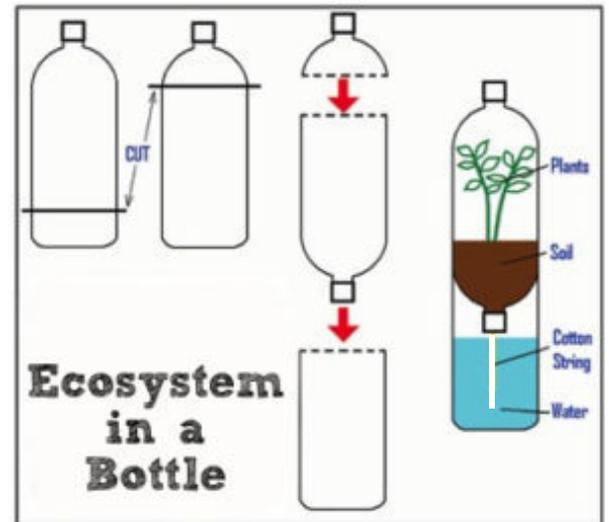


GOAL:

Explore the components of an ecosystem and how it relates to water.

MATERIALS:

- Two 2-liter soda bottles
- One bottle cap
- Duck tape
- One piece of heavy cotton string cut about 6 inches long
- Distilled water
- 3.5 inches of planting soil
- And a couple of small plants with the roots attached
- Optional, pill bugs (Isopods) worms, or a land snail



STEPS:

1. Cut the two 2-liter bottles as shown in the pictures
2. Using duct tape, connect the three pieces as shown in the middle picture
3. Drill or punch a hole in the bottom lid and place a cotton string through it
4. Fill the top portion with 3.5 inches of planting soil
5. Fill the bottom portion with a pond: of distilled water so the cap is just above the water line
6. Plant two or three small plants in the soil
7. (Optional) add some pill bugs, worms or a snail to you bottle

DISCUSSION:

Observe your ecosystem for a couple of days. Do you notice any changes with the plant? Is the water level the same or does it move? What would happen if the water was contaminated?

HOW DOES WATER IMPACT THE ECOSYSTEM?

Water is one the most important component of any ecosystem. All living organisms need water to grow and survive. In an ecosystem, water cycles through the atmosphere, soil, rivers, lakes, and oceans. Some water is stored deep in the earth. Surface water, on the other hand, is the source that sustains life on land.

Here are some examples of how the water affects the ecosystem:

- Polar bears rely on ocean ice in order to successfully hunt and capture seals.
- Plants use rainwater so that it can grow.
- Fish need water because it is part of their habitat.

WHAT ARE THE EFFECTS OF WATER IN THE ECOSYSTEM

Water can have good or bad effects on the ecosystem. It depends on the quality of water. If the water quality is good, then plants and other animals will benefit from it. On the other hand, if the water is polluted, it can harm the environment and wildlife

- Health: When our water becomes polluted, we can no longer drink it. If we don't clean it, we can get sick or get diseases.
 - Ecosystem: Pollution can easily travel through streams and rivers, which means that more bodies of water can become contaminated.
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