

Shape: Cylinders Lesson Plan

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Strand:

Shape and Space

Grade Level:

Six

Pre-requisite

Knowledge:

circumference, perspectives, radius, diameter

Objectives:

Students will be able to indicate the cylinder shapes found in the tipi-raising videos.

Students will be able to explore the mathematical concepts of 3-D shape, length, circumference, perspective, radius and diameter using old soup labels.

Students will be able to work with a partner to create a cylinder and cone.

Materials:

examples of cylinders, old soup labels (to create a cylinder), math workbook/duotang, writing utensil

Before you complete this activity, you will need to have students bring old soup labels from home. You can also have a collection bucket in the staff room to collect extra from staff members.

Recommended

Video clip:

Have students watch the video clip entitled "Placing Canvas on the Structure." Before you play the video for the class, let students know that they need to watch out for cylinder shapes in the video. At this time you may also want to provide some pictures of cylinder examples, or have the students explore indoor and outdoor facilities to spot cylinder shapes in their environment.

After the students have watched the video (to which you may choose to show them two or three times) place the students into the partner groups. Each partner group should have two or more old soup labels. They need to make a cylinder which could be used as pins on a miniature tipi. In the partner groups, have students collaborate on how they will create a cylinder using the old soup labels they have. Have them think of the length they would like their cylinder to be and what the circumference will be. They should record this information in their workbooks or duotangs.

Once they have collaborated, they should create their 3-D cylinder. At this time they could compare their cylinder to the partner group nearest to them. Have them discuss what is similar and what is different. What makes their shape a cylinder?

Now that they have compared their cylinders, have them return to their partner groups. One person will label the radius on the base, and the other person will label the diameter.

As a class discuss what they learned from completing this lesson.

Assessment:

You can use a rubric to mark their design. Did they draw and label what was asked of them properly?

Self/Peer Assessment on how they worked together as a partner group.

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