

Real Heavy and Clear Capacity

Purpose

Students will make comparisons of weight and capacity.

Materials

For the teacher: various pairs of objects that differ clearly in weight (e.g., 2 books, 2 tables, 2 jugs, 2 chairs), variety of clear jars, rice, small pebbles, pea beans, funnels, scoops

Activity

A. Pre-Activity Preparation

1. Set up stations around the classroom with pairs of objects that clearly differ in weight.
2. Set up separate stations around the classroom that each have a funnel, a scoop, a pair of jars of differing capacities, and a bowl of either small pebbles or pea beans.

B. Pre-Activity Discussion

Using a number of examples, explain to the class the concepts of weight and capacity.

C. Weight

1. Show students a pair of objects and ask them which object is heavier.
2. Have two or three students compare the objects directly by holding or lifting them.
3. Ask them which object is heavier. Make sure students understand the concept of “heavier.”
4. Repeat with other pairs of objects, sometimes asking students which object is lighter.

D. Capacity

1. Have two or three students determine which of two containers has a greater capacity.
2. Ask one student to fill the first jar with rice and count the number of scoops needed to fill the jar to the top.
3. Have another student estimate if it will take more or less rice to fill the second jar.

(continued)

EXTENDING
THE



ACTIVITY

Have students look at home for pairs of objects that are heavier/lighter and that hold different amounts. Ask them to report to the class what they found.

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Science

Describe how plants and animals are alike and different in the way they look by using weight (e.g., an elephant is heavier than a mouse).

Standards Links
K.1.8, K.3.1, K.4.2

Activity (continued)

4. Ask that student to pour the rice from the first jar into the second jar. Discuss with students that if the rice spills over, the first jar holds more, and if the jar is not completely filled with rice, then the first jar holds less.






E. Small Group Activity

1. Have students move around the room comparing pairs of objects in groups of three or four.
 - a. Weight: Have students move around the room visiting each pair of objects and discussing which is heavier and which is lighter.
 - b. Capacity: Have students move around the room comparing capacity by using the procedure in Part D with different sizes of jars and a variety of objects such as pea beans and small pebbles.
2. Walk around the room listening to the discussions taking place.
3. Complete the activity by comparing several additional objects as a whole class.

Questions for Review

Basic Concepts and Processes

During the activity, discuss the following questions with your students to gauge their understanding of the Standard Indicator:

-  Which of these objects do you think weighs more/has a greater capacity [*hold objects up for the class to see*]?
 -  Which of these objects is heavier? Which is lighter?
 -  Which of these objects has a greater capacity?
 -  How did you figure out which object weighed more/had a greater capacity?
 -  Why do you think this is so?
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