

Float or Won't Predictions

Activity: Children will make predictions about an object's buoyancy and conduct simple experiments to test their predictions.



Objective

Children will demonstrate knowledge related to the properties of water.

Targeted Standards

VI. Scientific Inquiry

VI. D.1. Demonstrates knowledge related to the dynamic properties of earth and sky

Benchmark a. Describes properties of water including changes in the states of water

VI. A.3. Uses Understanding of causal relationships to act on social and physical environments

Benchmark a. Makes predictions and tests their predictions through experimentation and investigation

Benchmark b. Collects and records data through drawing, writing, dictation, and taking photographs

http://flbt5.floridaearlylearning.com/standards.html#d=VI&a=four_year_olds

Extensions

- Invite the children to brainstorm other objects that may sink or float and conduct their own investigation.
- Send a note home encouraging families to conduct their own sink/float experiments with their preschoolers.
- Place related books in the reading center. Some titles to explore:
 - *Who Sank the Boat?* by Pamela Allen
 - *Things that Float and Things that Don't*, by David A. Adler
 - *Floating and Sinking*, by Amy S. Hansen

Materials Needed

Clear plastic sensory bin or basin

Water

12-15 objects that can be immersed in water (see above)

Poster board and markers to create a 2 column Sink/Float chart (see above)

Digital camera and printer

Checking for Understanding

Children will demonstrate their understanding of the lesson by determining if an object sinks or floats and placing the object in the corresponding column.

Scaffolding

Some children may benefit from having an adult stretch their thinking through questioning. Some questions to consider: "Why do you predict the penny will sink?" "What did you notice?" "Was your prediction correct?" "How do you know?"

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Procedures

1. Assemble a group of 12-15 objects that can be immersed in water. Be sure to include some that will float (i.e., cork, pencil, unifix cube, ping pong ball, etc.) and some that will sink (i.e., penny, paperclip, key, stone, marble, bolt, etc.).
2. Fill a clear plastic basin or sensory bin half full with water.
3. Create a simple chart with 2 columns and use a blue marker to draw water at the top of each one. Use a black marker to print the word, *Float* on top of the water in one column and the word, *Sink* under the water in the other column. Laminate the chart if possible.
4. Invite a small group of children to work together to predict whether each item will sink or float. Ask them to place each item in the corresponding column. Take a picture of the completed chart and print it out for later use.
5. Encourage the children to test their predictions by placing each item in water to determine if it sinks or floats. Instruct them to place the item in the corresponding column.
6. Once they have tested all the items, show them the picture of their original predictions. Were they surprised? What did they learn?