

Activity

1. Discuss with your students the needs of plants (water, sunlight, soil). Ask your students how the plants in the garden get water. Answers will vary. If students have not mentioned rain, you can prompt them by asking how plants in nature are watered.

Introduce students to the water cycle by filling the plant flat or foil dish halfway with water and covering with the lid. Place near a sunny window. Observe after 24-48 hours as condensation forms on the lid. Allow students to gently tap the lid and make it "rain." Explain to students that we have a limited amount of water on the earth and a very small portion available is fresh water. The amount of freshwater available is all we have and it is important for us to conserve our freshwater.

Grade Level: 2

Subject Area: Math / Social Studies

Materials:

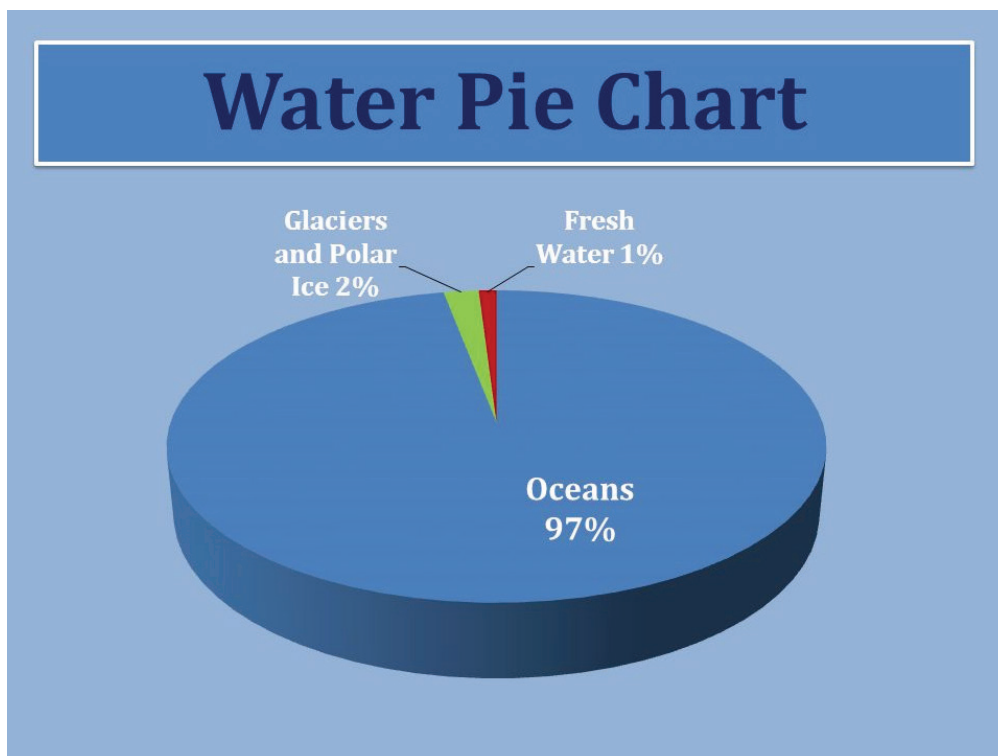
Plant flat with humidity dome or a foil casserole dish with a lid.
Milk jugs (top cut off, but handle intact) or 2-liter soda bottles (top cut off)
Rocks or aquarium gravel
Recording sheet
Rulers
Rain gauge

Standards:

2.MD.1
2.G.2
2.G.2.2

Collaborators:

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Ask students to brainstorm ideas of ways to water plants in the garden without using water from the faucet/sink. Allow students time to turn-and-talk to discuss their ideas. Come together and record their ideas.

2. Provide students with materials needed to create a rain collector (milk jugs, 2-liter soda bottles). Remind them that it is better to use materials we already have for a second use rather than buying new containers. The tops of these bottles are removed to make the opening larger for collecting more water. Students can decorate their rain collectors in order to take ownership of their collector. Place a few rocks inside each container to keep them upright and prevent them from blowing away, then place rain collectors outside.
3. After it rains, bring the students out to the rain collectors. Ask students what unit of measurement we could use to measure the rain (light rain: centimeters; moderate/heavy rain: inches). Have students measure the rain water using a rain gauge. Record on a chart, then graph their findings, students may graph results in groups or as a class. Have students water their garden using the rain water.
4. After it rains a second time, repeat step 3. Have students compare the amount of rain water from the first and second rain events. Students will form questions they could ask about their graphs, such as, "What is the difference between the two measurements?" or "What was the total rainfall?" Have students create number sentences that represent these questions.
5. What are other ways we can conserve water in order to be good stewards of the environment? Allow students to brainstorm ways they can conserve water in their daily lives.

Your Notes & Ideas