Unit 5 Lesson 12: Prisms and Pyramids
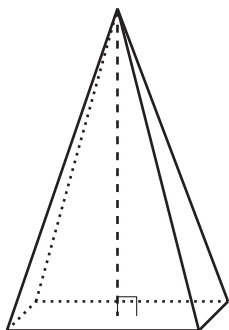
1 The Faces of Geometry (Warm up)
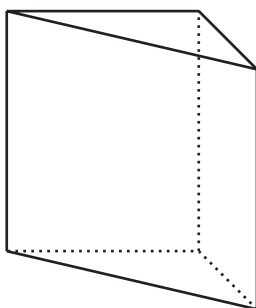
Student Task Statement

Three solids are shown.

A   **B**   **C**
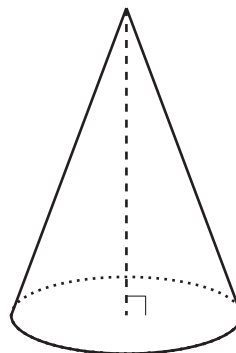

Draw all the surfaces of each solid.

2 Card Sort: Sorting Shapes

Student Task Statement

Your teacher will give you a set of cards that show geometric solids. Sort the cards into 2 categories of your choosing. Be prepared to explain the meaning of your categories. Then, sort the cards into 2 categories in a different way. Be prepared to explain the meaning of your new categories.

3 Building a Prism from Pyramids

Student Task Statement

Your teacher will give your group 3 nets. Each student should select 1 of the 3 nets.

1. Cut out your net and assemble a pyramid. The printed side of the net should face outward.

2. Assemble your group's 3 pyramids into a triangular prism. Each pair of triangles with a matching pattern will come together to form one of the rectangular faces of the prism. You will need to disassemble the prism in a later activity, so use only a small amount of tape (or no tape at all if possible).

3. Make a conjecture about the relationship between the volume of the pyramid marked P1 and the volume of the prism.

4. What information would you need to verify that your conjecture is true?

Don't throw away your pyramids! You'll use them again.

Images for Activity Synthesis