**Cylinder Activity**

11 inches

8.5 inches

11 inches

8.5 inches

1. Calculate the surface areas of both cylinders
2. Which of the following is true according to your prediction from the sinkhole picture?
   1. Long cylinders have a bigger volume
   2. Short cylinders have a bigger volume
   3. Both cylinders have the same volume
3. Calculate the volumes of the cylinders
4. Write a mathematical statement that relates the lateral (rectangle) surface area and the volume of a cylinder
5. Write a mathematical statement that relates the area of the base and the volume of a cylinder.

