

**Learning Objectives**

- 1) Know the three types of natural resources: inexhaustible, renewable, and nonrenewable.
  - a) Inexhaustible natural resources cannot be used up.
    - i) Air is inexhaustible. All living things need air to live. Air is also used for things like blowing up toys, hearing sounds, and flying planes.
    - ii) The sun is an inexhaustible resource. It warms the earth's land and water. Plants use the sun's energy to make food and grow. People use the sun's energy for solar power.
    - iii) Water is another inexhaustible natural resource. Water covers most of the earth's surface and is used for transportation. It is also used to make electricity and for doing many fun things, like fishing and swimming.
      - (1) Most of the earth's water is ocean water, which is too salty to be used for very many things.
      - (2) Only a small amount of the world's water is fresh. A lot of the fresh water is frozen in glaciers, leaving only a small amount of fresh water for living things to use. *Clean* fresh water is considered a renewable resource.
  - b) Renewable natural resources can be used over and over again.
    - i) Trees and plants are renewable. They are used for food, clothing, medicine, toys, and even homes. They are renewable because they can be replanted, but because they take a long time to grow, it is important to conserve them.
    - ii) Soil is a renewable resource. Soil, the top layer of the earth's surface, is a mixture of tiny pieces of rocks, minerals, and decayed plant and animal materials. Many foods grow in soil. Clay and sand from soil can be made into bricks, which are used in building homes, schools, walkways, and many other things. It is important to conserve soil. Soil erosion can be prevented by crop rotation, contour farming, and replanting forests.
  - c) Nonrenewable natural resources cannot be made again in our lifetime.
    - i) Minerals are nonrenewable. They are hard nonliving things found in rocks. Minerals can be metals (like iron, copper, and gold) or gems (like diamonds,

emeralds, and rubies). Many things we use are made from metals that come from minerals.

- ii) Oil, natural gas, and coal are nonrenewable resources. They are called fossil fuels.
  - (1) Coal is a black or dark brown substance that is mined from the earth. It forms from the remains of plants and can be burned for energy.
  - (2) Oil and natural gas form from the remains of animals and plants. They are pumped out of the earth from a drilled well. They are often used for fuel to heat buildings and make electricity. Oil is also used to make gasoline, plastics, paints, soaps, and medicines.
- 2) Understand the bad effects of pollution. Pollution is harmful materials getting into water, air, or land. Sometimes nature pollutes itself, but people are the greatest cause of pollution. Planes and factories can pollute the air, fertilizers and chemicals can pollute water, and garbage can pollute the earth.
- 3) Know how some pollution can be removed. Water treatment plants start by keeping the water in a quiet pond. Mud falls to the bottom of the pond. Then the water is sprayed into the air, where sunlight and air help to kill germs. Finally, the water flows through sand, which removes chemicals.
- 4) Realize the importance to recycle, reuse, and reduce.
  - a) Recycling is making new things out of the materials from old things. Used glass, cans, and paper can often be recycled.
  - b) There are many ways to reuse something. One example is turning a sheet of paper over to use the other side. By using both sides, you go through half as much paper than if you were to only use one side. You could also give your old clothes to someone who needs them instead of throwing them away.
  - c) To reduce is to use less of something. You can use less energy by wearing a sweater in the winter instead of turning up the heat. You can reduce the amount of water you use by turning off the faucet when you brush your teeth.
- 5) Know that April 22 is Earth Day. On that day, people take a closer look at the planet to see how they can make it better.

**Suggested Activities**

- 1) Take a trip to a local recycling plant. Students will be able to see how recycling works, what kind of things can be recycled, and the benefits of recycling.
- 2) Bring to class several items that come from natural resources. They could be things like clothing, a nail or screw, some food items, or a toy made of wood. Have the students write down each item and try to guess the natural resource it came from.

**Vocabulary**

**Natural resource** — Something found in nature that people use to make food and goods that they need to live.

**Inexhaustible resource** — A natural resource that cannot be used up.

**Renewable resource** — A natural resource that can be used over and over again.

**Nonrenewable resource** — A natural resource that cannot be made again in our lifetime.

**Conserve** — To save; to avoid wasting.

**Erosion** — Wearing away the earth's soil by wind, water, or ice.

**Crop rotation** — Planting different crops each year to help put nutrients back into the soil).

**Contour farming** — Planting along slopes in the soil to keep soil from washing down hills.

**Pollute** — To put harmful materials into the water, air, or land.

