

# Do We Grow It or Mine It?

Soda cans and the shirt on your back have something in common. Do you know what a soda can is made from? What is a T-shirt made from? If you said the can is made from aluminum, you are correct. The tee shirt is probably made from cotton. Both of these items have different physical properties, yet share one main characteristic. Do you know what these objects have in common?

The aluminum in the can is a metal. **Metals** are natural mineral substances mined from the ground. Special factories, called refineries and mills, process the rocks that contain the metal minerals. The cotton in the T-shirt is grown on cotton farms. Areas with warm summers and plenty of rain are ideal locations for cotton farms.

Metal and cotton are examples of natural resources. A **natural resource** is any material found in nature that can be used to benefit people. Natural resources include everything from the air you breathe to the water you drink. Natural resources also include the foods you eat and the materials in the products you use every day.

Natural resources are usually divided into sub-categories depending on how they are replenished. Resources that grow are usually considered **renewable resources**. Resources that need to be mined or pumped from the ground are normally considered **nonrenewable resources**. As the name indicates, we can obtain more of a renewable resource relatively easily. Cotton, rice, and corn are considered renewable.

Another name for a nonrenewable resource is a depleting resource. A **depleting resource** is a natural resource in limited supply. Any material found in a fixed, or finite, amount on Earth is nonrenewable. Examples of this category include all metals, rocks, and minerals. Fossil fuels, such as coal, oil, and natural gas are also depleting and in limited supply. Replenishing supplies of nonrenewable resources can take thousands or millions of years.



Natural resources, such as aluminum cans and T-shirts, are all around you.



Crop plants are renewable natural resources. Here, a sugar cane plant grows in a field. When this crop is harvested, another crop will grow in its place.

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Air and water are in a special category. Air and water are called **reusable resources**. Both air and water have existed on Earth for millions of years. Natural activities constantly recycle and purify reusable resources. Air and water are not destroyed when used. In fact, a glass of water may contain molecules that dinosaurs drank millions of years ago! The air you breathe while reading this sentence may have been in the lungs of a penguin in the Antarctic or an elephant in Africa a few weeks ago!

Contamination of reusable resources is a problem. **Contamination** is the input of dangerous substances into a natural resource. Many human activities pollute reusable resources at accelerated rates. Some water supplies contain chemicals not easily removed by natural processes. Chemicals can also make air toxic to breathe.

The demand for materials is also a problem. The demand for fossil fuels is far greater than the supply available on Earth. Mining operations can ruin habitats and endanger species of plants and animals. Thus, we all have a responsibility to use resources responsibly. Can you think of ways that you can help achieve this goal?



Oil rigs drill for natural oil deposits on the ocean floor.