

Earth Resources

SECTION 25.1 *What are resources?*

In your textbook, read about natural resources and renewable and nonrenewable resources. Answer the following questions.

1. What is a renewable resource?

2. What is a nonrenewable resource?

Put a check (✓) in the column to indicate whether a resource is renewable or nonrenewable.

Natural Resource	Renewable	Nonrenewable
3. Air		
4. Aluminum		
5. Chickens		
6. Carbon		
7. Coal		
8. Copper		
9. Diamond		
10. Elephants		

Natural Resource	Renewable	Nonrenewable
11. Trees		
12. Freshwater		
13. Gold		
14. Petroleum		
15. Phosphorus		
16. Solar energy		
17. Soil		

In your textbook, read about the distribution of resources. For each statement below, write *true* or *false*.

- _____ 18. Natural resources are evenly distributed on Earth.
- _____ 19. Availability of natural resources helps determine a country's wealth and power.
- _____ 20. A country's standard of living has no relationship to its resource consumption.
- _____ 21. The United States has 6 percent of the world's population and annually consumes about 30 percent of the mineral and energy resources.

Energy Resources

SECTION 26.1 Conventional Energy Resources

In your textbook, read about energy resources on Earth.

For each statement below, write *true* or *false*.

- _____ 1. The Sun is the ultimate source of most energy used by organisms on Earth.
- _____ 2. Materials that are burned to produce heat or power are known as energies.
- _____ 3. Probably the earliest fuels used by humans were fossil fuels.
- _____ 4. Humans can live in cold climates because they use energy to provide heat.

In your textbook, read about traditional fuel sources.

Complete the table below. Write *yes* or *no* to indicate whether or not the fuel is renewable.

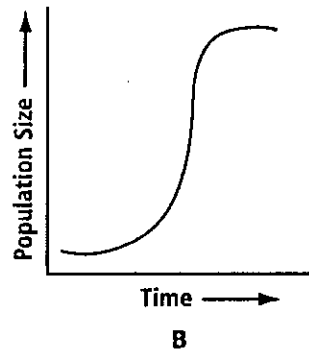
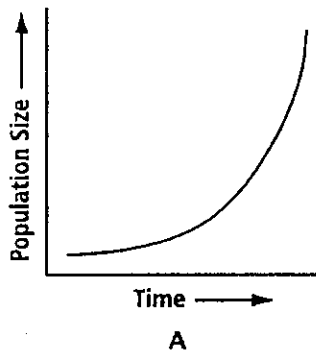
Identify each fuel as a biomass fuel or a fossil fuel. Give one example of how the fuel is commonly used, such as to heat homes, to power vehicles, in cooking, or in power plants.

Fuel	Renewable?	Biomass or Fossil?	Common Use
1. charcoal			
6. coal			
7. fecal material			
8. field crops			
9. natural gas			
10. peat			
11. petroleum			
12. wood			

Human Impact on Earth Resources

SECTION 27.1 Populations and the Use of Natural Resources

In your textbook, read about population growth and the use of resources by organisms. Examine the graphs below. Then answer the questions.



1. Why must organisms use natural resources?

2. Describe the pattern of population growth in graph A.

3. Describe the pattern of population growth in graph B.

4. What happens to a population that has not reached its carrying capacity?

5. What happens when a population exceeds its carrying capacity?

SECTION 27.3 *Human Impact on Air Resources*

In your textbook, read about air pollution.

Use each of the terms below just once to complete the passage.

acid precipitation	carbon dioxide	gasoline	global warming
greenhouse gases	nitrogen oxides	oil	ozone
particulate matter	smog	ultraviolet	stratosphere
			volcanic eruptions

Clean air is essential to life on Earth. But human activities put many types of pollution into the air we breathe. The reaction of sunlight on an atmosphere full of pollution causes a yellow-brown haze called **(1)** _____. The major chemical in this pollutant is a gas molecule with three oxygen atoms called **(2)** _____. Air pollutants also occur in the form of particles of materials such as ash and dust called **(3)** _____.

The largest source of air pollution in the United States is the exhaust from motor vehicles that burn the fossil fuel called **(4)** _____. Another large source of pollution is electric power plants that burn coal and **(5)** _____.

Air pollution does not come only from human activities. Natural phenomena such as forest fires and **(6)** _____ can also cause air pollution.

(7) _____ in Earth's atmosphere help it retain heat released from Earth's surface. However, the burning of fossil fuels has increased the concentration of the most important of these gases, **(8)** _____. Scientists hypothesize that the increase in this and other such gases has caused **(9)** _____, which is a rise in Earth's average surface temperature.

The use of chemicals called CFCs has also contributed to air pollution. CFCs rise into the atmosphere and break down ozone molecules in the **(10)** _____. The ozone layer protects Earth from the Sun's harmful **(11)** _____ radiation.

Precipitation with a pH of less than 5.0 is **(12)** _____. It forms when sulfur dioxide and **(13)** _____ from sources such as power plants and motor vehicles combine with moisture in the atmosphere.

SECTION 27.4 *Human Impact on Water Resources*

In your textbook, read about water pollution.

In the space at the left, write *true* if the statement is true; if the statement is false, change the italicized word or phrase to make it true.

- _____ 1. Water pollution *nonpoint sources* generate pollution from widely spread areas.
- _____ 2. Leaking chemical-storage barrels, landfills, and underground gasoline storage tanks are major sources of *surface water* pollution.
- _____ 3. A pipe pouring out pollution from a factory into a river is a *point source* of water pollution.
- _____ 4. The *Endangered Species Act* is the main federal law that protects our nation's waters from pollution.
- _____ 5. The *Safe Drinking Water Act* was designed to ensure that every American has safe drinking water.
- _____ 6. Since 1960, freshwater use has nearly *doubled*.
- _____ 7. Nutrients present in sewage water can create blooms of cyanobacteria that deplete *nitrogen* in the water as they decompose.

In your textbook, read about water conservation.

For each area below, list one way that people can conserve water.

8. On farms

9. In industry

10. At home

