

Station 1

1. Inflate a balloon and tie the end.
2. Place the inflated balloon on a balance, using a piece of tape to hold it in place.
3. Record the mass.
4. Remove the balloon from the balance. Use a pin to gently puncture the balloon near the neck and release most of the gas contained in it.
5. Place the deflated balloon on a balance (with the tape still attached) and record its mass.

Station 2

1. With its open end facing downward, lower an empty drinking glass into a larger container of water.
2. With the open end still under water, slowly tilt the glass.

Station 3

1. As shown in Figure 1, insert the rounded end of an unused balloon part way into an empty soft-drink bottle, stretching the balloon's neck over the mouth of the bottle.
2. Blow up the balloon so that it fills the bottle.
3. Remove and discard the used balloon.

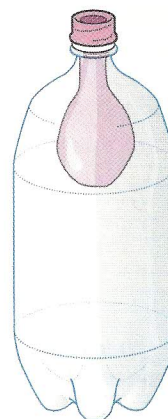


Figure 1 Placement of balloon in bottle (Station 3).

Station 4

1. Fill a test tube to the rim with water.
2. Cover the test tube rim with a piece of plastic.
3. Press down on the plastic to make a tight seal with the mouth of the test tube.
4. While continuing to press the plastic to the test tube, invert the test tube above a sink or a pan.
5. Without causing any jarring, gently remove your fingers from the piece of plastic.
6. Repeat the process with the test tube half-full of water.

Station 5

1. Locate the plastic bottle with a small hole in its side.
2. Cover the hole in the side of the bottle with your finger.
3. Fill the bottle with water.
4. Replace the cap tightly.
5. Holding the bottle over a sink, remove your finger from the hole.
6. Still holding the bottle over a sink, remove the cap.