

Activity—Will it Float?

Standard III
Students will gain an understanding of Physical Science through the study of the forces of motion and the properties of materials.

Objective 2
Analyze objects and record their properties.

Intended Learning Outcomes
Knowing In Science: Understanding the nature of science.

Content Connections: Language Arts

Connections

Background Information

When objects sink or float, they push water away. When water is pushed aside we call it displacement. If the amount of water pushed aside by an object weighs more than the object, the water can hold it up and it floats.

If an object placed in the water pushes away an amount of water that weighs less than the object, the water can't hold it up and it sinks.

When the aluminum foil boat is on top of the water, it is pushing the water aside, or displacing it. All of this displaced water weighs more than the foil, so it allows the foil boat to float. When the surface area of the foil is smaller (the foil is crumpled) it does not displace or push aside enough water to allow it to float.

Materials

- cork
- pencil
- paper clip
- crayon
- twig
- marble
- plastic spoon
- bar of soap
- Mr. Gumpy's Outing* by John Burningham

Invitation to Learn

Read *Mr. Gumpy's Outing*.

Instructional Procedures

1. Show items on table and have students predict which will sink or float. Record findings on a chart.
2. Drop items one at a time in water. Observe what happens and mark results on the chart.
3. Discuss why certain items floated and others sank.
4. Compare predicted results with what actually happened.

Possible Extensions/Adaptations

Try using other materials such as an oil-based clay to see if the same principles apply. Also try leaves, twigs, and other objects found in nature.

Assessment Suggestions

Write observations of the experiment in a journal. Describe one object and tell about results.

Additional Resources

Amazing Water by Melvin Berger

An Apple Floats by Christin Wilsdon

Is It Floating? by Fred and Jeanne Biddulph

Sink or Float by Leslie Fox

Water Changes by Brenda Parkes

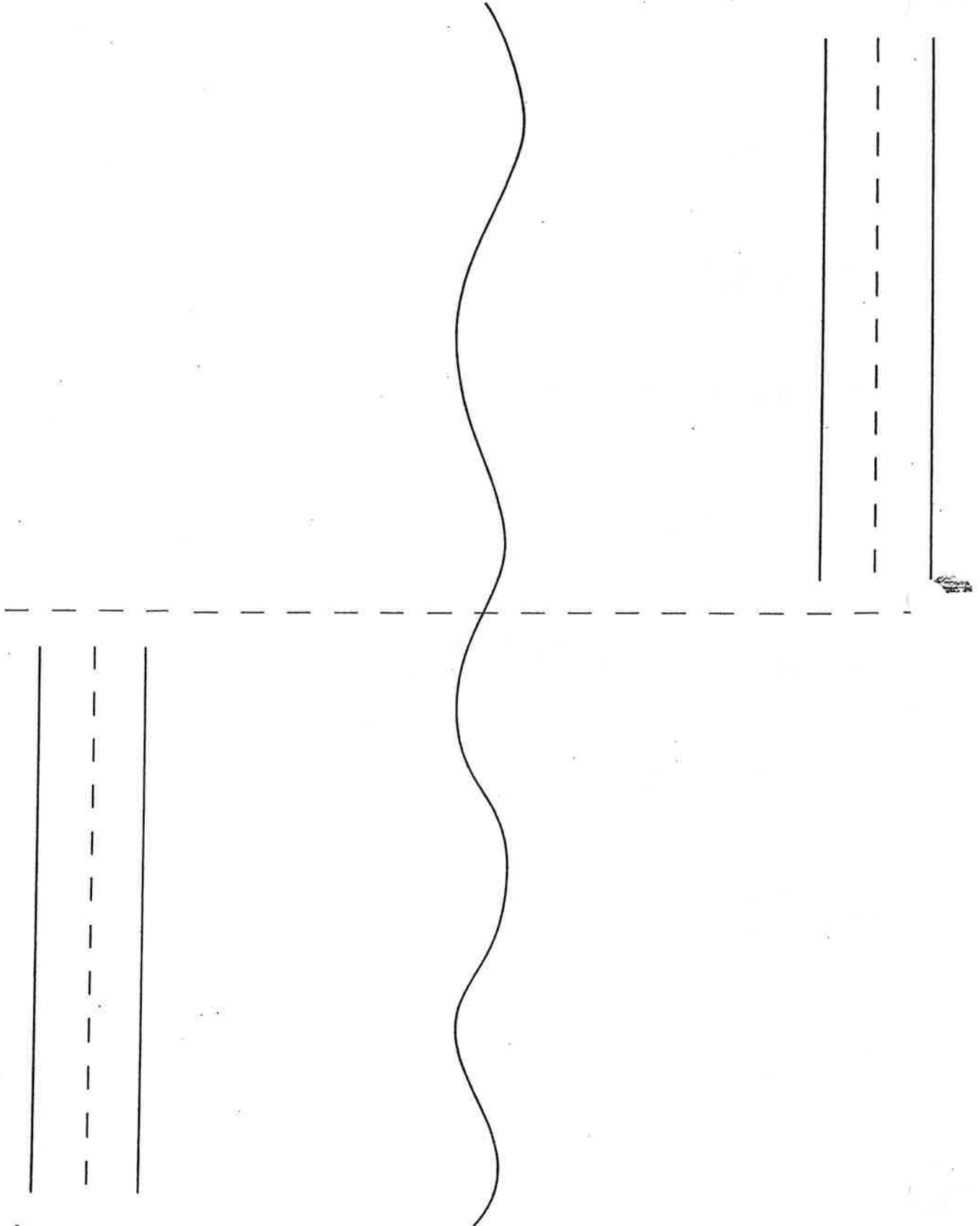
Family Connections

Invite the students to share the sink or float chart with their family. Have them experiment with objects at home and share results with the class.

Will it Sink or Will it Float?

	Sink	Float
cork		
pencil		
paper clip		
marble		
plastic spoon		
crayon		
soap		
twig		

Sink or Float Worksheet



1st 3-2 4.4