

Lesson Overview A Changing Landscape

CHANGGING LANSCAPE

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HUMAN AKTIVITY

Lesson Overview A Changing Landscape**THINK ABOUT IT**

The first humans to settle about 1600 years ago. They cut trees to plant farms, and they introduced nonnative plants, pigs, chickens, dogs, and rats. This combination drove many native plant and animal species to extinction.

Yet for centuries ecosystems provided enough fresh water, fertile soil, fish, and other resources to keep the society self-sufficient. What happened next is an important lesson on managing limited resources.

Lesson Overview A Changing Landscape**The Effect of Human Activity**

 How do our daily activities affect the environment?

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The Effect of Human Activity

- How do our daily activities affect the environment?
- Humans affect regional and global environments through agriculture, development, and industry in ways that have an impact on the quality of Earth's natural resources, including soil, water, and the atmosphere.

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The Effect of Human Activity

Beginning in the late 1700s, they imported plants and animals that became invasive pests. They cleared vast tracts of forest to grow sugar cane, pineapples, and other crops that required lots of water. They also converted land for housing and tourism. Waikiki Beach, for example, is surrounded by built-up areas that support tourism.

The Effect of Human Activity

The effect of these activities on ecosystems and its human inhabitants show what happens when a growing human population does not adequately manage natural resources.

Agriculture

Modern agricultural practices have enabled farmers to double world food production over the last 50 years.

Monoculture, for example, is the practice of clearing large areas of land to plant a single highly productive crop year after year. Monoculture enables efficient sowing, tending, and harvesting of crops using machines.

Lesson Overview A Changing Landscape**Agriculture**

However, agriculture impacts natural resources, including fresh water and fertile soil. Fertilizer production and farm machinery also consume large amounts of fossil fuels.

Lesson Overview A Changing Landscape**Development**

As modern society developed, many people chose to live in cities. Then, as urban centers became crowded, people moved to suburbs.

This development has environmental effects. Dense human communities produce lots of wastes that, if not disposed of properly, can affect air, water, and soil resources.

Lesson Overview A Changing Landscape**Development**

In addition, development consumes farmland and divides natural habitats into fragments. Development in Florida, for example, has led to fragmentation of the forests there.

Lesson Overview A Changing Landscape**Industrial Growth**

The conveniences of modern life require a lot of energy to produce and power. Most of this energy is obtained by burning fossil fuels—coal, oil, and natural gas—and that affects the environment.

In addition, industries have traditionally discarded wastes from manufacturing and energy production directly into the air, water, and soil. Smog, for example, is formed by chemical reactions among pollutants released into the air by industrial processes and automobile exhaust.


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The image contains four photographs of open-pit coal mines. The top-left photo shows a large, terraced mine with a road and a truck. The top-right photo shows a mine with a large, greenish pond. The bottom-left photo shows a mine with a large, dark, rectangular structure. The bottom-right photo shows a mine with a large, yellowish, rectangular structure and a road. A watermark 'PPACOAL.COM' and the URL 'http://www.PPACOAL.com' are visible in the bottom-right photo.

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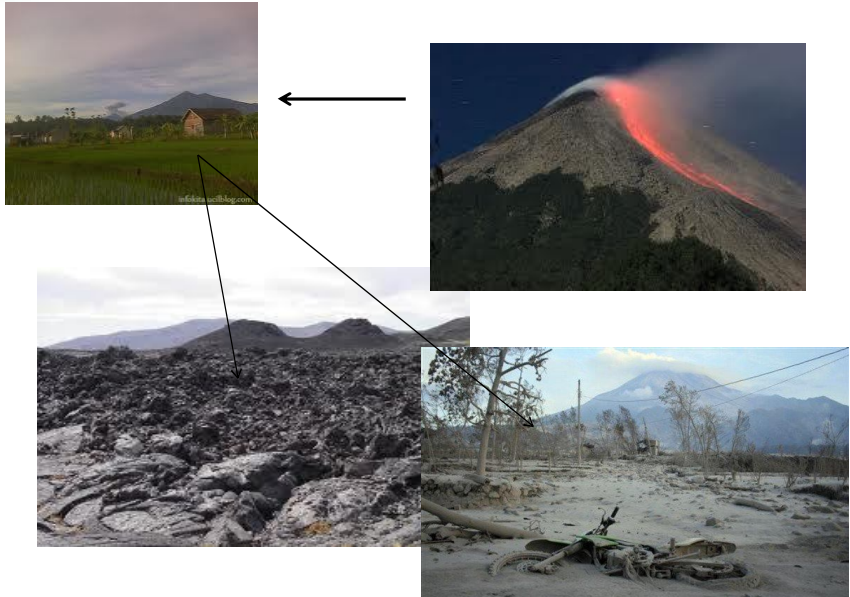
Renewable and Nonrenewable Resources

Some resources are **nonrenewable** resources because natural processes cannot replenish them within a reasonable amount of time. Fossil fuels like coal, oil, and natural gas are nonrenewable resources formed from buried organic materials over millions of years.

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NATURAL AKTIVITY

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The image illustrates the impact of a volcanic eruption on a landscape. It shows a progression from a peaceful scene with a house and green field to a desolate landscape covered in ash and debris, with dead trees and a volcano erupting at night.

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This slide contains four photographs illustrating flood damage. The top-left photo shows a river overflowing its banks, with muddy water spreading across a forested area. The top-right photo shows a town with houses partially submerged in brown floodwater. The bottom-left photo shows a wide, shallow river channel with a large amount of sediment and debris. The bottom-right photo shows a dry riverbed with a concrete dam structure in the background.

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This slide contains four photographs illustrating landslides and mudflows. The top-left photo shows a landslide on a hillside with exposed tree roots. The top-right photo shows a landslide on a hillside with several people standing on the edge. The bottom-left photo shows a landslide near a house, with a large amount of mud and debris. The bottom-right photo shows a large mudflow moving down a hillside.