

Chapter 1 Main Ideas

- Describe and identify the layers of a forest.
- Forests benefit humanity in many ways.



Facts to Know

- What kind of plants that grow in each layer of the forest?
- What types of forests have an emergent layer?
- What are some common foods that originally came from the forest?
- How much of Earth's land surface is covered by forests?

Things to Think About

- What do you think are the four most important benefits of forests? What are some reasons you think so?
- Why was the discovery of food in the forest important?

Vocabulary Words

- Emergent Layer, Shrub Layer, Forest Floor, Canopy, Understory, Carbon Dioxide, Evapotranspiration



Chapter 2 Main Ideas

- Tropical moist rainforests and tropical dry rainforests are different in many ways.
- Plants and animals have had to adapt to survive in the tropical rainforest.
- Tropical rainforests benefit humanity in many ways.



Facts to Know

- Where are tropical rainforests found and how much land they cover?
- What types of animals that live in each type of tropical rainforest?
- What is the climate like in each type of rainforest?
- How does the climate affect the plants?
- How do plants in tropical forests protect themselves?

Things to Think About

- What are some of the ways tropical forests are important to humanity?
- Why do some animals only live in one type of tropical forest?
- How are moist and dry rainforests different from each other? How have plants and animals had to adapt?

Vocabulary Words

- Fertile, Nutrients, Leaching, Carnivorous, Epiphytes, Mutualism, Rainforest, Monsoon, Tropics, Drought, Flora



Chapter 3 Main Ideas

- Temperate forests have moderate climates that experience all four seasons.
- Coniferous forests and deciduous forests are different from each other in many ways.



Facts to Know

- How have coniferous and deciduous trees adapted to their environment?
- Why can't deciduous trees survive cold winters?
- How do deciduous and coniferous trees affect the soil?
- What kind of forests have emergent layers?
- What are the largest trees on earth?

Things to Think About

- How are coniferous forests and deciduous forests different from each other? Why are they different?
- How are temperate forests different from tropical forests in terms of climate, adaptations and location?

Vocabulary Words

- Perennial, Sapling Layer, Deciduous Tree, Coniferous Tree, Nurse Log, Chlorophyll, Temperate, Evergreen Trees, Broadleaf Forest, Hibernate, Mixed Forest, Herbaceous



Chapter 4 Main Ideas

- Boreal forests are in the far northern hemisphere and are the largest land based biome.
- Plants and animals have had to adapt to the extreme cold.
- Boreal forests have three distinct zones.



Facts to Know

- Where are boreal forests located?
- Why do some animals stay year round in the boreal forest while most migrate in winter?
- How have snow shoe hares and lynx adapted to the boreal forest?
- How does the cold affect the soil of the boreal forest?
- How are boreal forests different than temperate coniferous forests?
- How is each zone of the boreal forest different from the others?

Things to Think About

- How have larch trees had to adapt to the extreme cold of the boreal forest?
- Why are coniferous trees more common in the boreal forest?
- Why have the plants in the boreal forest adapted to be darker in color?

Vocabulary Words

- Lichen Woodland, Forest Tundra, Closed Canopy, Omnivore, Permafrost, Bog, Decomposition, Taiga



Chapter 5 Main Ideas

- Unique climate conditions can create unique forests



Facts to Know

- What climate conditions need to exist for each type of special forest?
- Where can you find each type of special forest?
- What kind of trees can you find in each type of special forest?
- How is a mangrove different than all other types of forests?
- What is a sub-alpine forest?

Things to Think About

- Which kind of special forest do you think is the most unique? Why?

Vocabulary Words

- Riverine Forest, Montane Forest, Cloud Forest, Mangrove, Mediterranean Forest, Scrubland



Chapter 6 Main Ideas

- Our forests face many threats, and these threats can work together to harm forests.
- Our civilization is dependent on wood.
- We must all do our part to preserve our forests for the future.



Facts to Know

- How many acres of forests are being lost every year?
- How can invasive species harm a forest?
- How did slash and burn agriculture get its name?
- What effect does the release of carbon have on our atmosphere?

Things to Think About

- What are causes of deforestation?
- How can deforestation affect animals far away?
- What are some things you can do to protect our forests?

Vocabulary Words

- Deforestation, Invasive Species, Drought, Global Warming