

Floater--Sinker Pop Cans

Lesson Plan

Topic : Science Inquiry
Subtopic: Scientific Method
Hypothesis building

Activator Question What discrepant event will you use to capture the student's interest?	Floater--Sinker pop cans
What science concepts do you want the students to explore and learn?	The scientific method, hypothesis making
What activities are the students going to do ?	Teacher demonstration, students will make hypotheses and test several of the hypotheses.
What are the behavioral objectives you want the student to accomplish?	A student will gain confidence in making a hypothesis. A student will see that there may be many possible answers to a given problem. A student will expand their creative thinking skills while listening to other possible solutions to the problem.
How are these objectives tied to the state goals?	<u>State Goal #3</u> Principles of scientific research and their application in simple research projects. <u>Process Skills:</u> Observing, Inferring, Formulating Hypotheses <u>NRC Standards:</u> Teaching Standard A, Teachers of science plan an inquiry-based science program for their students. Teaching Standard B, Teachers of science guide and facilitate learning. Content Standard - Science as Inquiry Standard A, as a result of activities students should develop abilities to do scientific inquiry
How are these objectives Benchmarks?	Scientific Inquiry- K-2 People can often learn about tied to things around them by just observing those things carefully, but sometimes they can learn more by doing something to the things and noticing what happens. 3-5 Scientist's explanations about what happens in the world come partly from what they observe, partly from what they think. Sometimes scientists have different explanations for the same set of observations. This usually leads to their making more observations to resolve differences.
What kind of assessment will you use?	Evaluate the number and creativity of hypotheses that the students offer in future science problems.

What interdisciplinary connections will you make?

List the materials you will need to conduct this lesson.

Large clear container to hold water and two pop cans.
Two cans of pop one diet and the other regular, both cans should be the same kind of pop (Coke, Pepsi, 7-Up)

What questions will I discuss with the students ?

What are some possible explanations for the observation that one can floats while the other can sinks ?
How can we design an experiment to test one or several of our hypotheses ?

List the science process skills emphasized in the lesson.

Observing, Inferring, Formulating Hypotheses, Designing an experiment.

Other Resources : Teacher

GEMS Activity Guide. Discovering Density. Grades 6-10
GEMS Activity Guide. Sifting Through Science. Grades K-2.
AIMS. Floaters and Sinkers
Bosak, Susan V. Science Is ... Scholastic, 1991.
Delta Science Modules