

Sinking Objects

Grade Level: 1st - 3rd; **Type:** Physical Science

Objective:

To investigate which objects float and sink in honey, water, and oil.

Research Questions

- Which liquid is more dense - honey, water, or oil?
- Does the size of an object determine its density?

Density determines an object's ability to float. If an object has less density than the liquid it is in, it will float and more density it will sink.

Materials;

- honey
- water
- oil
- 5 small objects of similar size such as a coin, bean, small plastic toy, small cork,
- paperclip, small screw, kernel of cereal, etc.
- clear glass or narrow tube
- paper
- pencil

Experimental Procedure:

1. Gather the necessary materials.
2. Have an adult help pour about 2 inches of water in the glass or tube. Then tilt the glass and slowly pour in about 2 inches of oil, followed by 2 inches of honey. Observe what happens and record.
3. Predict which of your objects you think will float and which will sink. Record your predictions.
4. Gently drop each object into the glass or tube and observe. Record the results.
5. Continue until all of the objects have been tested.
6. Analyze your data and draw a conclusion.

Terms/Concepts: density: how heavy something is for its size buoyancy: the force that causes something to float; Density is how heavy something is for its size. Density determines an object's ability to float. If an object is less dense than the liquid it is in, it will float.

References:

"What is Density" at "Density" by Martha Marie Day, Ed.D. and Anthony Carpi, Ph.D. at "Density" at

