

## **Shape: Cones Lesson Plan**

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### **Strand:**

Shape and Space

### **Grade Level:**

Six

### **Pre-requisite Knowledge:**

cones

### **Objectives:**

Students will be able to point out the cone shape in the tipi-raising videos.

Students will be able to explore different mathematical concepts using paper cones (shape, slant height, area).

### **Materials:**

paper, pencils, tipi-raising videos (Anaquod or Haywahe), plastic funnels

- Examples of plastic funnels are what we use to put oil in our cars, or the ones used as drinking cups.

**Introduction:** Individually or in partner groups have students brainstorm everything they can think of that is a cone and jot it down. After they have completed that list, have them brainstorm everything they can think of that is a cylinder and jot that down as well. Have students make arrows from each item to list where they would see that shape.

**Video:** Have your students watch the tipi-raising videos located on our website. You may show them the tipi-raising done with Elder Glen Anaquod with Saulteaux teachings or you may show them the tipi-raising done with Tim Haywahe with Nakota teachings. Depending on your location, it may be appropriate to choose one over the other.

Before you show the students the videos, give them the heads up to look out for cones in the video. After they have watched the videos, make a list on the board of the places students have seen cones in the natural and manmade environment.

Hand-out a funnel to each student. Students will also need a piece of paper and writing utensil. What if you were to cut your cone in half, what shape would it be? Have your students draw their cone from three different perspectives - top, bottom and side. After they have completed their drawings, have them make a straight cut line from the bottom of the funnel to the top. Was it the shape they anticipated it to be? Have students flatten out their cone and mark the slant height. If the base of their cone were to exist, what would the area be?

There are other activities you may choose to do with these plastic funnels, whether they be mathematics related or other subject related.

### **Assessment:**

Were the students able to point out the cone shape in the tipi-raising video?

Have students hand in their drawings and answers to questions.

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