Who Needs Water?

Suggested Grade Level: First Grade

Concept: Living things need water.

Materials
- Balloon
- Paper Towel
- Sponge
- Plant
- Fish
- Picture of person
- Globe
- Paper
- Big white paper

MIGs:
Science: Examine characteristics of plants and animals and describe their basic needs.
Communication Arts: In composing text, write simple sentences.
Social Studies: Locate continents, oceans, and rivers.

Measurable Objective
- Students will explore characteristics of plants and animals and determine what living organisms need water to survive.
- Students will write 3 sentences about 3 organisms telling why each organism needs water.
- Students will use the globe to point out continents, oceans, and rivers.

Anticipatory Set
“How many of you drank water today? How many of you watered a plant today? How many of you have a fish? All of these questions have something in common—can you guess what it is? Have students guess what the common thing is. Tell them that we will be talking about water.

Instructional Input: Prior knowledge: Living organism

1. “All living things require water. But what are living organisms? Maybe you can help me decide what things are living and not living.” Have a box with objects in it. Bring
a balloon, a paper towel, and a sponge. Also have a plant, a fish, and a picture of yourself. Pull out the balloon and ask the class if it is alive. Ask them why or why not. Point out that it has air in it but it does not breathe. Then pull out the paper towel. Is this alive? It takes in water but it does not need water and it does not breathe. How about the sponge? When you put it in water it grows, but is it alive? No, it does not breathe. So what is alive?

2. Pull out the plant. Is it alive? Yes, why? It needs air to breathe and water to grow. How about this fish? Yes, it breathes through the water, it grows, and it needs water to survive. What about this person? Am I alive? Yes, I grow, breathe air and I need water to survive.

3. What will happen if I don’t water this plant? Students will say that it will die. What if I take this fish out of the water and put him on the desk? He will die. What if I don’t drink any more water ever again? What will happen to me? I will die. So even though I have air to breathe if I don’t drink water I will die? Yes. Our bodies are made up of approximately 60-70% water and if we don’t drink water our bodies will not be able to work right.

4. What kinds of water are there? Students should answer salt and fresh, but may need more clues. Can you drink water out of the ocean? Two kinds of water are salt water and fresh water. Where can you find salt water? Students should say, “the ocean.” Get out a globe and have student first point out landmasses and then point out the water. Have students find the oceans on the globe. Explain that oceans are salt water. Oceans actually have salt in them much like the salt that you eat on food. Ask the students if they would like to drink that water. Then ask where you can find fresh water. Answers should include rivers, lakes, ponds, and streams. Point out the great lakes and other fresh water bodies on the globe. Explain that that water is fresh water that humans and other animals drink. There is no salt in that water. Ask the students if they should drink water straight out of a river, pond, lake, or stream. Tell them it could make them very sick with all the bacteria and things in it.

5. Now that we know the difference between the two kinds of water, let’s see what kind of living things need fresh or salt water. Get a large piece of paper and tape it on to the
board. Pass out paper to the students so that they can create their own concept map. Begin making a web to show which living organisms need what kind of water. Put water in the middle and make two branches: fresh water and salt water. Have students list living things that need fresh water and salt water.

6. Pass out paper and have the students write 3 sentences about three different organisms on the concept web. Tell why each organism needs water to survive.

Modeling:
Thinking aloud when deciding which objects are living or not and creating the concept web.

Checking for Understanding
Ask students what will happen if I don’t water plants or take fish out of water. Ask the students about salt and fresh water and they will begin volunteering answers. All students should raise their hand to point out things on the globe.

Guided Practice
Making a concept web to show which living organisms need which kind of water.

Independent Practice
Have students choose 3 things off of the concept web and tell why each of the organisms needs water.

Closure
Take the globe to the front of the class and tell them that all the water they see on the globe is all the water we will ever have. So what happens if someone puts something bad in the water and we can’t drink it anymore? We will die. That is why it is very important not to waste water or pollute our water. All living things share the same water so take care of it.

Evaluation
Look at the students sentences to make sure there are 3 sentences and that they include why three different organisms need water. Students will pass around the globe and point out continents, oceans, and rivers when asked.

Lesson plan compiled by Meaghan Bonham, an Earth Team Volunteer and Early Childhood Education student at Missouri State University, Springfield, MO. May, 2007