

# Activity: Tube In A Cup

**Problem:** *Does air take up space? Does air exert pressure?*

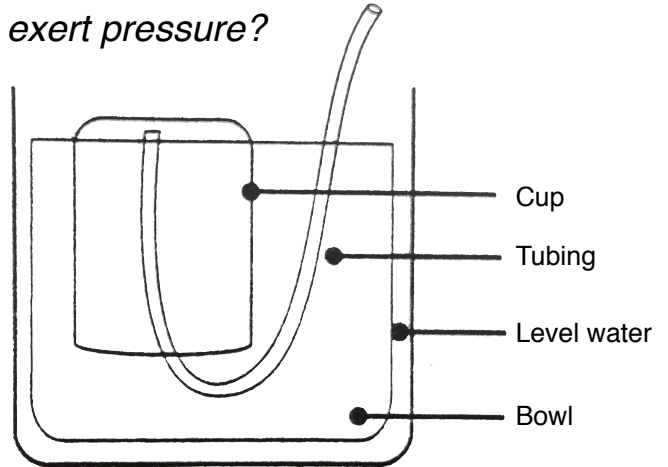
**Hypothesis/Prediction:**

---

---

**Materials:**

- plastic or rubber tubing
- clear plastic cup
- clear glass bowl (filled with water)



**Variables:**

**Controlled:** \_\_\_\_\_

**Independent/Manipulated:** \_\_\_\_\_

**Dependent:** \_\_\_\_\_

---

**Procedure:**

1. Tape the end of plastic tubing to the inside of a cup, close to the bottom of the cup.
2. Seal the other end of the tube and hold it above the water level.
3. Invert the cup and push it straight down in the bowl of water. Observe that there is still air in the cup.
4. Blow into the tube. Note observation. Is there still air in the cup?
5. Unseal the tube. Note observation. Is the water level rising in the cup?
6. Blow into the tube. Note observation. Is the air displacing the water?

**Observations:**

---

---

---

---

---

**Inference/Conclusions:**

---

---

---