

Name _____ Date _____

Forests

Learn more about this topic! Each section gives more detail on one of the lyrics from the song. Read each section, and then respond by answering the question or taking notes on key ideas.

1. b'

The forest is one of five biomes on Earth. The others are grassland, tundra, desert, and aquatic. A biome is a region with a certain climate and plant and animal life. Trees are the primary plant life in forests. There are different types of forests, but they are all generally characterized by four layers. The emergent layer is at the tops of the tallest trees. The canopy is the
 of the forest, where tree branches and leaves meet. The understory is at the height of smaller trees and plants. The forest floor is the bottom layer, or the ground.

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Notes

2. b'

There are three major types of forest: tropical rainforests, temperate forests, and boreal forests, also known as the taiga. Tropical rainforests are located near the equator, between 23.5 degrees of latitude North and South. They are hot and humid year-round, with temperatures rarely falling below 70
 F. As you may guess from their name, tropical rainforests get a lot of rain
 up to 30 feet per year! They contain a great diversity of life: scientists estimate that half of the planet's plant and animal species thrive there.

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Notes

3. b'

Temperate forests are located at mid-latitude in eastern North America, northeastern Asia, and western and central Europe. They have four defined seasons, and precipitation is distributed evenly throughout the year. Temperate forests are home to deciduous trees, which drop their leaves in winter and regrow them in spring. As the fallen leaves decay, they enrich the soil with nutrients.

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Boreal forests, also known as the taiga, are located between 50 and 60 degrees North latitude. They can be found in Scandinavia, Canada, and Siberia. The soil is generally thin and low in nutrients. Coniferous trees, which keep their leaves year-round, grow there. The taiga has short, wet, warm summers and long, cold, dry winters. Precipitation falls mostly in the form of snow.

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4. b'

Forest plant and animal species have developed special adaptations to help them survive. Rainforests are rainy and humid, so plants have evolved to deal with excess moisture. Some trees have thin, smooth bark. It helps water flow down to the roots and allows moisture to evaporate. "Drip tips" on tree leaves enable raindrops to run off quickly. In addition to being humid, rainforests can be quite dark. The rainforest floor gets very little sunlight. Some vines can climb over 100 feet high to reach openings in the tree canopy. Many rainforest animals, like spider monkeys and flying frogs, have adaptations that let them climb trees easily.

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Notes

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5. b'

Trees in the temperate forest evolved to have broad green leaves, which capture sunlight to make food through photosynthesis. In the winter, it is too cold for trees to protect their leaves from freezing. They drop the leaves and seal up the places where the leaves attached to the branch. This helps the trees conserve water. Temperate forest animals, like squirrels and chipmunks, store food in the ground or in trees to eat during the winter, when food is scarce. Some animals, like bears, hibernate through the winter. Others, like birds, have not adapted to cold weather. They migrate to warmer regions in the winter.

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Notes

6. b'

In the taiga, most trees are evergreen conifers, whose leaves are known as needles. Evergreen needles have evolved to withstand the cold climate. The concentrated sap in their cells has a low freezing point, so it stays liquid even when the temperature is very cold. They also retain water during the cold, dry winter. Many taiga mammals, like caribou, foxes, bears, and minks, have a thick coat of fur to keep them warm and insulated against the cold.

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