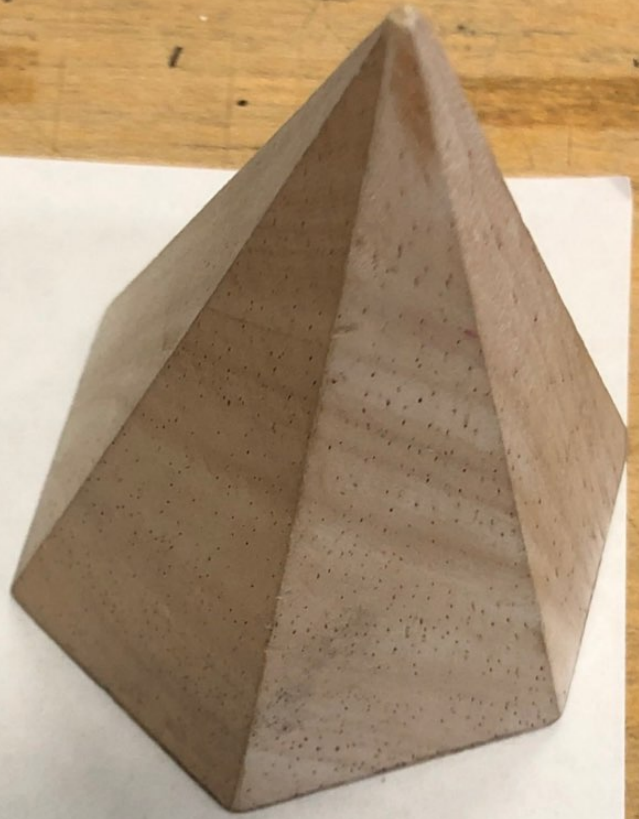


pyramid

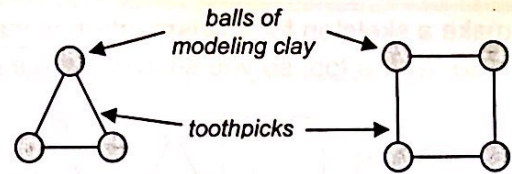


prism

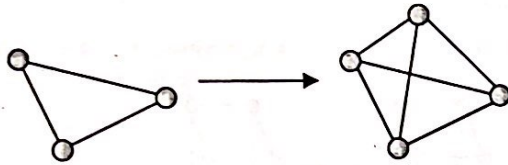


# G4-30: Building Pyramids

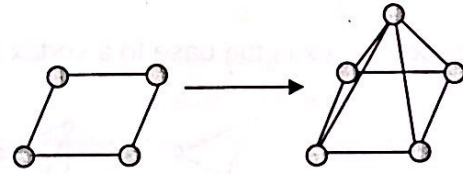
To make a **skeleton** for a pyramid, start by making a base. Your base might be a triangle or a square.



Now add an edge to each vertex on your base and join the edges at a point.



Triangular Pyramid



Square Pyramid

Make a triangular pyramid, a square pyramid, and a pentagonal pyramid.

1. Fill in the first three rows of the chart. Use the skeletons you made.

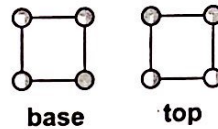
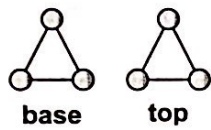
	Draw Shape of Base	Number of Sides of Base	Number of Edges of Pyramid	Number of Vertices of Pyramid
Triangular Pyramid				
Square Pyramid				
Pentagonal Pyramid				
Hexagonal Pyramid				



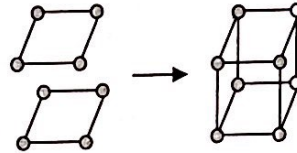
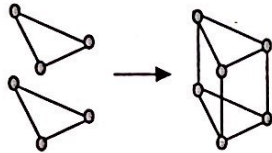
- Describe the pattern in each column of your chart.
- Use the pattern to fill in the row for the hexagonal pyramid.
- What relationship do you see between the number of sides in the base of a pyramid and the number of edges in the pyramid?

# G4-31: Building Prisms

To make a skeleton for a prism, start by making a base (as you did for a pyramid). However, your prism will also need a top, so you should make a copy of the base.



Now join each vertex in the base to a vertex in the top.

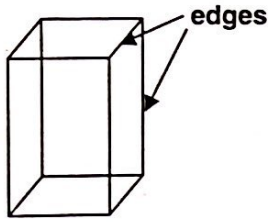


1. Fill the first three rows of the chart, using the skeletons you made.

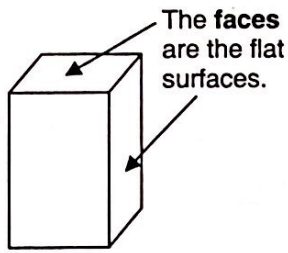
	Draw Shape of Base	Number of Sides of Base	Number of Edges of Prism	Number of Vertices of Prism
Triangular Prism				
Rectangular Prism				
Pentagonal Prism				
Hexagonal Prism				



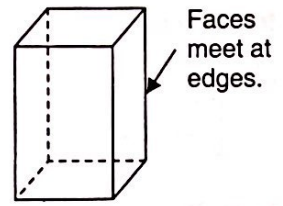
- Describe the pattern in each column of your chart.
- Use the pattern to fill in the row for the hexagonal prism.
- What relationship do you see between the number of sides in the base of a prism and the number of edges in the prism?



Candice builds a **skeleton** of a rectangular prism using wire.

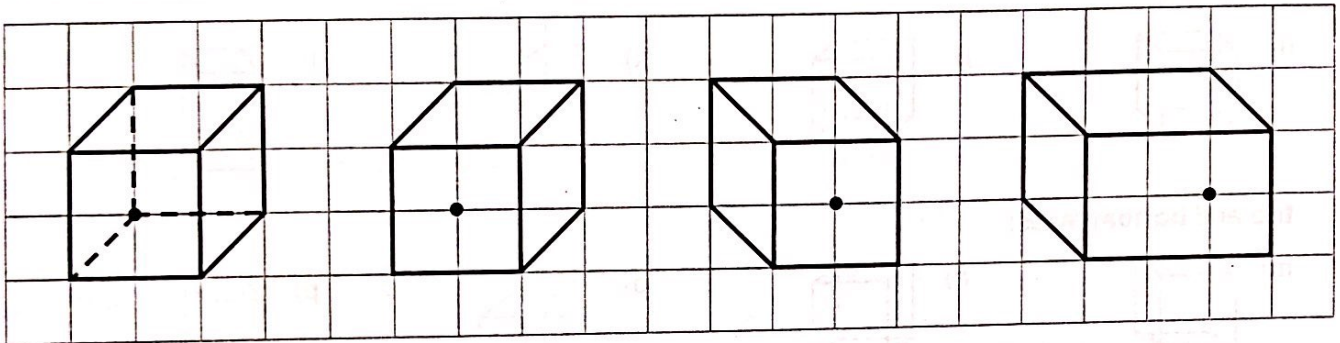


She covers the skeleton with paper.

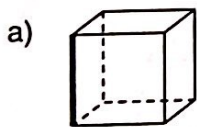


The dotted lines show the **hidden edges**.

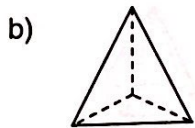
1. Draw dotted lines to show the hidden edges.



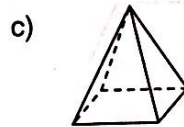
2. Shade all of the edges (the first one is started for you). Count the edges as you shade them.



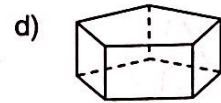
\_\_\_ edges



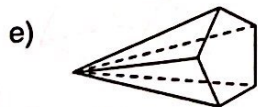
\_\_\_ edges



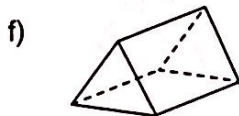
\_\_\_ edges



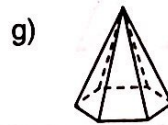
\_\_\_ edges



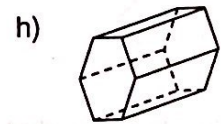
\_\_\_ edges



\_\_\_ edges

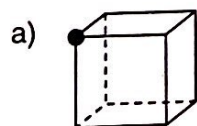


\_\_\_ edges

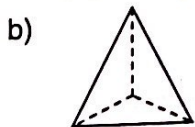


\_\_\_ edges

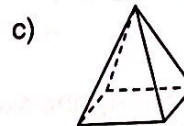
3. Vertices are the points where the edges of a shape meet. Put a dot on each vertex (the first one is started for you). Count the vertices.



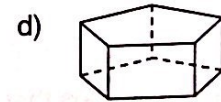
\_\_\_ vertices



\_\_\_ vertices



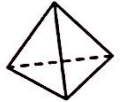



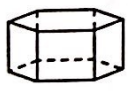
\_\_\_ vertices



\_\_\_ vertices

# G4-35: Properties of Pyramids and Prisms (continued)

4. a) Complete the chart. Use actual 3-D shapes to help you.  
 Colour the number of sides in each base to help you name the shape.

Shape	Picture of Base	Number of ...			Name
		edges	vertices	faces	
					
					
					
					
					

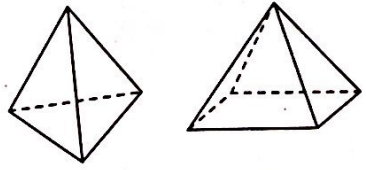


b) Circle the prisms.

c) Compare the number of vertices in each prism to the number of sides in the base. What do you notice?

5. Write a paragraph outlining how the shapes are the same and how they are different.

a)



b)

