



Episodes

:Jack the Seal and the Sea
Seashore Surprises

Activity:

Designing and Floating Boats

**Learner
Objective:**

Students will plan and conduct an experiment to design a toy boat that will float using modeling clay or aluminum foil. Students will determine the carrying capacity of the boat by using such items as paper clips or pennies. Students will add their findings to a classroom graph.

**Materials
needed:**

- Modeling clay (one stick for half the students in the class)
- Aluminum foil (one large square for half the students in the class)
- Large tub of water
- Variety of small objects such as paper clips or pennies
- Large paper for class graph

Steps:

1. Give each student a stick of clay or one sheet of aluminum foil
2. Have students design a boat that floats from their material
3. Students test their boat in a large tub of water to determine floating ability.
4. Each student then tests the carrying capacity of his or her boat carefully placing the small objects provided one at a time into the boat until sinks.
5. Students record their results on a class graph.

**Additional
Option:**

Present both mediums to the class and have them predict which boat will be easier to make and which one would have more carrying capacity. Students write their predictions and graph them. After the experiment they graph their results next to their predictions and compare.

Assessment:

This activity has a built-in assessment. The teacher will be able to clearly see if the student has met the objective of designing a boat that floats and the carrying capacity.