

How Much Water do We Have?



Target Audience: 3-5

Subjects: Science, Social Studies

Time: 1 hour

H2O University Issues Addressed:

- Natural Processes
- Water cycle

Educational Goals

Students will be able to:

- ◆ Understand how much water is on the Earth.

Materials Needed

- * Globe or map of the Earth
- * Apple
- * Knife

Procedure

1. Look at a globe or a map/picture of the Earth. Observe how much of the Earth is covered in water. Discuss how much of the planet is covered in water and how much of that water is usable.
2. Show students the apple. Tell them that this apple represents the Earth. Cut $\frac{1}{4}$ of the apple out and indicate that this represents all of the water found on the Earth as saltwater and freshwater.
3. Hold up the $\frac{1}{4}$ piece of apple to the students. Ask them if they think this piece represents fresh water? No!
4. Cut the quarter section in half and then in half again making $\frac{1}{16}$ of the total apple.
 1. Very carefully, cut in half again making $\frac{1}{32}$ of the total apple. Show the students and ask if they think that there is this much available water? No!
 2. Peel the skin of this $\frac{1}{32}$ slice. This apple peel represents the amount of fresh water available.
 3. Discuss the characteristics of a liquid, solid and vapor with the students.

4. Fill a glass with water and hold it in front of the students. Ask them what it is that you are holding. Now ask them what state the water is in.

Show them a piece of ice. Ask them what it is. Ask them what state it is in. What will happen when the ice melts? What state will it turn into then?