

Making a Flinker



Materials

- styrofoam peanuts
- paperclips of various sizes
- a container of water

Procedure

- Work in pairs
- Obtain a few Styrofoam peanuts and paper clips
- Fill a container with water
- Now drop one paper clip and one Styrofoam peanut into the container
- Which object floats and which object sinks?

Floats: _____ Sinks: _____

- Using your Styrofoam peanuts and paperclips brainstorm and try to create an object that flinks!

Flinker:

A flinker is an object that does not float or sink; it is suspended midway in the body of water.

(Hint*) you can combine the paper clips with a foam peanut by unraveling the paper clips and puncturing the peanut.

(Hint*) you may need to squeeze your Styrofoam peanut occasionally because when it gets extremely soaked through it works much worse.

The Scientific Explanation

Through this experiment the scientific principle of density is illustrated. The density of water is equal to one, and if an object has a greater density than water it will sink, and if density is less than that of water it will float. A flinker will have a density of one because it is suspended midway in the body of water. This experiment begins to introduce children to the principle of density. As children get older, during eighth or ninth grade they will go deeper into the principle of density and learn that $\text{density} = \text{mass} / \text{volume}$.