

DRINK IT UP!

K-2

OBJECTIVES

At the end of this lesson, the students shall be able to do the following:

1. Illustrate that the human body needs a lot of water by graphing water consumption for a day;
2. Describe orally how the human body gets water;
3. Tell why the weight of an apple decreases over a period of time; and
4. Give an oral or written definition of dissolve.

BACKGROUND INFORMATION

Water is very important to us. All living things must have water to stay alive and healthy. We must take care of our bodies and give them plenty of water. The body gets its water from things that we eat and drink. The human body needs eight glasses of water a day. Seventy percent of a child's body is water.

Term

dissolve: to make a solution of, as by mixing with a liquid; blend with a liquid.

ADVANCE PREPARATION

- A. Gather materials.
- B. Label a cup for each child with his/her name.
- C. Cut the apples into fourths.

SUBJECTS:

Science, Math, Health, Music

TIME:

30 minutes

Extension activity extends through a school day

Follow-up activity extends over several days

MATERIALS:

clear cup

Kool-Aid

container of water

4-6 apples, depending on number of children in class

2 pint jars

1 quart jar

1 clear pitcher

disposable 8 oz cup for each child

measuring cup

balance scale

unifix cubes or bear counters for weights

PROCEDURE

I. Setting the stage

A. Have a clear 8 oz. cup of water in your hand and seven more 8 oz. cups in front of you.

B. Sing the song:

CUP OF WATER

(Original tune: I'm a Little Teapot)

Here's a cup of water

Clean and pure.

It is very good for me

I am sure.

Eight cups a day, feeds and cleans you up

So tip your cup and

Drink it up!

C. Drink the water in the clear cup at the end of the song.

D. Explain the background information to the students.

E. Tell the students that the following activity is going to show them that water is inside their bodies and that it gets there by eating and drinking.

II. Activities

A. With the students in a group, let them help prepare a clear pitcher of Kool-Aid. The students can pour cups of water into pint and quart containers according to the recipe on the Kool-Aid package. Ask the students how many cups make a pint? How many pints make a quart? How many cups make a quart? (Actually let them use the water to determine the answers.) Also, let the students measure the sugar.

B. Count the number of stirs it takes to dissolve the powdered Kool-Aid into the water. Explain dissolve.

C. Serve the Kool-Aid and apple wedges to the students.

D. After the snack, ask the students questions such as:

1. How much water did we use to make our Kool-Aid?
2. Where is the water now? (Inside you)
3. Did we put water in our bodies when we ate the apple?
4. How can we find out if the apple had water?

III. Follow-Up

A. Weigh an extra apple wedge on the balance scale. Place unifix cubes on opposite side of scale to balance. Let the students predict what will happen to the apple's weight, what the apple will look like, and how many cubes will be needed to equal the weight of the apple each day.

B. Let the apple dry for several days. Weigh and record the difference every few days. Discuss the results with the students. Also discuss the appearance of the apple. "Would people weigh more or less if they had no water in their bodies?"

IV. Extensions

A. To reinforce the concept of how much water a child's body needs daily, set eight disposable or non-breakable 8 oz. cups in the water play or science center for the students to fill.

B. Give each child an 8 oz. disposable cup labeled with his/her name. Have the students tally and graph, by stacking unifix cubes together, each time they drink a cup of water or liquid. At the end of the day, let the children compare the trains of unifix cubes by placing them side by side. Determine who drank more, less, or equal amounts.

RESOURCE

Hone, Elizabeth and Geraldine Thompson, Water is Your Best Friend, California Department of Water Resources, p. 1.