

Sink or Float

Standards of Learning

Science K.1, K.4, K.7, 1.1, 1.4, 2.1, 3.1, 4.1

Math 2.17, 2.18, 2.19, 2.20, 3.17, 3.19, 4.14, 4.15

Objective

The student will be able to:

- Define fruit – the fleshy part of the plant that holds the seeds.
- Identify many common fruits.
- Make predictions whether common fruits will sink or float based on size and density.
- Draw a bar graph and develop a conclusion regarding common fruits and their ability to sink or float.

Materials

- Large clear plastic container that will hold at least 2 gallons of water
- At least 2 gallons water
- A variety of fresh fruits (at least 20 in assorted sizes, shapes, colors, etc.) Some good examples: apple, cucumber, bell pepper, orange, grapes, cherry tomatoes, squash, small pumpkin, small melon, blueberries, pear, eggplant, strawberries, peach, lemon, lime.
- 1" square graph paper
- Crayons or markers

Background Knowledge

Familiarize students with the definition of a fruit. Show them examples of fruits.

Procedure

1. Place the large clear plastic container in front of the class at a point where all students can see it.
2. Fill container $\frac{1}{2}$ full with water.
3. Give students the "Sink or Float" chart.
4. Write the names of the fruit on the board and have students fill out the chart.
5. As you show each fruit, have students predict if it will sink or float by marking their charts.
6. After all predictions have been made, place the individual fruits in the container of water to see if they will sink or float. As you remove the fruits, have students mark the results on their charts.
7. At the conclusion of the experiment, have students tally their predictions. How many did they predict correctly?
8. Using one inch square graph paper, have students create two bar graphs, one showing their predictions and one showing the results of the experiment. One square inch will equal one fruit for each category...sink or float.
9. Students will write a summary of his/her findings.

Extension

At the conclusion of the experiment, cut the fruits into pieces and allow the students to sample them.



