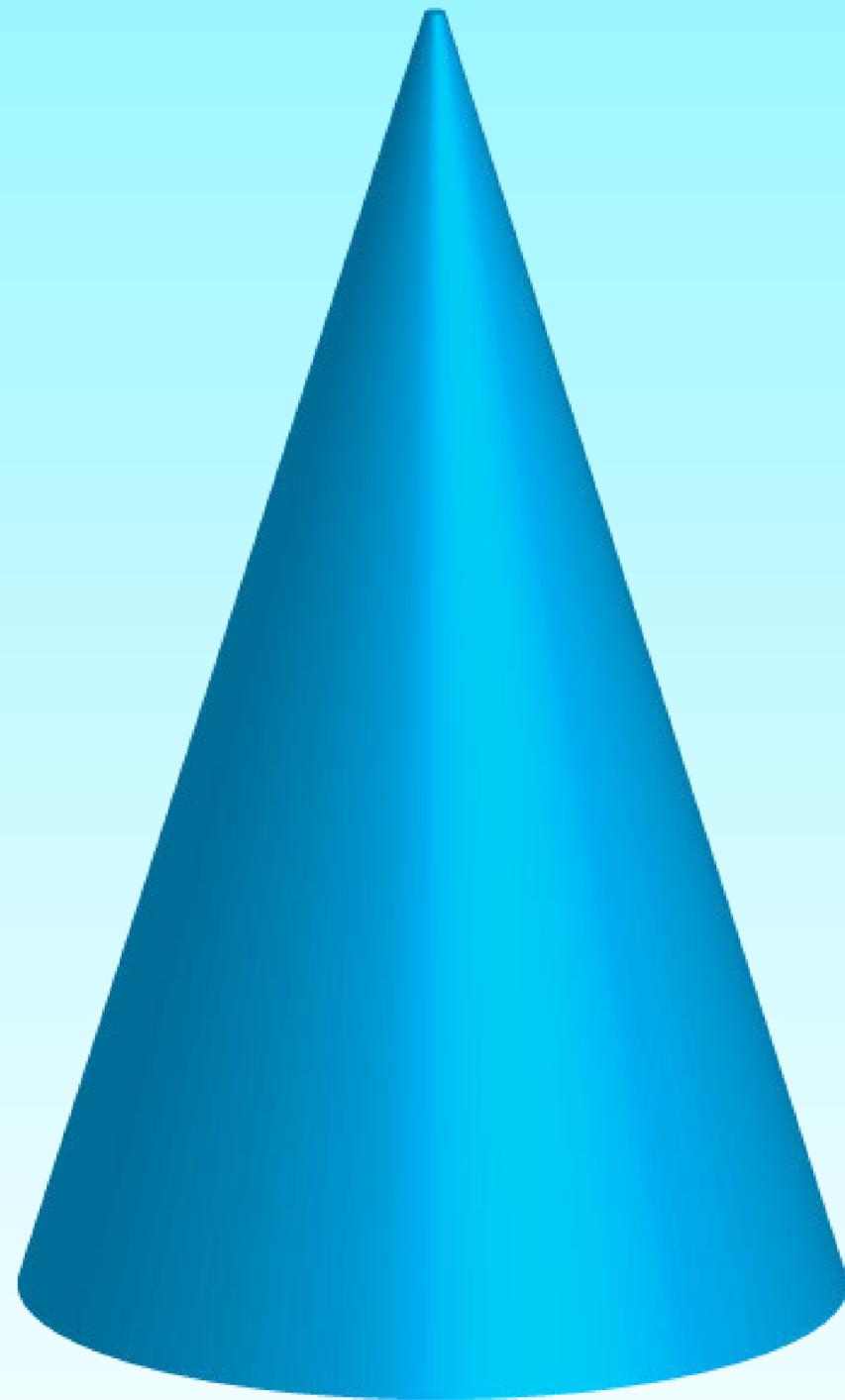
Faces: 6

Edges: 12

Vertices: 8



Cone

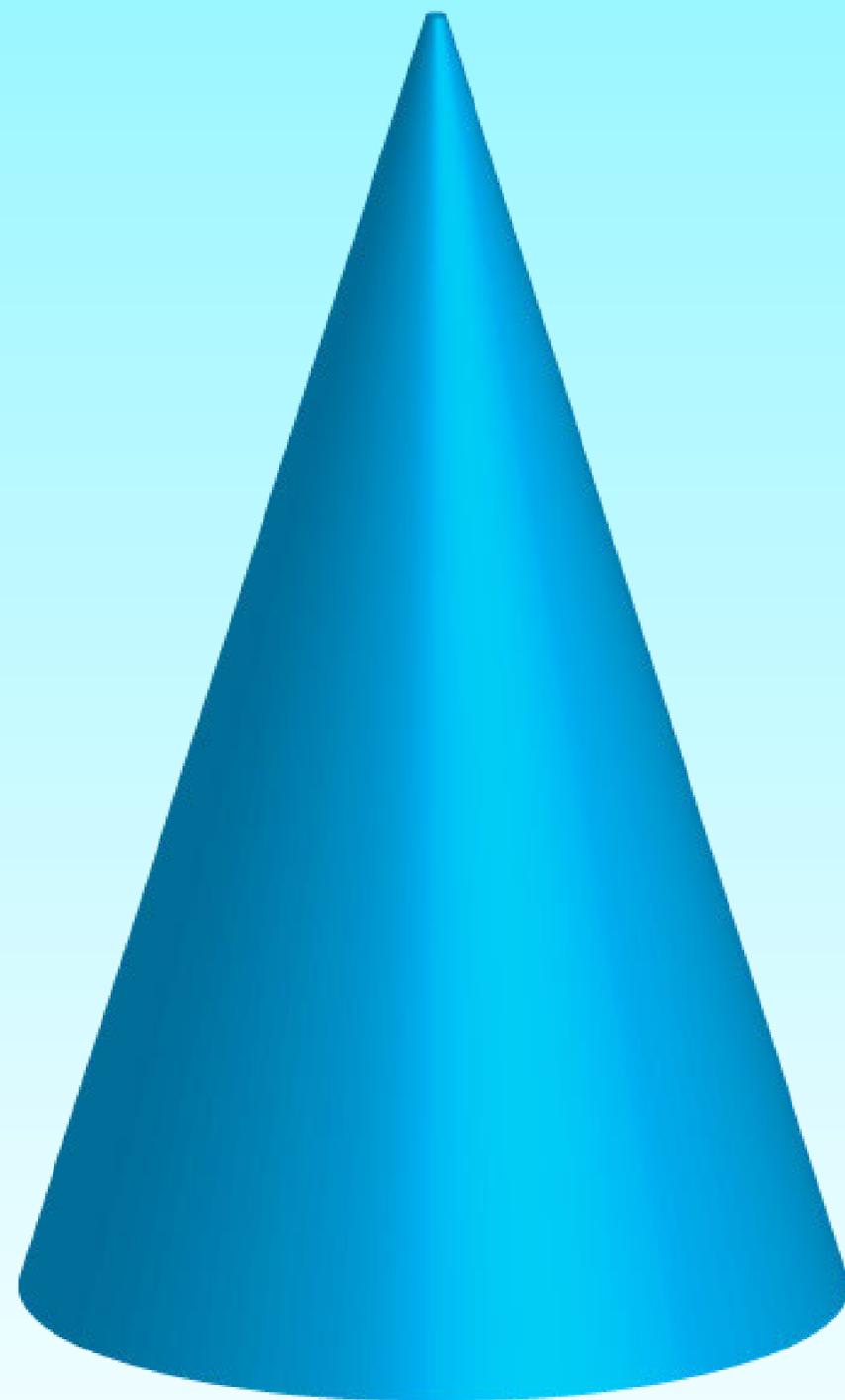


Faces:

Edges: 1

Vertex: 1

**How many
faces does
this shape
have?**

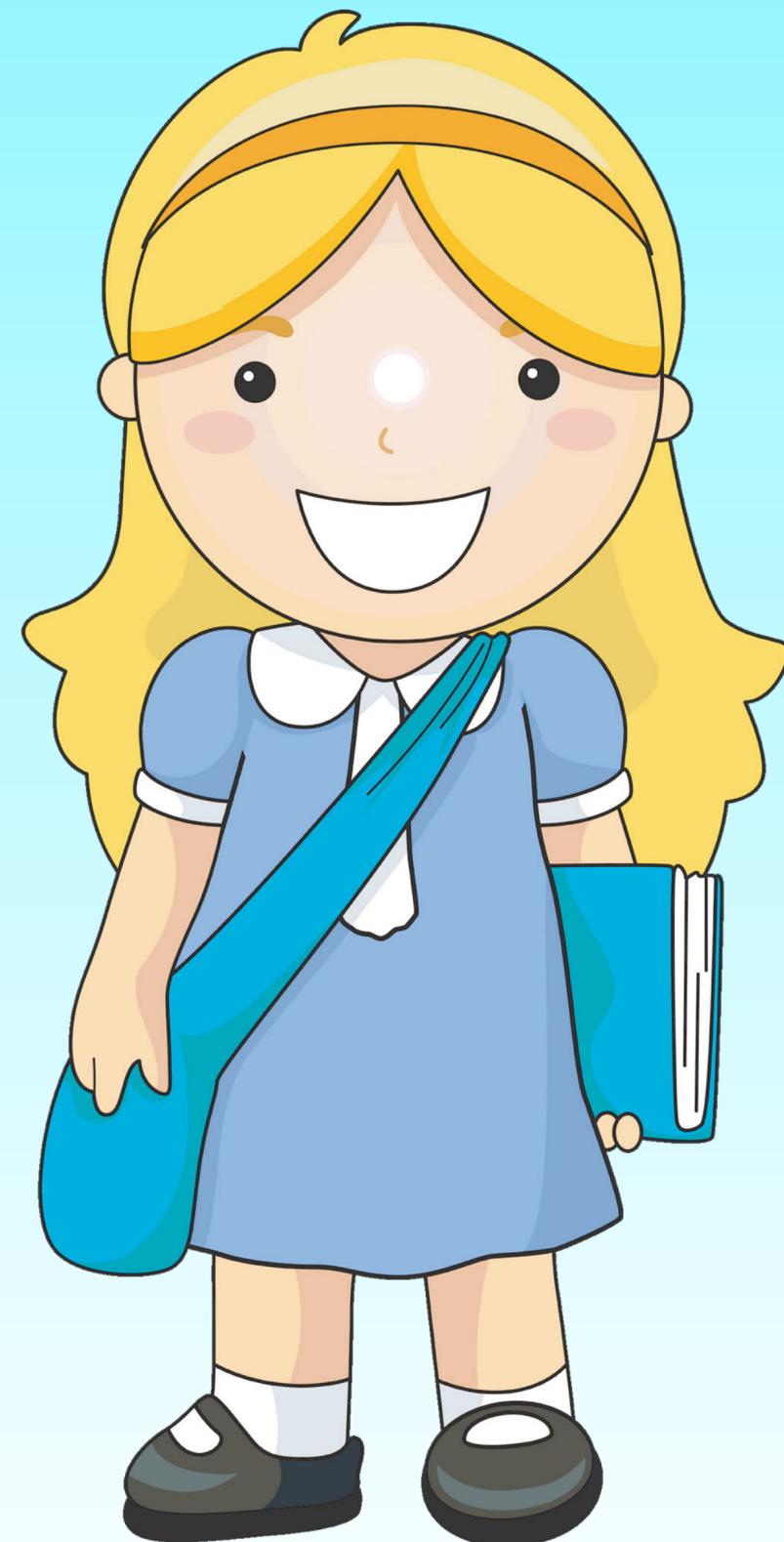


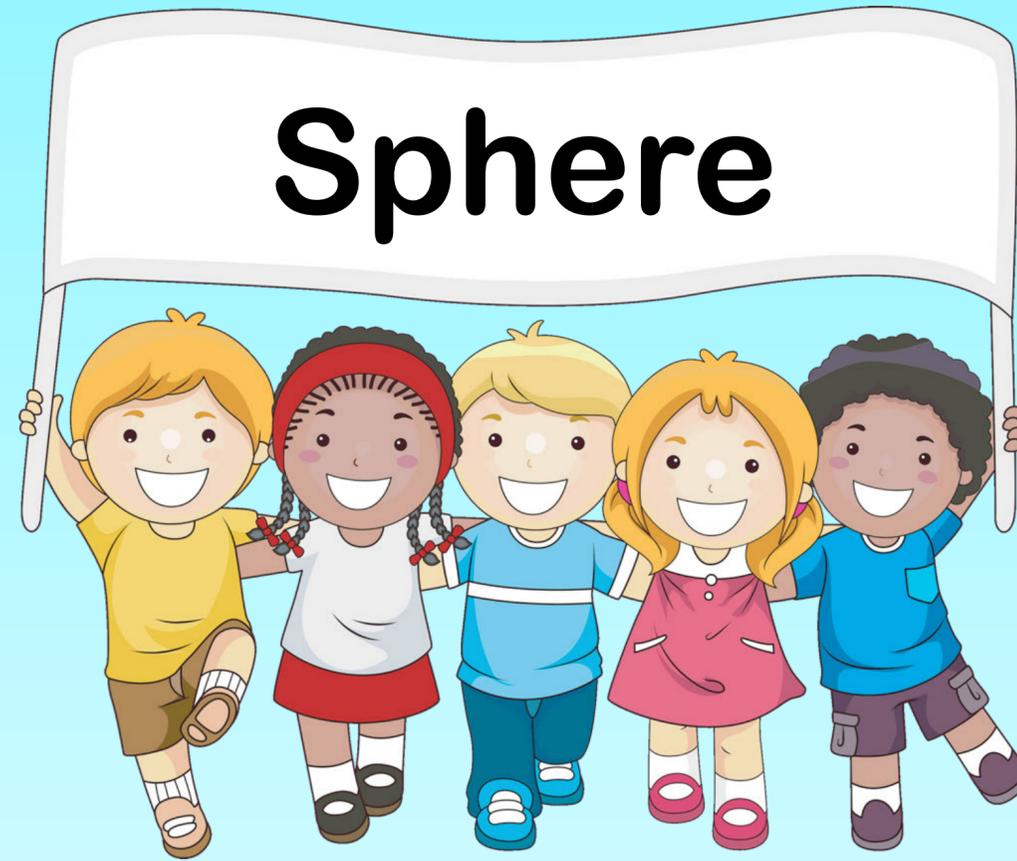
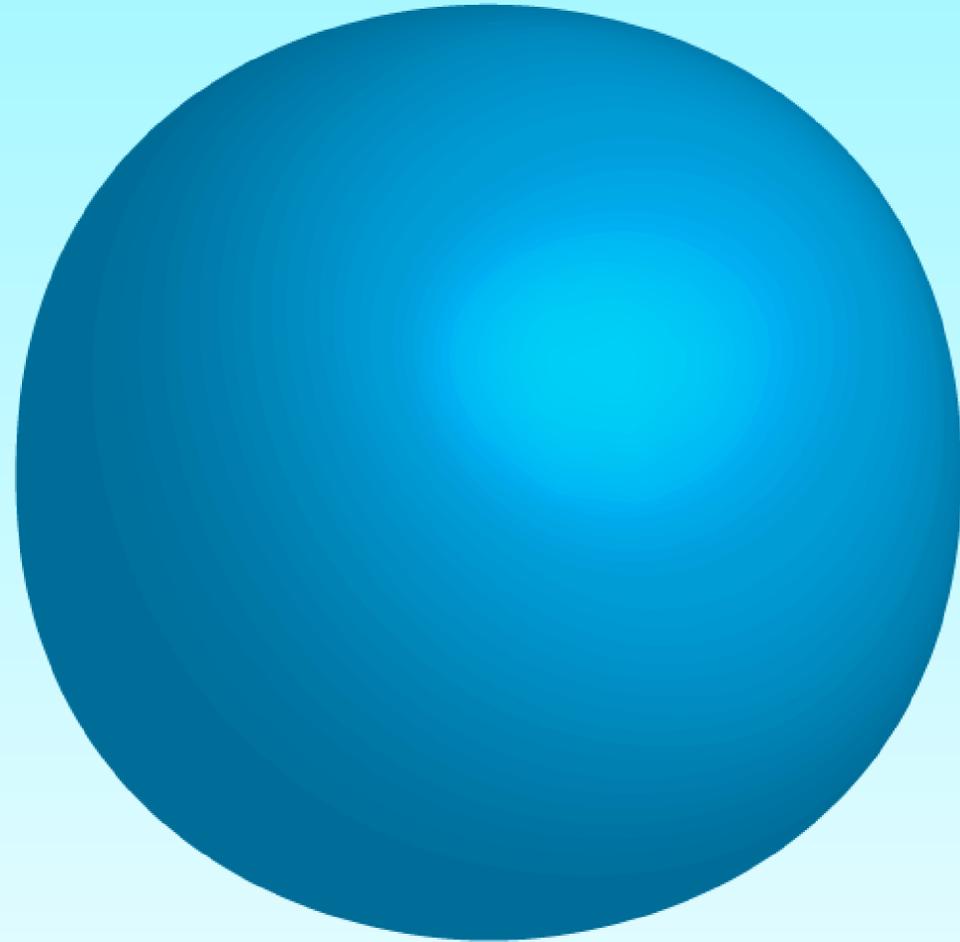
Did you get it
right?

Faces: 2

Edges: 1

Vertices: 1



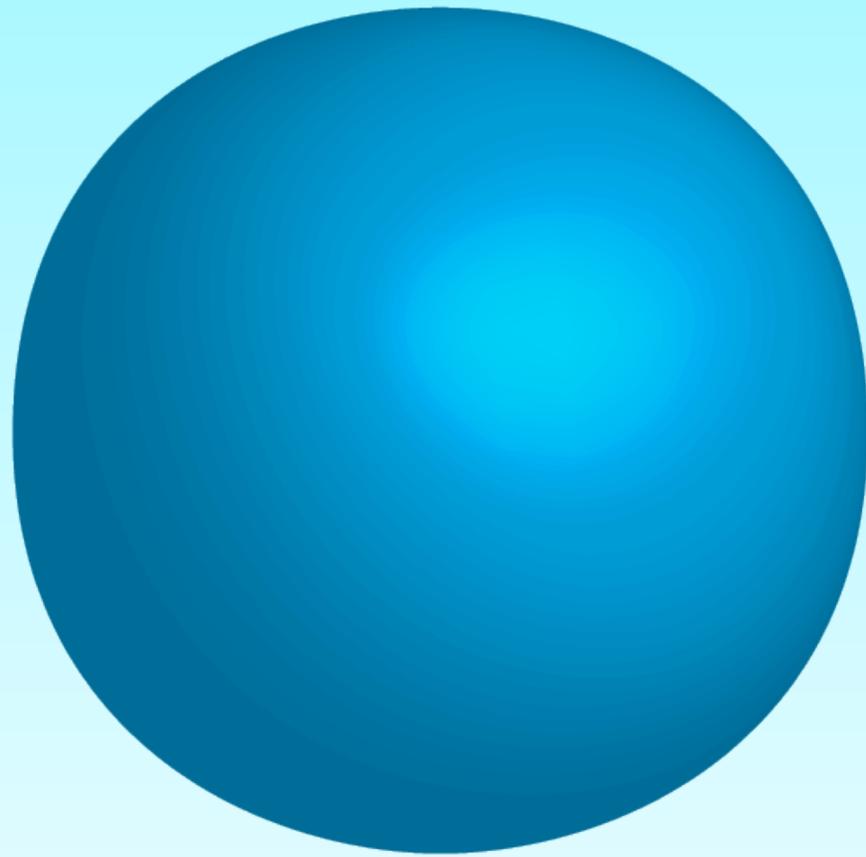


Faces:

Edges: 0

Vertices: 0

**How many
faces does
this shape
have?**

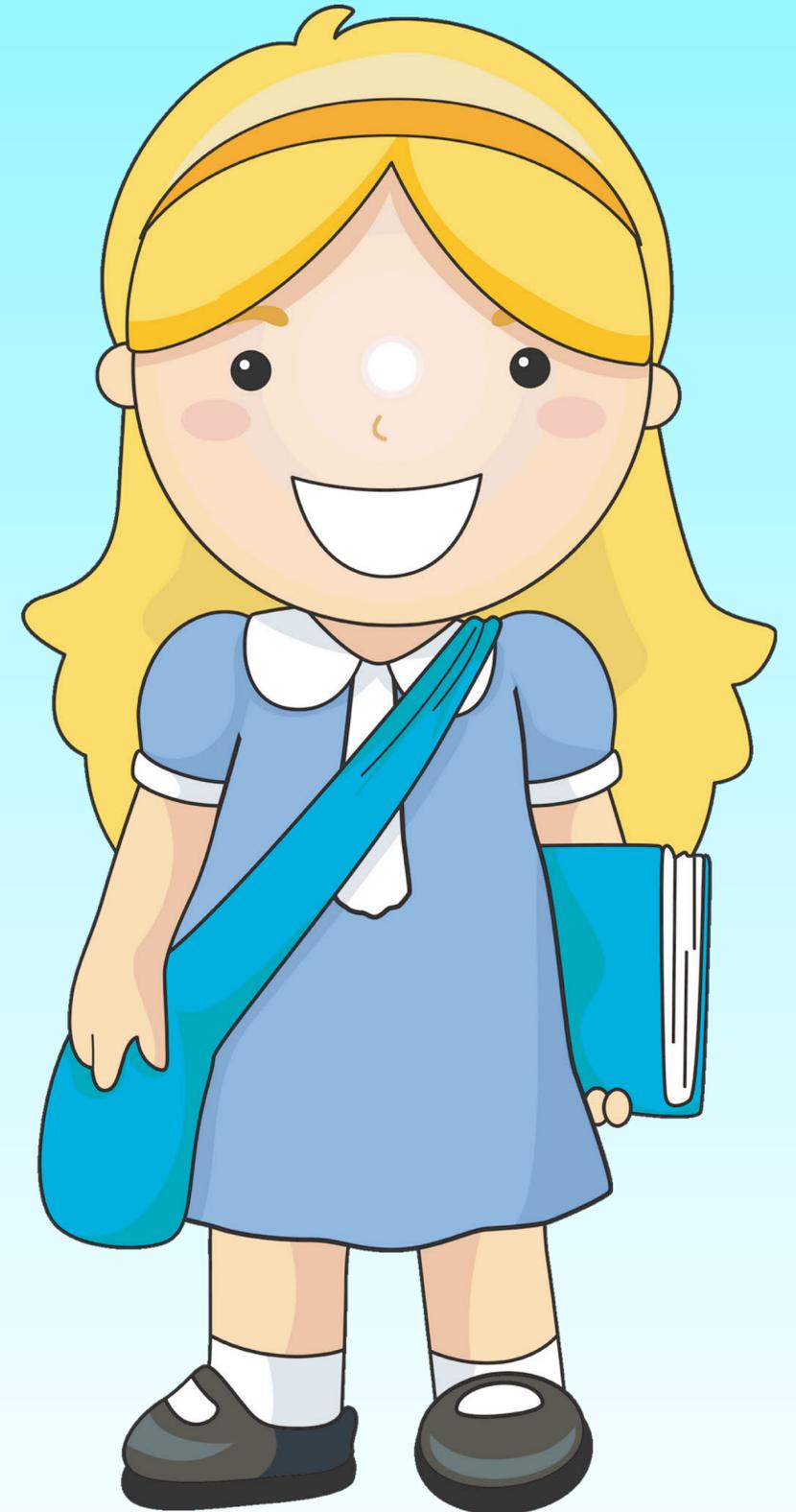


Did you get it
right?

Faces: 1

Edges: 0

Vertices: 0





Triangular prism



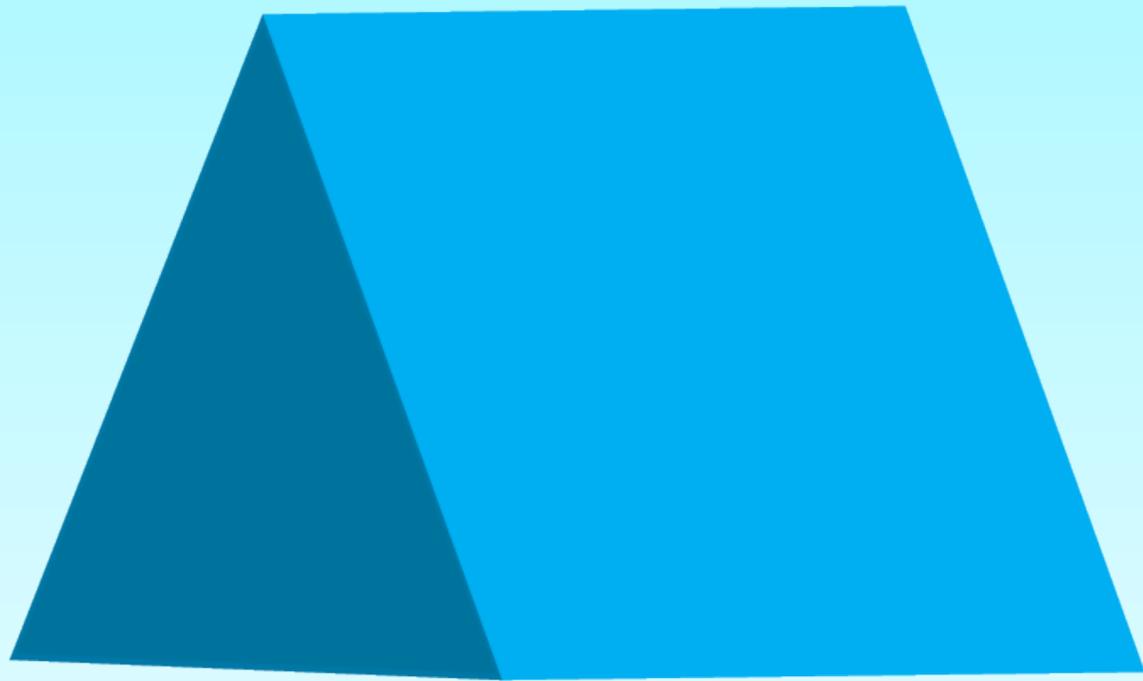
Faces: 5

Edges:

Vertices: 6

**How many
edges does
this shape
have?**



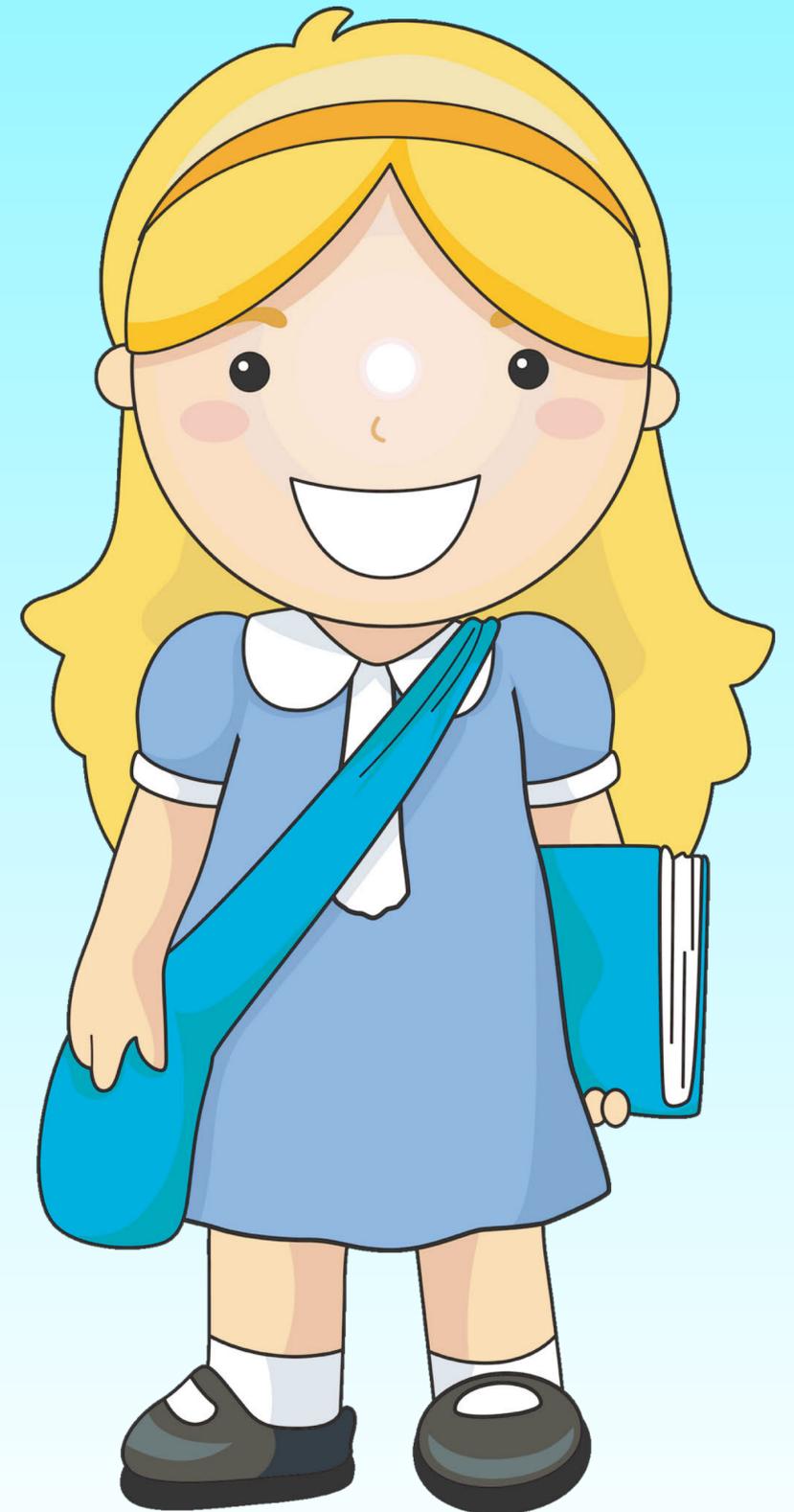


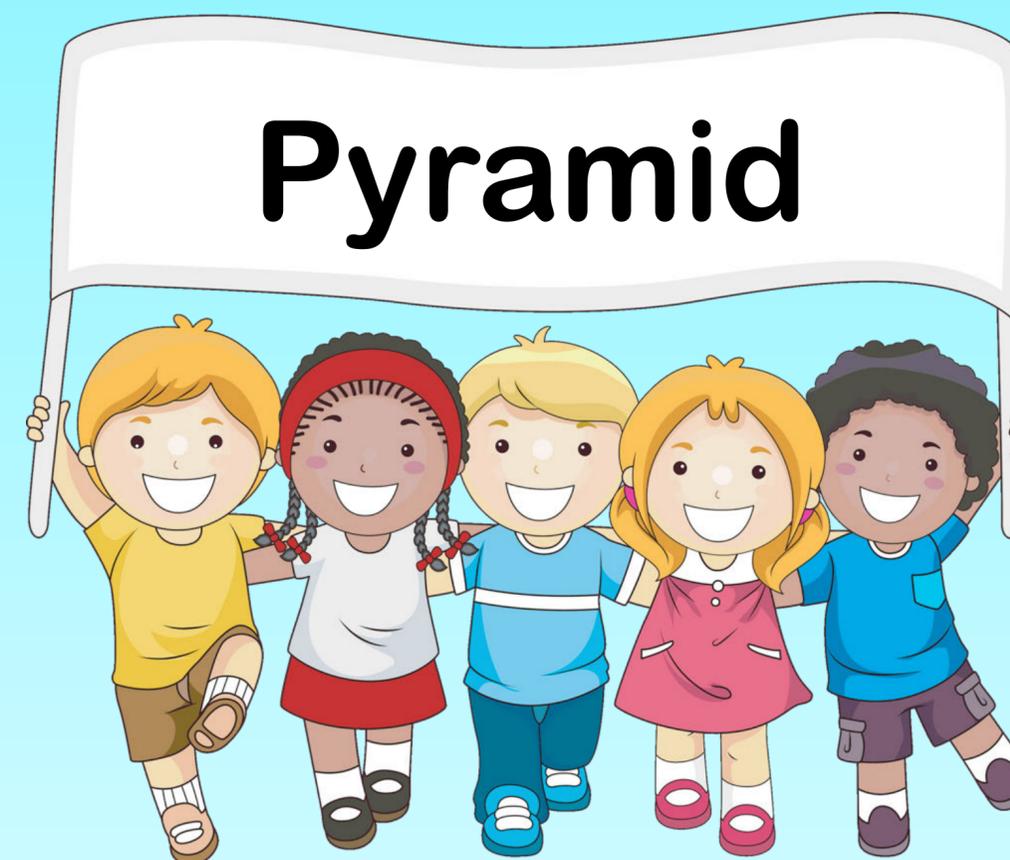
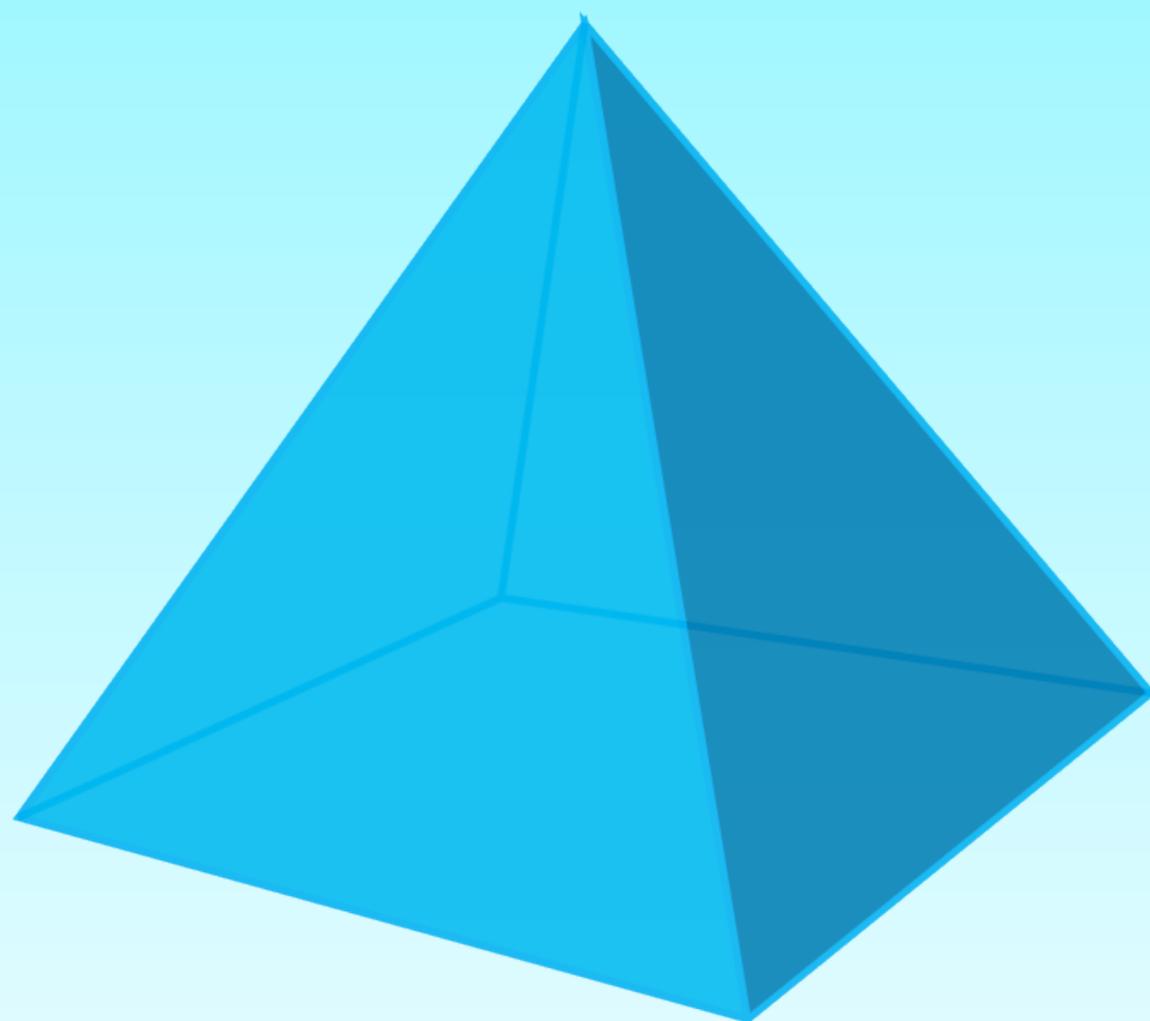
**Did you get it
right?**

Faces: 5

Edges: 9

Vertices: 6





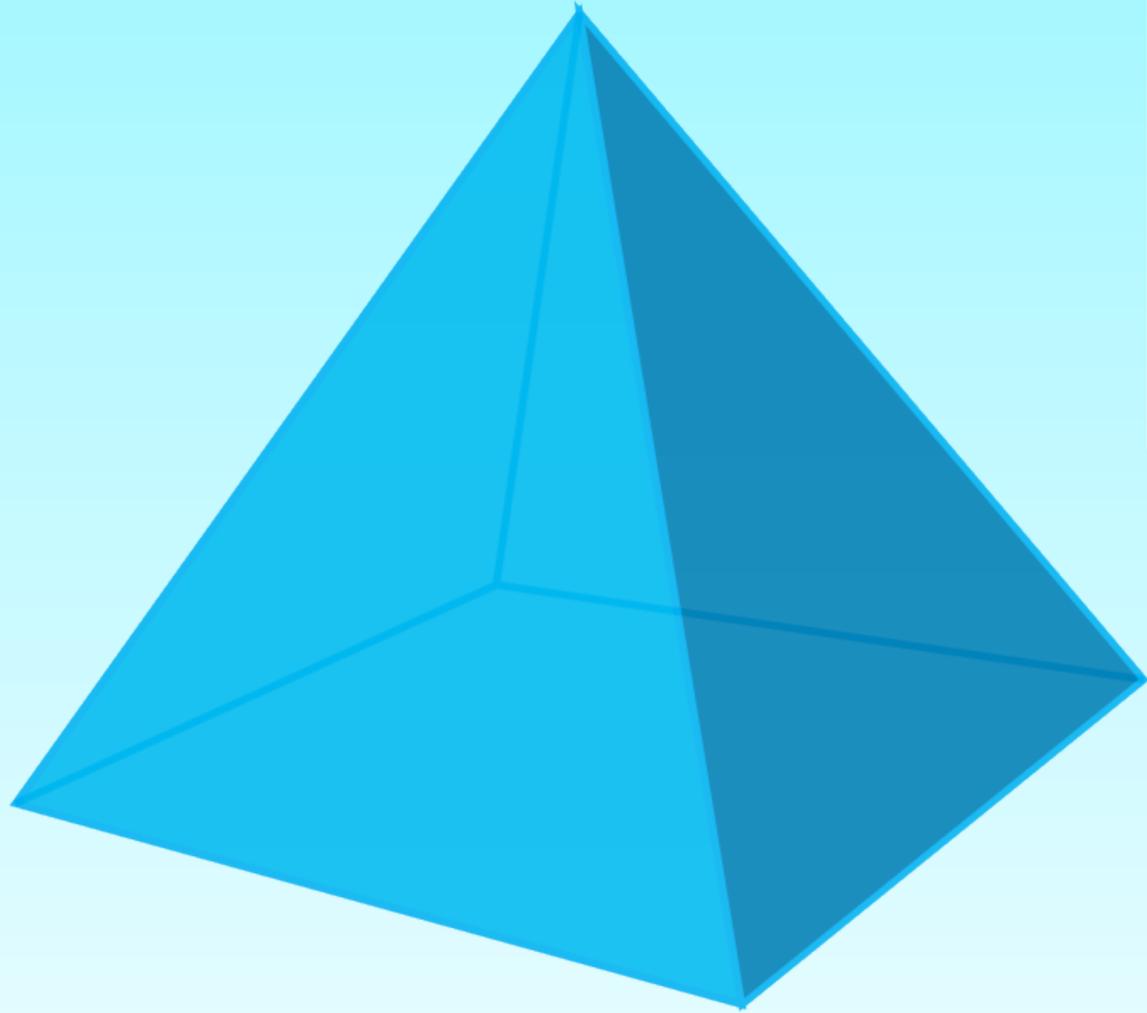
Faces: 5

Edges: 8

Vertices:

**How many
vertices does
this shape
have?**



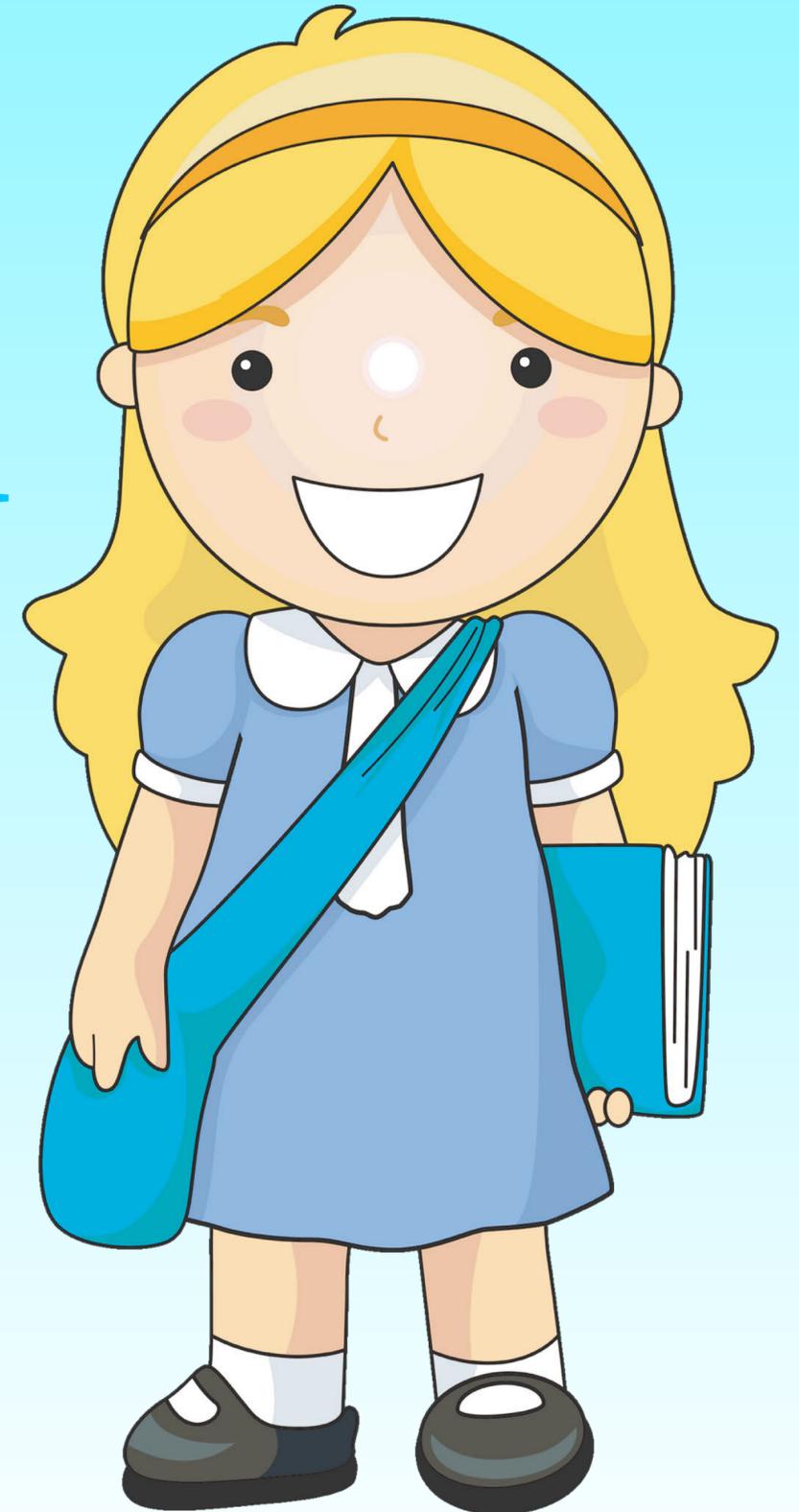


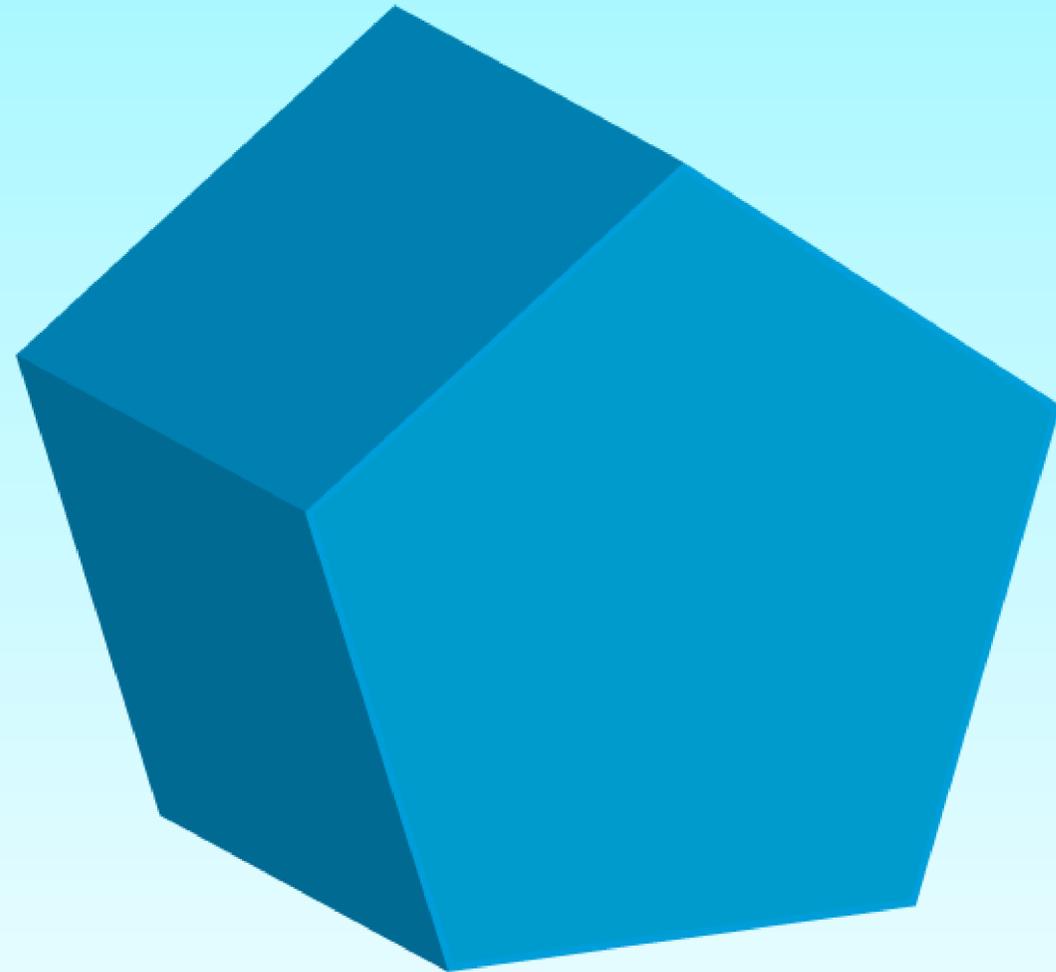
**Did you get it
right?**

Faces: 5

Edges: 8

Vertices: 5





Pentagonal Prism



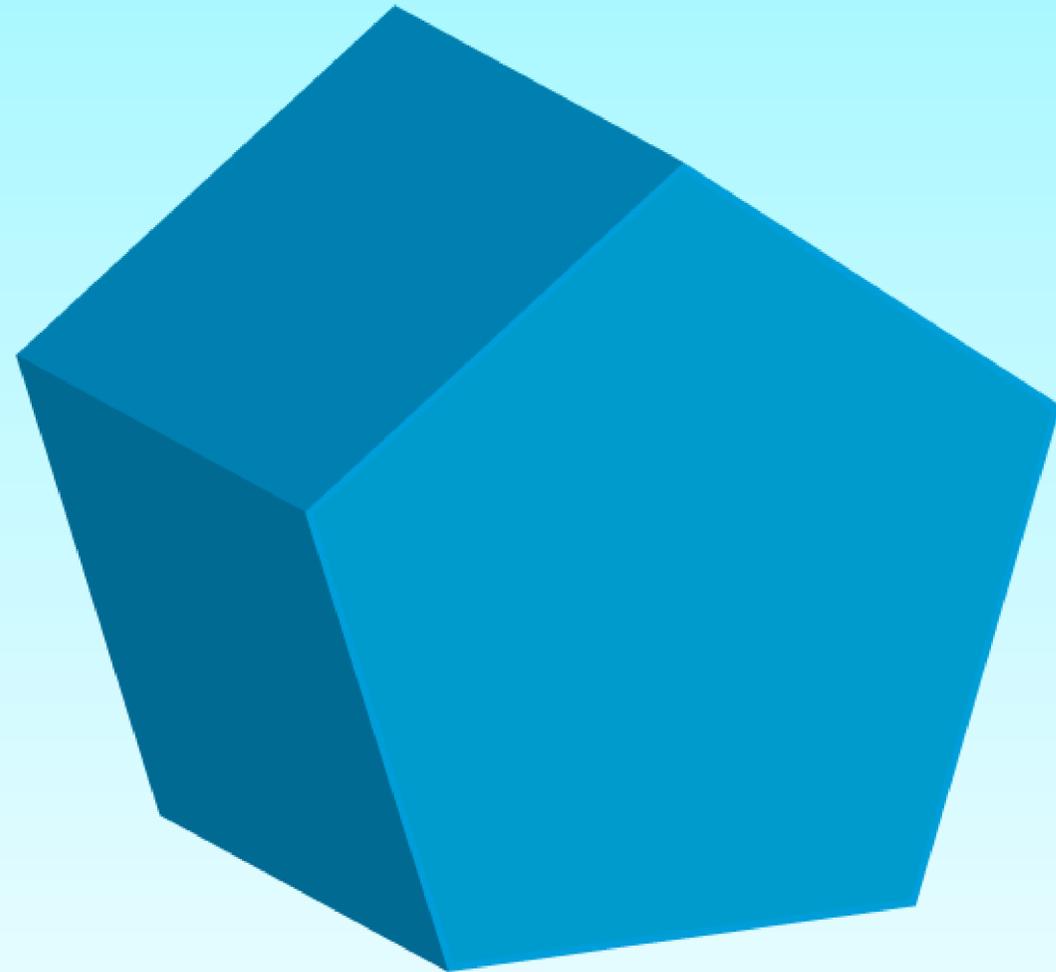
Faces: 7

Edges:

Vertices: 10

**How many
edges does
this shape
have?**



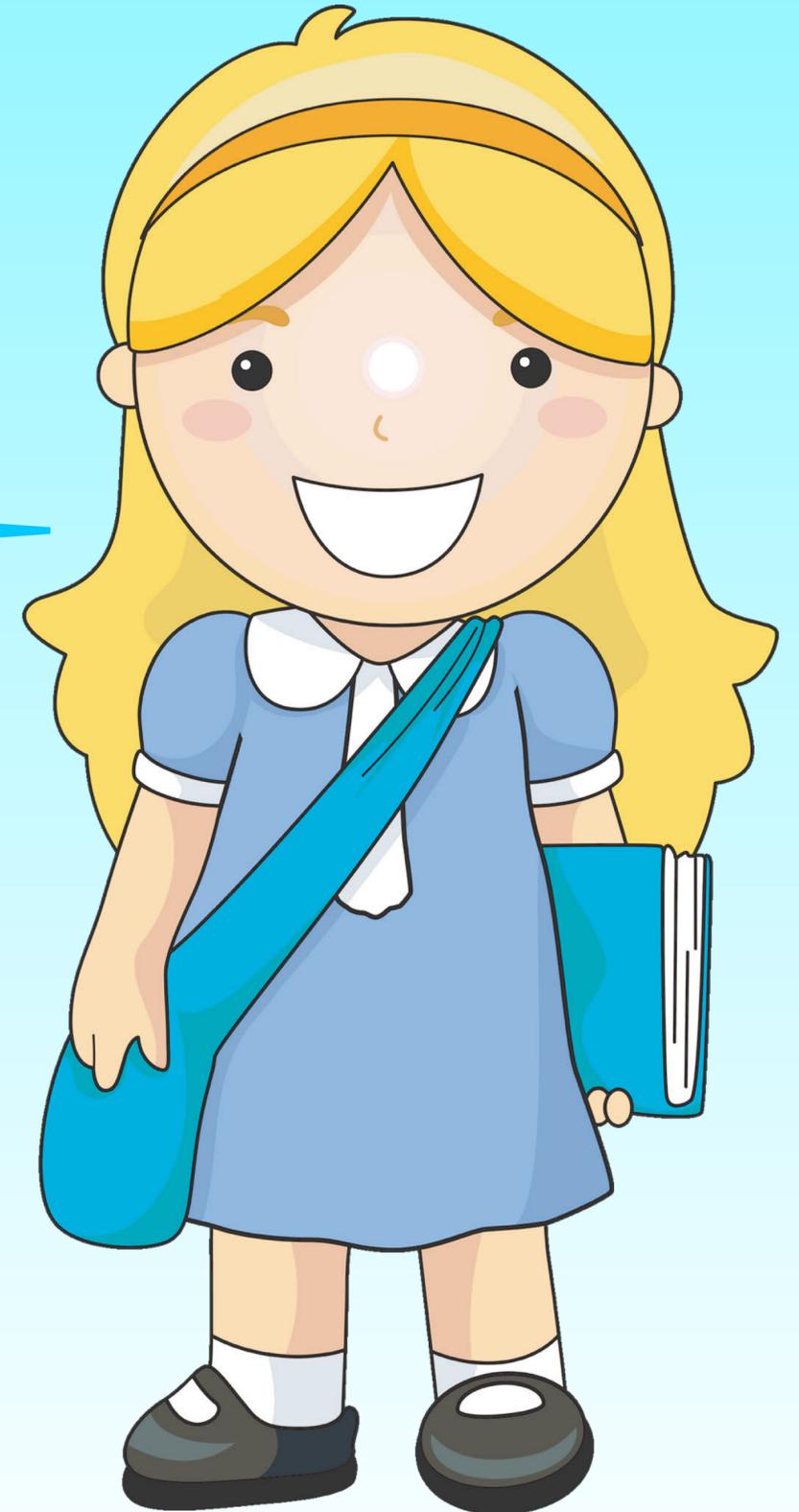


Did you
get it
right?

Faces: 7

Edges: 15

Vertices: 10





**Good work gang!
Are you ready to do
some shape work on
your own?**

