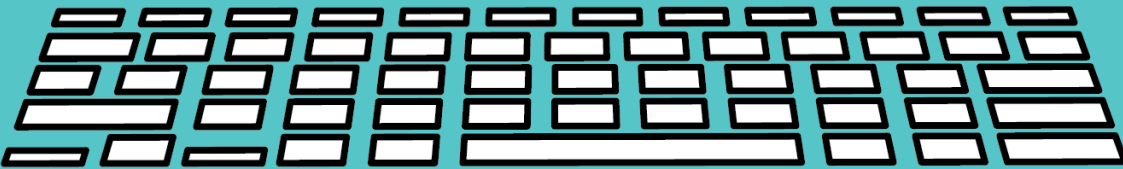
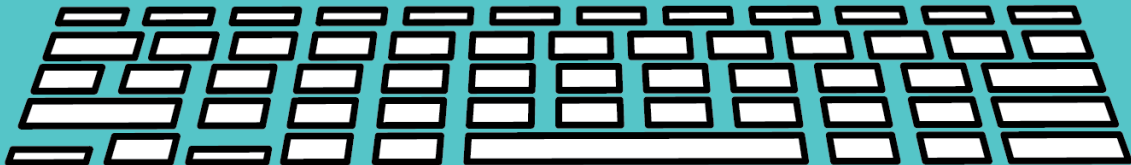


RAIN FOREST
PRODUCE
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THE WORLD'S
OXYGEN

Short Answer	Type Answer Here
1. What are groups of similar ecosystems called?	
2. On what continent is the largest savanna?	
3. What is the top layer of a rainforest called?	
4. What is a tropical grassland also called?	
5. How many seasons do grasslands have?	
6. What forests are the coldest of the forest biomes?	
7. Where is the windiest place on Earth?	
8. What temperature in fahrenheit is freezing?	



Short Answer	Type Answer Here	Fill in the Blank	Type Answer Here
1. What are groups of similar ecosystems called?		9. ____ are where living creatures interact with non-living things.	
2. What continent is the largest savanna?		10. Temperate forests have ____ seasons & more mild temps.	
3. What is the top layer of a rainforest called?		11. Savannas are typically located near the ____.	
4. What is a tropical grassland also called?		12. Deserts have as little as ____ in of rain per year.	
5. How many seasons do grasslands have?		13. Scorpions and meerkats are examples of ____ animals.	
6. What forests are the coldest of the forest biomes?		14. ____ biomes are marine, freshwater, and coral reefs.	
7. Where is the windiest place on Earth?		15. Deserts have ____ humidity.	
8. What temperature in fahrenheit is freezing?		16. An ecosystem thrives when everything works in ____.	



ECOSYSTEMS & BIOMES

Ecosystems are where living creatures (plants and animals) interact with non-living things in an environment. Basically, it is how organisms interact with the sun, air, water, and soil in each area.

Living organisms include plants, bacteria, fungi, and insects. Non-living things include trees, water, and weather. Living organisms require other organisms in order to survive. For example, animals need food, water, and shelter. If there is a drought, animals will have to move to a new place in order to survive. Ecosystems vary in size, from a tiny area of land to an entire planet.

An ecosystem thrives when everything works in harmony. Living beings rely on food, water, oxygen, and carbon. If any of these is lost, new organisms are introduced, or the ecosystem is disrupted, it can die. Such disturbances include pollution, deforestation, human development, and removal of natural resources.

Adding animals that don't belong in a particular ecosystem can also interfere. Animal populations can't remain constant due to the predator-prey relationships. Three things can occur with a new species. First, animals adapt and stay in the ecosystem. Second, existing animals die. Finally, they may relocate.

Biomes are groups of similar ecosystems. Weather, rainfall, and animal species, and plants are similar within the various biomes on earth. Land biomes include the desert, grasslands, savanna, tundra, tropical rainforest, temperate forest, and taiga forest. Aquatic biomes are marine, freshwater, and coral reefs.

Deserts typically have as little as 10 inches of rain per year. With very dry soil there is little plant life. Deserts also have low humidity. They get very hot during the day. Daytime temperatures can reach 100 degrees Fahrenheit. However, heat disappears at night. Nighttime temperatures can drop to 32 degrees Fahrenheit (freezing).

Nocturnal animals like meerkats, camels, horned toads, scorpions, and grasshoppers, survive in deserts. They burrow underground to sleep during the heat of the day. Plant species include cactus, grasses, shrubs, and select short trees. Other desert biomes include the polar deserts in Antarctica and the North Pole. These cold deserts are home to penguins, seals, and snow petrels (birds). Antarctica is the windiest place on earth.

Grasslands can be both temperate and tropical (called savannas).

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Temperate grasslands are large landmasses with low growing grasses and wildflowers. They fall between the climate of the desert and forest. There isn't enough water to grow tall trees, but there's more water than in a desert. Grasslands have two seasons: hot summers and cold winters.

Savannas are tropical grasslands with scattered trees and shrubs. They have rainy and dry seasons with warm weather. On savannas, you will find herds of animals. Savannas are typically located near the equator, with the largest being in Africa.

The tundra biome is found in the extreme north. It accounts for 20 percent of the earth's surface. This cold and often frozen biome is dry. Beneath the top layer is frozen ground called permafrost. Tundras have little nutrients to fuel plant and animal life. Some animals in the tundra change coats to blend in with the seasons. The arctic hare, ermine, and arctic fox are brown in summer and white in winter. Tundra seasons include long winters (8 months) and short summers.

Tropical rainforests, located near the Equator, usually get over 75 inches of rain annually. They are very humid and warm. Temperatures average between 70 and 90 degrees all year. Rainforests have 3 layers: the canopy (top layer of trees), the understory, and the forest floor. The canopy is home to most of the animals. This includes monkeys, birds, insects, and reptiles. Some of the animals never touch the ground. The understory is where you can find snakes, leopards, jaguars, insects, frogs, iguanas, etc.

Temperate forests are located between the rainforests and the taiga. The taiga's cold forest environment covers parts of Russia, Canada, Scandinavia and southern Alaska. Temperate forests have four seasons and mild temperatures. Black bears, mountain lions, and deer live here. You'll find fox, squirrel, skunk, rabbit, porcupine, timber wolves, and birds. Many animals have sharp claws to climb trees.

Taiga forests are the coldest of the four biomes. They are also called boreal or coniferous forests. They are covered in coniferous trees (evergreens). Winters can last 10 months with short summers. These forests receive much more rain than the deserts or tundra. They are also called the taiga.

Marine biomes are the largest biomes on earth, covering 70 percent of the earth's surface. They include saltwater oceans. About 90 percent of life on earth lives in the ocean. Also, about 90 percent of human activity takes place here, too. Freshwater biomes include ponds, lakes, swamps, rivers, and wetlands. Coral reef biomes include fringe, barrier, and atoll reefs.

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