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Spring Into Math and Science

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I. Topic Area

Food/Water

II. Introductory Statement

The students will find out which fruits float.

III. Key Question

What do you think would happen if we put fruit in water?

IV. Math Skills

- a. Graphing
 - 1. Interpreting data
 - 2. Counting
- b. Predicting
- c. Sorting

Science Processes

- a. Observing and classifying
- Applying and generalizing
- d. Interpreting data
- d. Gathering and recording data

V. Materials

- · A variety of different fruits
- One large, open container for water
- Float/Sink prediction cards
- Float/Sink graph

VII. Management

- 1. Allow 20 minutes for this activity.
- This activity can be used as a small group teacherdirected lesson so that each child gets a turn, or it can be used as a whole group lesson.

VIII. Advanced Preparation

- Prepare the prediction cards. (See pattern sheet page #1.)
 - a. To make the cards quickly, simply duplicate the pattern sheet and fold it in half. Make one copy for each student in the group.
 - b. For reusable cards, make copies of the pattern sheet and cut them in half. Paste "sink" on one side of 6" × 9" construction paper or tagboard. Paste "float" on the other side. Laminate cards or cover them with clear plastic.
- 2. Prepare the float/sink graph.
- 3. Collect fruit.
- 4. Fill container with water.

IX. Procedure

- Show the fruit to the group of children. Ask the children to tell you what is the same about all of the items.
- 2. Discuss the meaning of "float" and "sink."
- 3. Give each child a float/sink prediction card. Make sure that each child can tell you which side shows "float" and which side shows "sink."
- 4. Choose one fruit and let the children feel it. Have them indicate with their prediction cards whether the fruit will float or sink. Ask the children to explain their predictions.
- 5. Discuss the predictions. Do more children think the fruit will float or do more think it will sink?
- 6. Have a child place the fruit in the water. The children tell whether it floats or sinks.
- 7. The child removes the fruit from the water and places it on the appropriate side of the graph.
- 8. Repeat the above procedure with the rest of the fruit.
- 9. Discuss the results.

X. Discussion

- 1. What does the graph show?
- 2. Did all of the fruit float?
- 3. Is that what you thought would happen? Why or why not?
- 4. If we had a _____ (name a fruit that was not used), do you think it would float?

XI. Extensions

- Try the above activity using the parts of each fruit. Will the skin float? The seeds? Etc.
- 2. Could you find a fruit that would not float?
- 3. Try this activity using vegetables instead of fruit.
- Set up a float/sink station where the students can try other materials to see which float and which sink.

XII. Curriculum Coordinates

Language Arts

1. Make a class book "My Favorite Fruit."

Make fruit prints using tempera. Cut fruit in half, dip in paint, then press on paper. After cutting the fruit, allow it to dry slightly so that the paint will adhere.

2. Make a fruit collage using pictures of fruit cut from magazines.







