



Activity 5: Tipping Straws

Materials:

Sink, bath, or bin filled part way with water (just deeper than the length of the straw)
Plastic drinking straw
Plasticine (play dough could work too as long as it's not underwater for too long)

Procedure

1. Have the student predict how full they can fill the containers with water before they sink (such as half full, 2 cups of water, up to the bottom of the label, etcetera).
2. Drop a drinking straw onto the surface of a tub of water and observe what happens.
3. Now tilt the straw under water to fill it up with water from one end to the other. Let it go and observe what happens.
4. Challenge the student to make the straw float upright in the water using plasticine as the only material to be added to the straw.
5. Record observations of how the straw behaved in step 2, 3, and what they did using the plasticine in step 4.

Science Notes

Instructing children to attach the plasticine to one end of the straw limits the opportunities for exploration. Although most children will discover that attaching the plasticine to one end of the straw works, the teacher might want to suggest that students can try to attach the plasticine at various points on the straw during their exploration.

Students may discover attaching smaller pieces of plasticine to the end of the straw will affect the depth the straw floats in the water. The more plasticine that is added to the end of the straw, the lower the straw will float.

The “tipping” straw is really a hydrometer. A hydrometer is used to measure density. The level which the straw hydrometer floats depends on the liquid’s density. The straw sits higher in more dense liquids. Liquids with a lower density weighs less than the same volume of one with a higher density. Water is more dense than cooking oil.