

# Measuring Lung Capacity

**Purpose:** To determine how much air our lungs can hold.

**Materials:** Make a list of the materials we will use today.


## **Procedure:**

1. Stretch your balloon.
2. Take a deep breath and blow all at once into the balloon and close it off.
3. Shape the balloon into a sphere shape while holding the air in.
4. Ask a partner to measure the circumference of the balloon at the middle.
5. Record the number in centimeters.
6. Repeat two more times.
7. If your hypothesis indicates exercise, repeat after doing a set of exercises.

## **Hypothesis:**

I think

\_\_\_\_\_

because \_\_\_\_\_.

**Data:** You may add to the chart if you have a large sample size.

Name	Height (cm)	Age (years)	Diameter (cm)	Circumference (cm)

**Calculations:** Use this space to calculate the volume of a sphere. The formulas are below. You may turn over the paper.

$$\text{Circumference} = 2\pi r$$
$$\text{Volume of a Sphere} = V = \frac{4}{3}\pi r^3$$

**Conclusion:** What did you learn? Was your hypothesis correct?