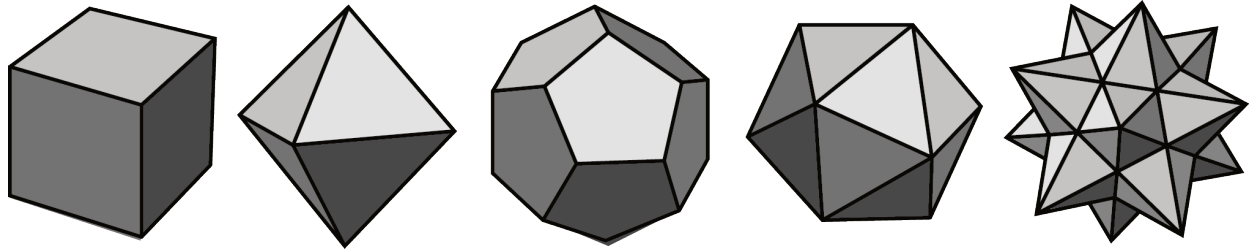


Unit 1 Lesson 13: Polyhedra

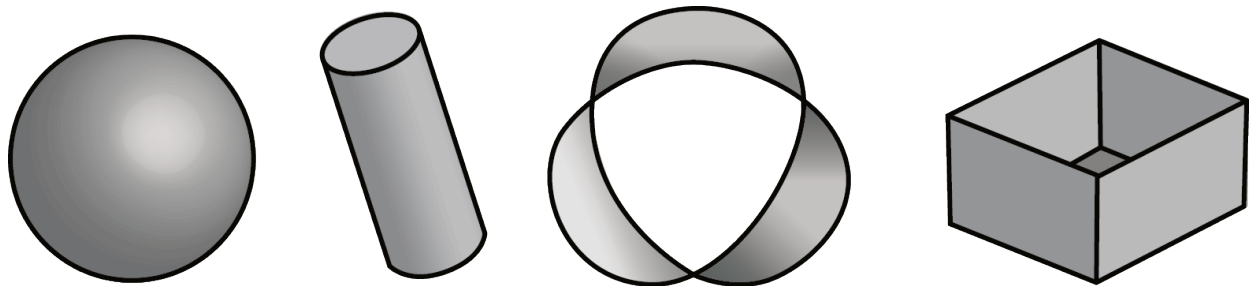
1 What are Polyhedra? (Warm up)

Student Task Statement

Here are pictures that represent polyhedra:

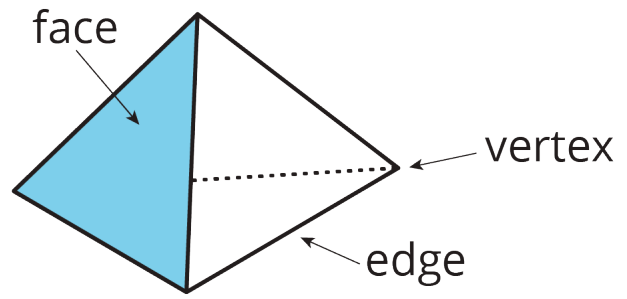
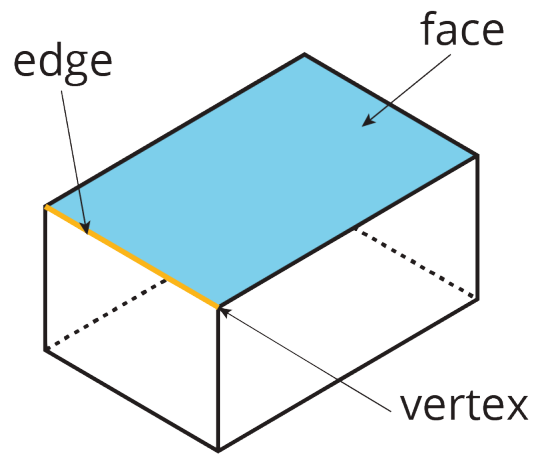


Here are pictures that do *not* represent polyhedra:



1. Your teacher will give you some figures or objects. Sort them into polyhedra and non-polyhedra.
2. What features helped you distinguish the polyhedra from the other figures?

Activity Synthesis

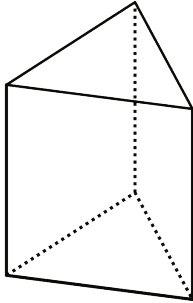


2 Prisms and Pyramids

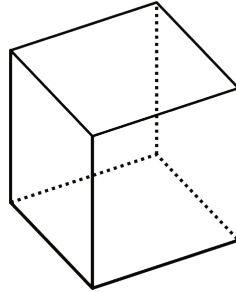
Student Task Statement

1. Here are some polyhedra called **prisms**.

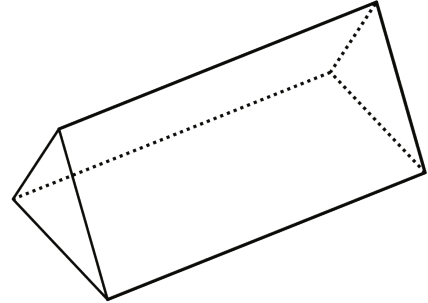
A



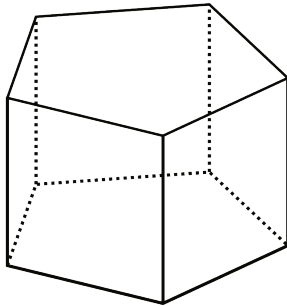
B



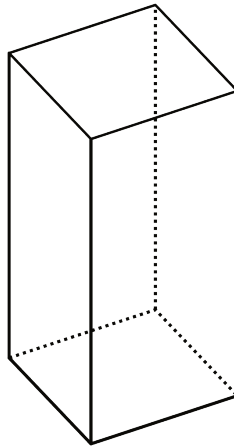
C



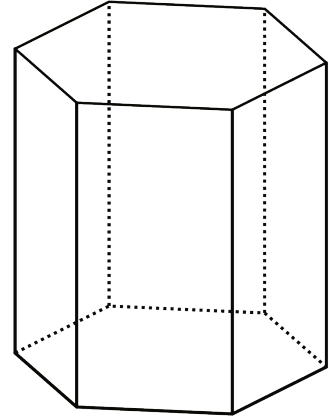
D



E

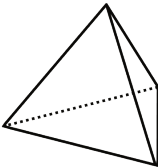


F

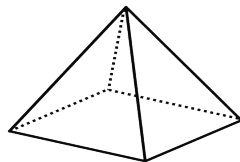


Here are some polyhedra called **pyramids**.

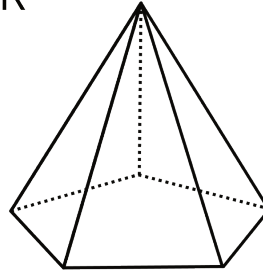
P



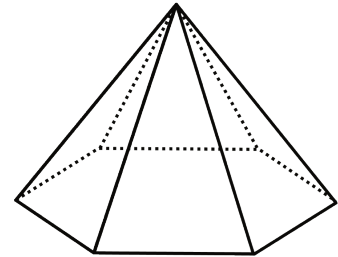
Q



R



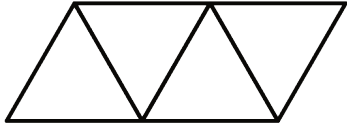
S



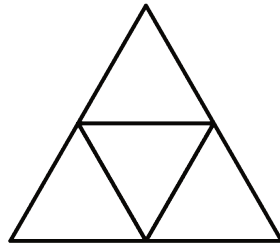
a. Look at the prisms. What are their characteristics or features?

b. Look at the pyramids. What are their characteristics or features?

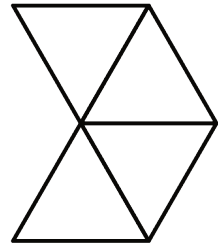
2. Which of these **nets** can be folded into Pyramid P? Select all that apply.



net 1



net 2



net 3

3. Your teacher will give your group a set of polygons and assign a polyhedron.
 - a. Decide which polygons are needed to compose your assigned polyhedron. List the polygons and how many of each are needed.
 - b. Arrange the cut-outs into a net that, if taped and folded, can be assembled into the polyhedron. Sketch the net. If possible, find more than one way to arrange the polygons (show a different net for the same polyhedron).

3 Assembling Polyhedra (Optional)

Student Task Statement

1. Your teacher will give you the net of a polyhedron. Cut out the net, and fold it along the edges to assemble a polyhedron. Tape or glue the flaps so that there are no unjoined edges.
2. How many **vertices**, **edges**, and **faces** are in your polyhedron?