

Terrestrial Biomes

4th
Grade



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Biome Vocabulary

We come across a lot of new and exciting words in science. If you come to a word in this workbook that you don't know, turn to this page and look it up.

Adaptation:

When a plant or animal changes physical or behavioral characteristics over many generations to better survive in their environment.

Biome:

A large area on Earth that has its own climate, plants, and animals. To really understand a biome you need to know:

- What the climate of the region is like.
- Where each biome is found and what its geography is like.
- The special adaptations of the plants.
- The types of animals found in the biome and their physical (how they look) and behavioral (how they act) adaptations to their environment.

Carnivore:

An animal that eats only meat.

Compass rose:

Tells which direction is north, south, west, and east.

Climate:

The long-term temperature, humidity, precipitation, wind, etc in an area.

Ecosystem:

The network of interactions between different living organisms and the environment in which they live.

Environment:

Where a plant or animal normally lives.

Herbivore:

An animal that eats only plants.

Migratory:

Animals or birds that move depending on the season.

Omnivore:

An animal that eats plants and animals.

Predator:

An animal that hunts and eats another animal.

Terrestrial Biome Cheat Sheet

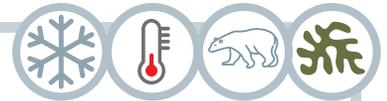
There are many different types of terrestrial biomes in the world. This page is a quick cheat sheet for you to use as you work your way through the workbook.

Taiga:



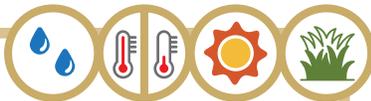
This is the largest terrestrial biome, with long cold winters and short warm summers which makes it a difficult place for animals to live. It features lots of evergreen trees.

Tundra:



This is the coldest biome. It is treeless with a few specialized animals.

Grasslands:



Summers here are hot and winters are cold. It has lots of grass, but trees are rare and most of the animals who live in grasslands are herbivores.

Deciduous Forest:



You can see all four seasons here which means that the temperatures vary from cold to hot. It has many different types of trees and animals that can adapt to all four seasons.

Chaparral:



It is very hot and dry here; most plants have large hard leaves to collect moisture, and it has many small mammals, reptiles, and insects.

Rainforest:



It is warm and wet here, with lots of different animals and trees.

Desert:



They cover 1/5 of the world. There are hot and cold deserts, but all are extremely dry. It is very hard for animals to live in the desert.

Alpine:



Here, it is cool to cold throughout the year. It is also windy and dry, making it a tough place for plants to live. Pine trees grow well, but other plants are small and grow close to the ground. Animals have special adaptations to deal with the cold and snow.

Key:



Snowy



Sunny



Very Little Water



Little Water



Moderate Water



Lots of Water



Cold Temps



Warm Temps

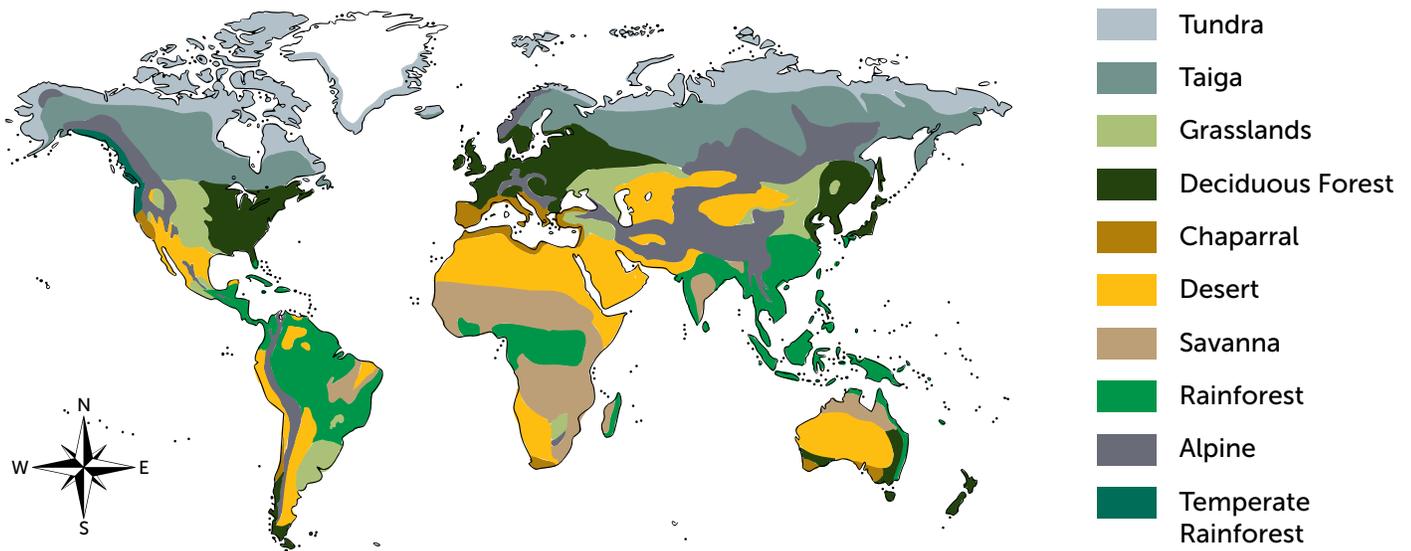


Hot Temps



Windy

Biomes of the World



Vocabulary: A biome is a large area where specific types of plants and animals live. A biome has its own climate.

There are many varieties of biomes on earth. The map above shows the different terrestrial biomes in the world and where they are found. Knowing the biome can help you understand what life is like in that part of the world.

Hint: Use the Terrestrial Biome Cheat Sheet if you get stuck.

Example: Look at the continent of Australia. Most of Australia is covered with golden yellow, which means it is a **desert** biome. This means that a lot of Australia is dry and possibly hot.

1. **a.** What type of biome covers most of Europe?

- b.** What type of plant, then, do you think you would see a lot of in Europe?

2. **a.** Most of the northern part of North America is made up of what biome?

- b.** What type of clothes, then, should you pack if you decide to visit there?

3. **a.** Name three biomes that are found in South America.

b. Do you think you would see a lot of the same types of plants and animals if you were traveling all over South America? Why?

4. **a.** Where is the **tundra** biome found?

- b.** What do you think the weather is like there?

5. **a.** Name two types of biomes that cover a large part of Africa.

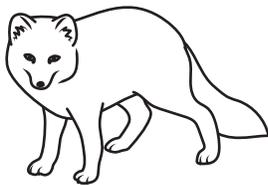
- b.** How big, then, would most of the plants be in Africa? Why?

Welcome to the Tundra

Read all about the tundra. Check your knowledge by completing the summary below.

About the Tundra:

The tundra is generally a very cold place. The main types of vegetation that grow in the tundra are various lichens, mosses, some grasses, and other small low-lying plants. This is because the ground is frozen for most of the year, so trees and large plants cannot grow. There are not many animals found in the tundra; those that can survive include reindeer (called caribou), musk oxen, arctic fox, lemmings, snowy owls, polar bears (only in the extreme north), arctic hares, seals, penguins (only in the south), and wolves (only in the north).



Summary:

The _____ is the coldest biome in the world. It can get as low as _____ and the wind often blows at _____. In fact, most of the year, the ground is frozen solid into _____. This makes it extremely difficult for _____ plants and trees to grow. There are a few small, low to the ground plants that can survive, such as _____. Animals and plants that live in the tundra are highly _____ to this extreme environment. Their fur, feathers, or skin is camouflaged to blend in with the land so they are harder to spot. Some examples of land animals that have this adaptation are:

Tundra Stats:

- Depending on the location, temperatures in the winter can reach as low as -58°F / -50°C !
- When soil is permanently frozen, it is called permafrost.
- Arctic tundra (in the north) can be very windy, with winds often blowing at 30 to 60 miles per hour!
- Most tundra is similar to the desert in that it receives very little annual precipitation.
- Animals and plants that live here are highly adapted to survive and make efficient use of resources.
- Millions of migratory birds fly to the tundra every summer to nest and feed.



Name: _____

Date: _____

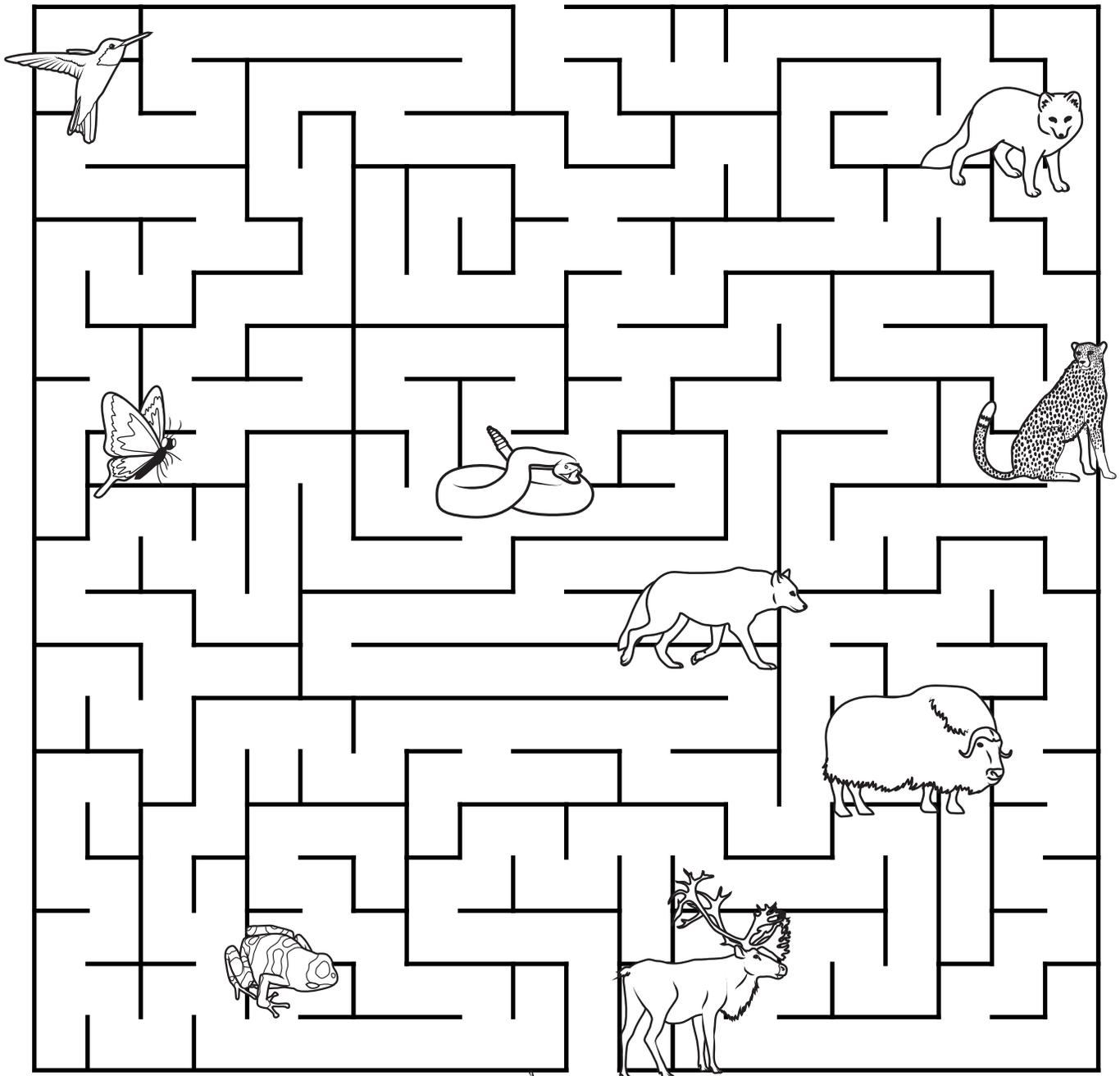
I Spy: Tundra Animals Edition

One common adaptation animals have is their ability to blend in with their environment. See if you can spot all the different tundra animals that are camouflaged in this scene. You should be able to pick out **two snow hares**, **one arctic fox**, **two polar bears**, and **four ptarmigans**.



Hiking Through the Tundra

You are going on a hike through the tundra, but once you start walking it feels more like a maze! Follow the tundra plants and animals, and you'll find your way to the log cabin. Follow the wrong paths, and you'll end up seeing plants and animals that won't survive in the tundra biome because they aren't adapted to the harsh environment. The wrong plants and animals will take you to dead ends.

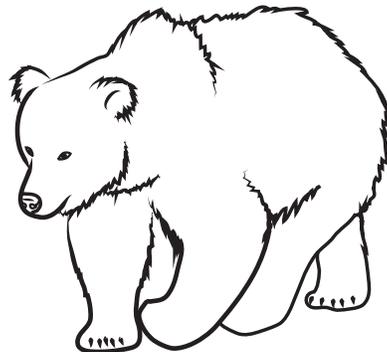
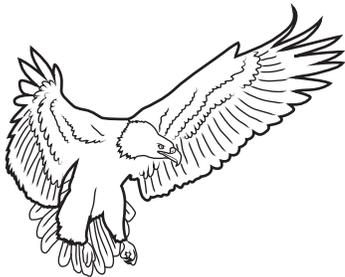


Welcome to the Taiga

Read all about the taiga. Check your knowledge by completing the summary below.

About the Taiga:

The taiga is located just south of the tundra in the northern hemisphere, and is mainly made up of coniferous forests. The taiga covers large amounts of North America, Europe, and Asia. It is characterized by very cold winters, and warm, humid summers. Many animals that can be found in the tundra can be found in the taiga; however, the tundra has mainly grasses and lichens, whereas the taiga contains many types of coniferous trees, such as fir, spruce, and cedar, as well as poplars and birches. Animals that can be found in the taiga include bears, lynx, wolves, foxes, rabbits, eagles, owls, moose, deer, and many migratory animals, especially birds.



Taiga Stats:

- The word *taiga* comes from the Russian word for forest.
- Six months of the year the temperature ranges from -65°F to 30°F . That means that for half the year it is below freezing!
- The taiga receives a moderate amount of precipitation, mostly during the summer in the form of rain.
- Many animals hibernate or migrate to avoid dealing with the harsh taiga winters, when there is often little food to be found.
- During the summer, the taiga is filled with insects, drawing birds from around the world to feed and breed.

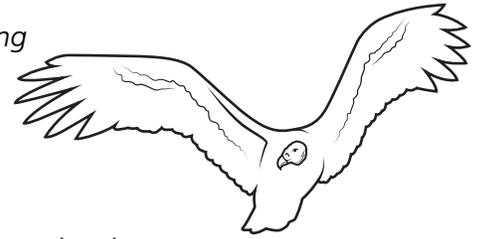


Summary:

Taiga biomes are only found in the _____. They can be found in the northern reaches of _____. The plants and animals that live in taiga biomes need to be used to _____ winters and _____ summers. The taiga has many different types of trees such as: _____. Animals such as _____ do very well in the taiga environment. There are also many kinds of _____ animals and birds that live there.

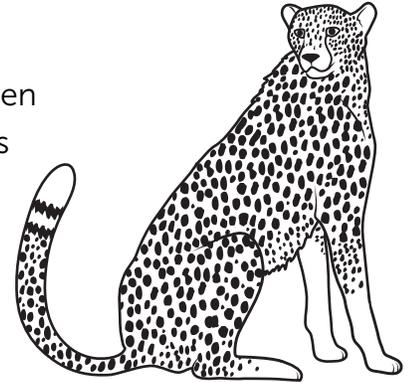
Grasslands Scramble

Read all about the grasslands. Check your knowledge by unscrambling the word in each of the sentences below.



About Grasslands:

Grasslands are a very diverse range of habitats that are all characterized by a dominance of grasses and herbaceous (non-woody) plants. The flora may be very short or very tall, and will sometimes include the occasional shrub or tree. Grasslands can be temperate, tropical, and even can be found in the tundra or desert! Many types of animals and insects can be found in grasslands, including lions, cheetahs, wolves, bison, zebra, elephants, rhinoceros, deer, prairie dogs, mice, coyotes, snakes, wild horses, grasshoppers, spiders, and many types of birds, such as hawks, vultures, sparrows, and quail.



Example: The most important plants in the grasslands biome are sssrage **grasses**.

1. The hreeawt _____ changes a lot in the grasslands.
2. The summers in the grasslands are oht _____ and the winters are locd _____.
3. eetrs _____ are almost never found in the grasslands.
4. Common kinds of grass found in the grasslands biome are: purple eenldrgass _____, dwil _____ oats, foxtail, ryegrass, and fubloaf _____ grass.
5. Animals that live in the grasslands do not have trees to hide behind, so they have to blend in with the ssga _____.
6. Many of the animals have the adaptation of long elsg _____ so they can get away from predators quickly.
7. There are many iderffnet _____ types of animals that live in the grasslands.
8. Most of the animals that live in the grasslands are ieoehrbvrs _____; they only eat plants.
9. Here are some examples of animals that live in the grasslands: ibosn _____, tanoleep _____, sdrib _____, phoergs _____, and ctssein _____.

Going Across the Deciduous Forest

Read all about the deciduous forest. Check your knowledge by completing the crossword puzzle below. The first clue has been completed for you.



About Deciduous Forests:

Deciduous forests are widespread across the globe, and have four changing seasons, including winter, spring, summer, and fall. Many animals that are found in taiga can also be found in these temperate forests, among others. Animals that make the forests their home include deer, elk, mountain lions, bobcats, bears, giant pandas, red pandas, koalas, opossums, foxes, many predatory birds and songbirds, raccoons, boar, snakes, coyotes, and wolves. Common plants include birch, oak, rose, fir, maple, ferns, wildflowers, fungi, and mosses.

Across:

1. In _____, deciduous trees shed their leaves.
3. Some animals that live in deciduous forests _____ during winter.
5. Most deciduous forests have warm, mild _____.
7. During autumn, deciduous trees lose their _____, which causes their leaves to change from green to vibrant yellows, oranges, and reds.
9. Deciduous forests are characterized by well-defined _____.
11. Many plants and trees in the deciduous forest produce _____ in the spring.
13. Black bears are _____, which means they eat plants, insects, and other animals.

Down:

2. There is a large swath of deciduous forest in _____ North America.
4. Deciduous forests have a large variety of _____.
6. Animals that live in deciduous forests must be able to _____ to the changing seasons.
8. _____ refers to a plant's ability to shed leaves to better survive the winter season.
10. When a plant or animal dies, fungi and insects _____ the nutrients and return it to the soil.
12. Bobcats and deer are animals that do not hibernate and stay _____ throughout winter.

Name: _____

Date: _____

Going Across the Deciduous Forest

1 W I N T E R 2

4

5

8

3

11

9 6

12

10

13

7

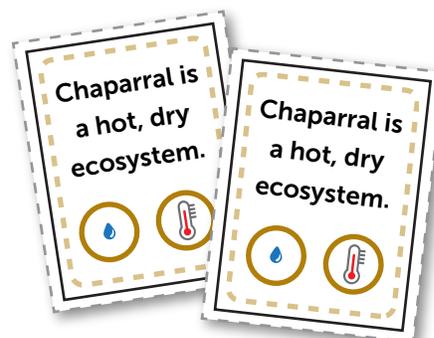
Chaparral Memory

Instructions

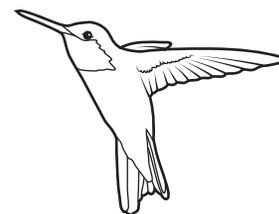
This is a two-player game, so find a buddy or parent who can play with you.

Read About Chaparral, below. Next, cut out the fact cards on the following page. There are 11 matching pairs of cards, all about the chaparral biome. *There are three cards that are not about the chaparral biome, and do not have a matching card.*

Place all the cards face down on a flat surface. The youngest player begins by picking two cards. If the cards match, the player gets to keep the cards, and gets to go again. If the cards don't match, they should be put back in the same spot, face down, and it's the other player's turn. The player with the most pairs at the end of the game wins.



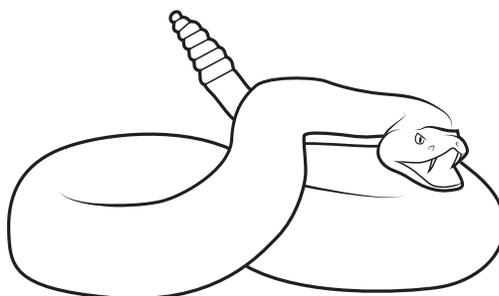
Example: If you picked both of these cards, you would receive one point for having a matching pair about the chaparral biome. You would then get to go again.



About Chaparral:



Chaparral is a dry, hot ecosystem that is also called "Mediterranean." Some chaparral can be found on most continents. Generally, temperatures are hot and winters are mild, but it can get very hot (100°F) or below freezing (30°F). Plants and animals here are adapted to dryness, and are similar to those found in deserts and grasslands. Common plants include several types of oak, cacti, sagebrush, yucca, olive trees, and manzanita. Animals include rabbits, deer, foxes, skunk, lynx, mountain lion, coyotes and rattlesnakes. Many kinds of birds also make their home in chaparral including quail, hummingbirds, and roadrunners.



Plants and animals that live in the chaparral biome are adapted to dryness.



Plants and animals that live in the chaparral biome are adapted to dryness.



Chaparral will only get 10 to 17 inches of rain.



Chaparral will only get 10 to 17 inches of rain.



Many of the animals in the chaparral are nocturnal (they sleep at night) because it is so hot during the day.



Rabbits, deer, foxes, skunk, lynx, mountain lions, coyotes and rattlesnakes all live in the chaparral.



Rabbits, deer, foxes, skunk, lynx, mountain lions, coyotes and rattlesnakes all live in the chaparral.



Animals that live in the chaparral know how to save energy and water so they can stay alive.



Animals that live in the chaparral know how to save energy and water so they can stay alive.



Many of the animals in the chaparral are nocturnal (they sleep at night) because it is so hot during the day.



Many kinds of birds such as hummingbirds, quail and roadrunners live in the chaparral.



Many kinds of birds such as hummingbirds, quail and roadrunners live in the chaparral.



The tundra is the coldest biome.



There are not many trees in the grassland biome.



There are many plants and animals found in the rainforest biome.

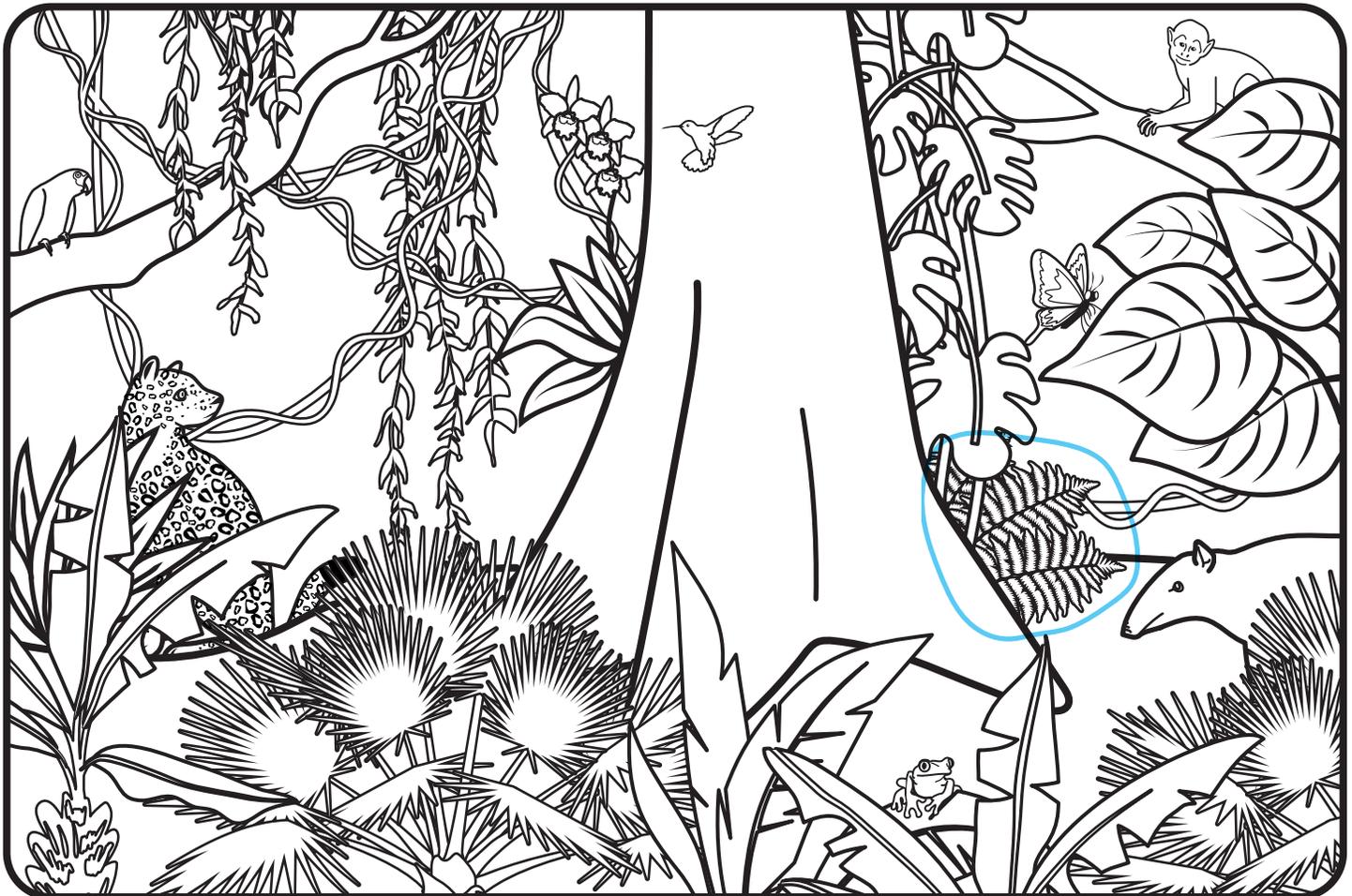


Animals and Plants Galore in the Rainforest

Read all about the rainforest. Then, find all the plants and animals in the rainforest scene.

About Rainforests:

Tropical rainforests are forests of tall trees in locations of very warm and wet weather. They are home to a huge number of different plants, insects, and animals. Even though tropical rainforests now cover six percent of the earth's land surface, it is estimated that they hold more than half of the world's species. There is a huge variety of insects such as ants, butterflies, moths, dragonflies, and beetles. Animals that can be found in tropical rainforests include birds, such as toucans, birds of paradise, and parrots; mammals, such as monkeys, rhinos, tapirs, bats, apes, and jaguars; and reptiles and amphibians like frogs, pythons, vipers, and lizards. Many of these organisms are endangered.



Find Me:



jaguar



hummingbird



monkey



tapir



orchid



parrot



frog



butterfly



fern

Welcome to the Alpine Biome

Read all about the alpine biome. Check your knowledge by matching the sentence starter from column A with the correct ending from column B.



About the Alpine Biome:

The alpine biome is found in mountainous regions worldwide, including the Andes, Alps, and Rocky Mountains. The alpine biome is usually dry, since it gets only about 12 inches of rain each year. Temperatures range from 40 to 60°F but can be below freezing in the winter. Alpine plants and animals have adapted to stay low to the ground in this biome. It is a tough place for plants to live since the soil is sandy and rocky. Most plants are groundcovers, grasses, small-leafed shrubs, and dwarf trees. Common animals include mountain goats, sheep, elk, beetles, grasshoppers, and butterflies.

A

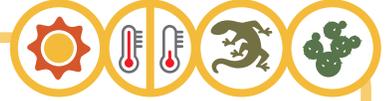
1. It is so windy in the alpine biome that most plants are
2. Most alpine plants are adapted to grow in
3. Alpine animals adapt to the cold by
4. Animals in the alpine biome have shorter legs, tails, and ears in order to
5. Alpine animals have larger lungs and more blood cells so they can

B

- hibernating, migrating to warmer areas, or insulating their bodies with fur or fat.
- small groundcover plants.
- breathe the air since it has less oxygen.
- sandy rock and soil.
- stay warmer.

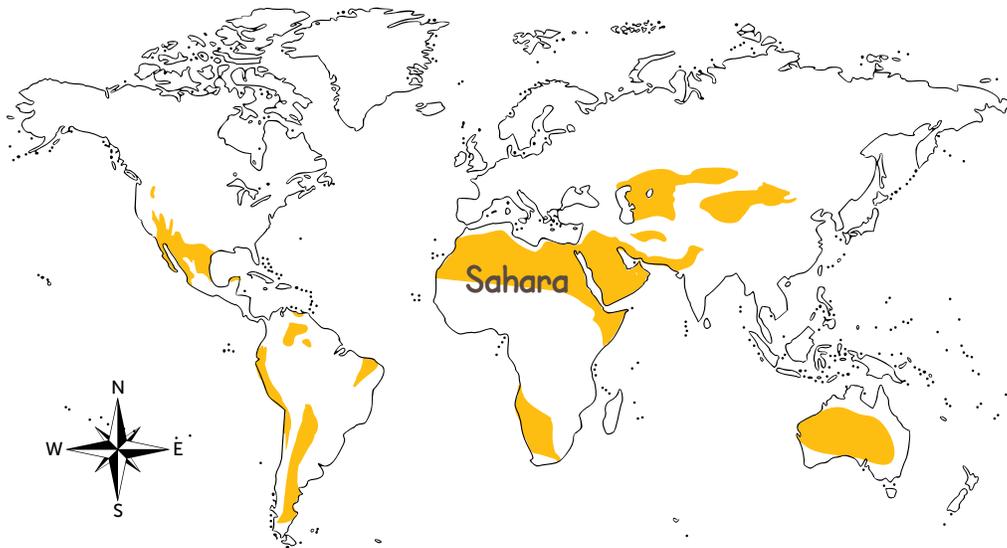
Where in the World is the Desert Biome?

Read all about the desert. Then, put the names of the deserts on the correct places on the globe. Use the compass rose to help you with directions.



About the Desert:

When most people think of deserts they think of hot, dry land with sand, cactuses, and few plants. Deserts can actually be very hot or very cold (technically Antarctica is a desert!), but they all receive very little rainfall. Plants and animals that live here are highly adapted to deal with the extreme conditions, including little water, high heat, and little plant life. Animals and plants that make hot deserts their home include coyotes, cactus, camels, lizards, many kinds of insects and arachnids, snakes, jackrabbits, and many types of birds. In hot deserts, rainfall will often come in heavy storms, frequently causing flash floods.



Desert	Location
Sahara	Northern Africa
Great Sandy Simpson	Australia
Kalahari	Southern Africa
Taklamakan	Central Asia
Chihuahuan	Mexico

Welcome to the Savanna

Read all about the savanna. Cut out the savanna animals at the bottom of the page. Then, read the description of each animal that lives in the savanna and match it with the correct picture.



About the Savanna:

Savannas are a type of grassland characterized by warm temperatures year round and support not only lots of grasses, but also scattered trees and shrubs. Savannas are also called tropical grasslands, because they are most common close to the equator. Instead of four seasons, savannas have a dry season, during which virtually no rain falls, and a wet season that is hot, humid, and very rainy. The most well-known savannas are in Africa, but there are also savannas in South America and Australia. The plants and animals of the savanna are highly adapted to survive the long dry season. Many plants store water, have spines, or are bitter in flavor to help protect them from herbivores. Animals that live in savannas include zebras, gazelle, wildebeest, giraffe, elephants, lions, cheetahs, leopards, and hyenas.

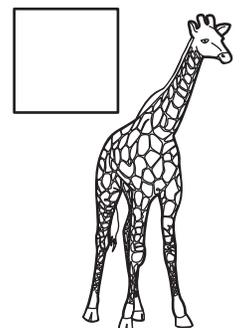
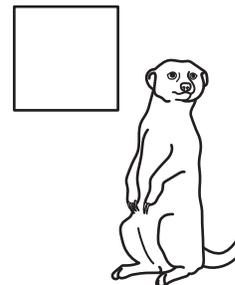
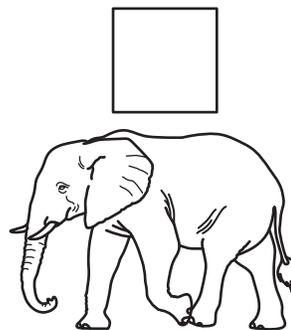
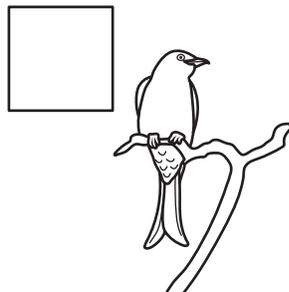
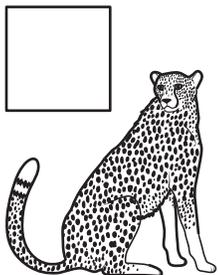
A. These animals have long necks to help them reach the leaves on the tall trees of the savanna.

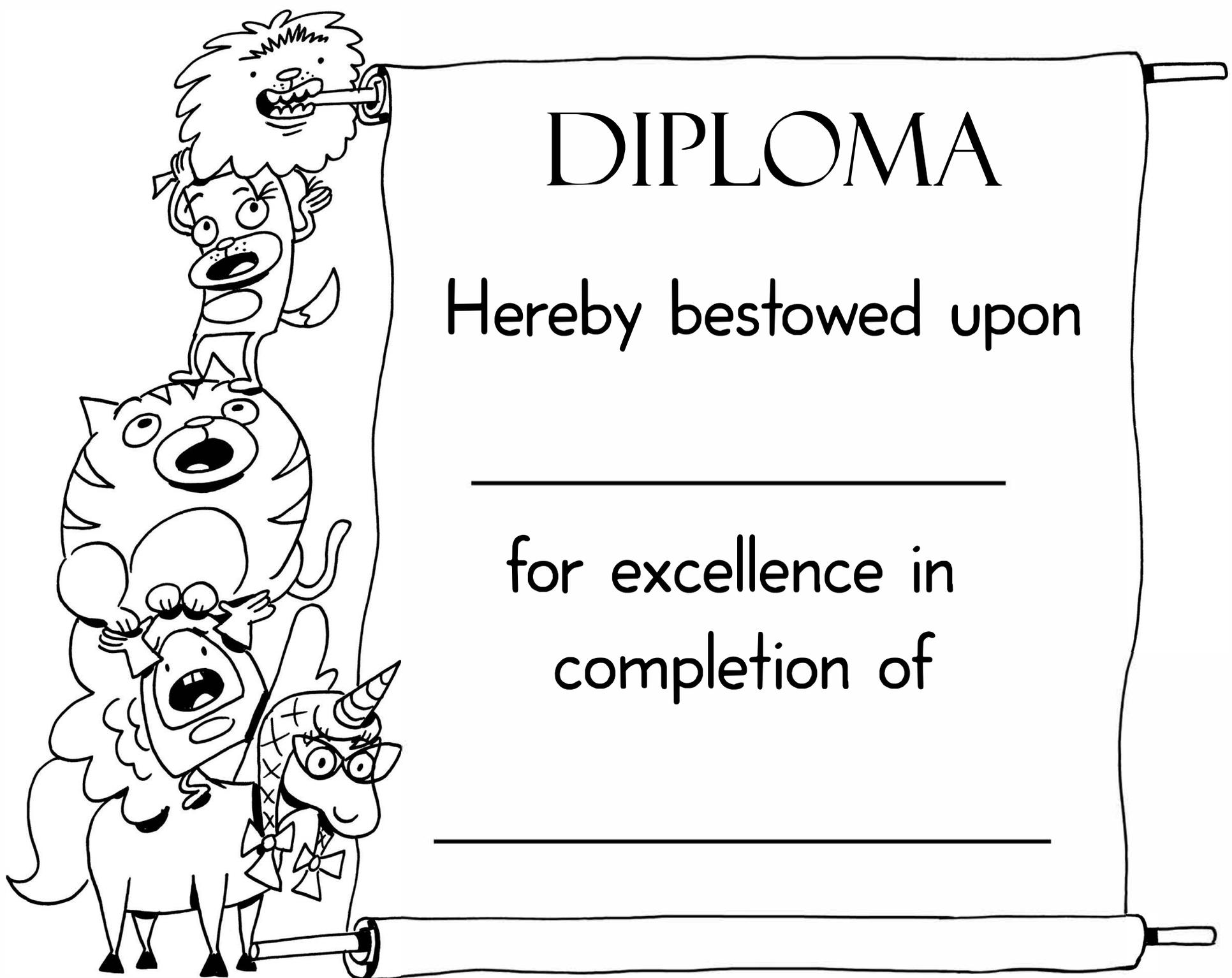
C. These small animals can survive the fires that occur during the dry season on the savanna by burrowing underground into tunnels.

E. These animals have spots for camouflage and are the fastest land mammal on earth.

B. These animals use their strong trunks to pick up dirt and put it on their huge backs to protect their skin from the sun.

D. These birds fly towards fires on the savanna to eat the roasted insects.





DIPLOMA

Hereby bestowed upon

for excellence in
completion of

Answer Sheets

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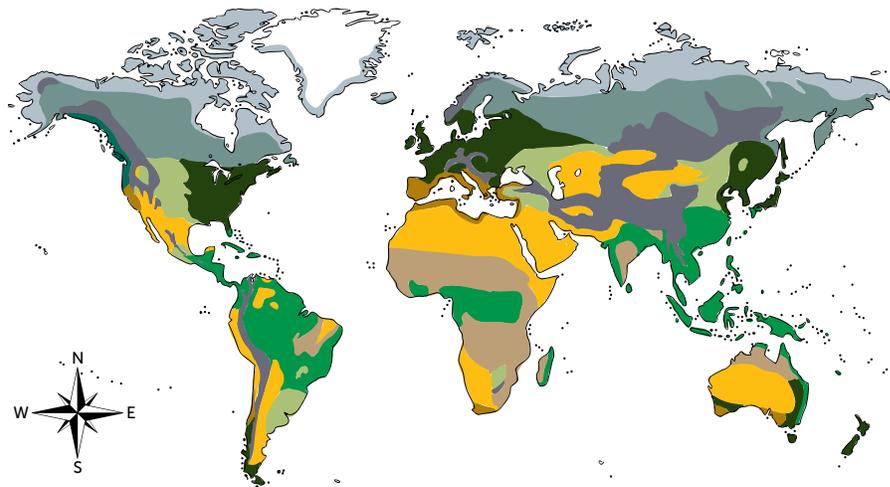
Answer Sheet

Name: _____

Date: _____

ANSWERS

Biomes of the World



	Tundra
	Taiga
	Grasslands
	Deciduous Forest
	Chaparral
	Desert
	Savanna
	Rainforest
	Alpine
	Temperate Rainforest

Vocabulary: A biome is a large area where specific types of plants and animals live. A biome has its own climate

There are many varieties of biomes on earth. The map above shows the different terrestrial biomes in the world and where they are found. Knowing the biome can help you understand what life is like in that part of the world.

Hint: Use the Terrestrial Biome Cheat Sheet if you get stuck.

Example: Look at the continent of Australia. Most of Australia is covered with golden yellow, which means it is a **desert** biome. This means that a lot of Australia is dry and possibly hot.

1. a. What type of biome covers most of Europe?

Deciduous Forest

b. What type of plant, then, do you think you would see a lot of in Europe?

Trees

2. a. Most of the northern part of North America is made up of what biome?

Taiga

b. What type of clothes, then, should you pack if you decide to visit there?

Jackets, gloves, warm clothes, etc.

3. a. Name three biomes that are found in South America.

Rainforest, grasslands, desert, alpine

b. Do you think you would see a lot of the same types of plants and animals if you were traveling all over South America? Why?

No, because there are many different biomes and therefore different plants and animals.

4. a. Where is the **tundra** biome found?

Northernmost part of North America and Asia

b. So, what do you think the weather is like there?

Extremely cold

5. a. Name two types of biomes that cover a large part of Africa.

Desert and savanna

b. So, how big would most of the plants be in Africa? Why?

The plants would be mostly small, since their environment doesn't receive a lot of water.

Answer Sheet

Name: _____

Date: _____

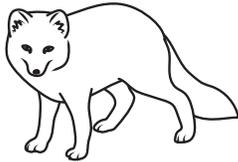
ANSWERS

Welcome to the Tundra

Read all about the tundra. Check your knowledge by completing the summary below.

About the Tundra:

The tundra is generally a very cold place. The main types of vegetation that grow in the tundra are various lichens, mosses, some grasses, and other small low-lying plants. This is because the ground is frozen for most of the year, so trees and large plants cannot grow. There are not many animals found in the tundra; those that can survive include reindeer (called caribou), musk oxen, arctic fox, lemmings, snowy owls, polar bears (only in the extreme north), arctic hares, seals, penguins (only in the south), and wolves (only in the north).



Summary:

The tundra is the coldest biome in the world. It can get as low as -50°C / -58°F and the wind often blows at 30-60 mph. In fact, most of the year, the ground is frozen solid into permafrost. This makes it extremely difficult for large plants and trees to grow. There are a few small, low to the ground plants that can survive such as: moss, lichen, and grasses. Animals and plants that live in the tundra are highly adapted to this extreme environment. Their fur, feathers, or skin is camouflaged to blend in with the land so they are harder to spot. Some examples of land animals that have this adaptation are: caribou, musk oxen, arctic foxes, lemmings, snowy owls, arctic hares, wolves, and polar bears.

Tundra Stats:

- Depending on the location, temperatures in the winter can reach as low as -58°F / -50°C!
- When soil is permanently frozen, it is called permafrost.
- Arctic tundra (in the north) can be very windy, with winds often blowing at 30 to 60 miles per hour!
- Most tundra is similar to the desert in that it receives very little annual precipitation.
- Animals and plants that live here are highly adapted to survive and make efficient use of resources.
- Millions of migratory birds fly to the tundra every summer to nest and feed.



Answer Sheet

Name: _____

Date: _____

ANSWERS

I Spy: Tundra Animals Edition

One common adaptation animals have is their ability to blend in with their environment. See if you can spot all the different tundra animals that are camouflaged in this scene. You should be able to pick out **two snow hares**, **one arctic fox**, **two polar bears**, and **four ptarmigans**.



Answer Sheet

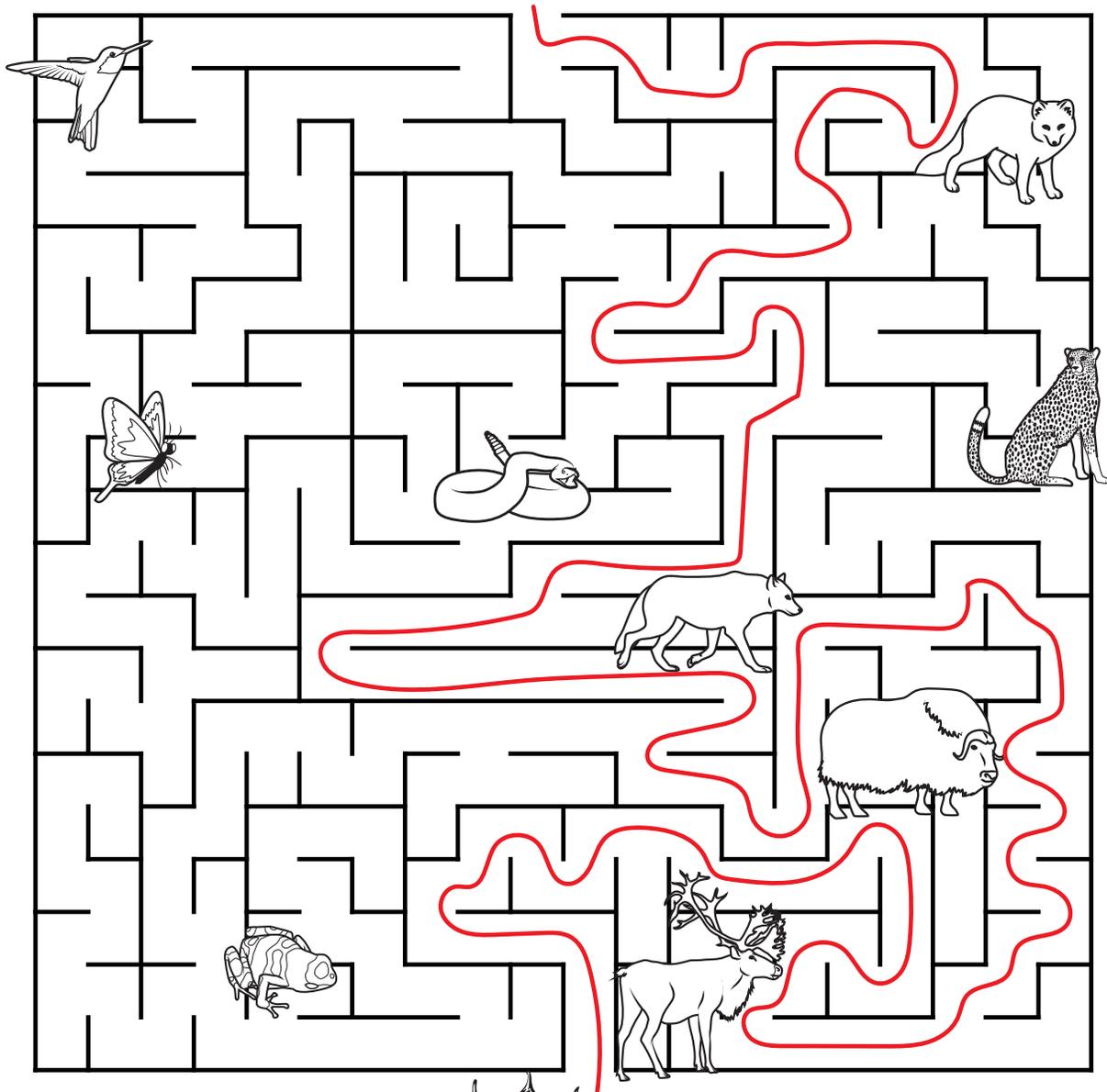
Name: _____

Date: _____

ANSWERS

Hiking Through the Tundra

You are going on a hike through the tundra, but once you start walking it feels more like a maze! Follow the tundra plants and animals, and you'll find your way to the log cabin. Follow the wrong paths, and you'll end up seeing plants and animals that won't survive in the tundra biome because they aren't adapted to the harsh environment. The wrong plants and animals will take you to dead ends.



Answer Sheet

Name: _____

Date: _____

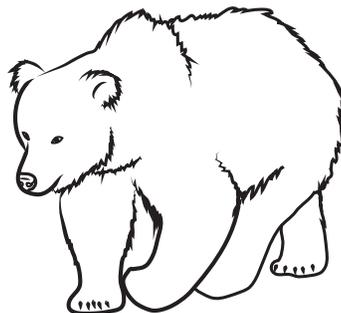
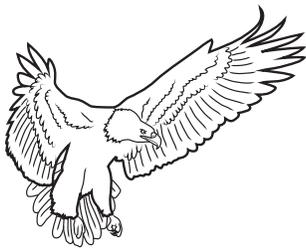
ANSWERS

Welcome to the Taiga

Read all about the taiga. Check your knowledge by completing the summary below.

About the Taiga:

The taiga is located just south of the tundra in the northern hemisphere, and is mainly made up of coniferous forests. The taiga covers large amounts of North America, Europe, and Asia. It is characterized by very cold winters, and warm, humid summers. Many animals that can be found in the tundra can be found in the taiga; however, the tundra has mainly grasses and lichens, whereas the taiga contains many types of coniferous trees, such as fir, spruce, and cedar, as well as poplars and birches. Animals that can be found in the taiga include bears, lynx, wolves, foxes, rabbits, eagles, owls, moose, deer, and many migratory animals, especially birds.



Taiga Stats:

- The word *taiga* comes from the Russian word for forest.
- Six months of the year the temperature ranges from -65°F to 30°F . That means that for half the year it is below freezing!
- The taiga receives a moderate amount of precipitation, mostly during the summer in the form of rain.
- Many animals hibernate or migrate to avoid dealing with the harsh taiga winters, when there is often little food to be found.
- During the summer, the taiga is filled with insects, drawing birds from around the world to feed and breed.



Summary:

Taiga biomes are only found in the Northern hemisphere. They can be found in the northern reaches of Asia, North America, and Europe. The plants and animals that live in taiga biomes need to be used to very cold winters and summers. Taiga has many different types of trees such as: fir, spruce, cedar, poplar, and birch. Animals such as bears, lynx, wolves, foxes, rabbits, owls, moose, deer, and eagles do very well in the taiga environment. There are also many kinds of migratory animals and birds that live there.

Answer Sheet

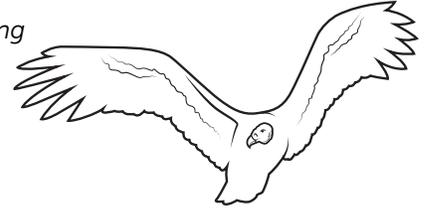
Name: _____

Date: _____

ANSWERS

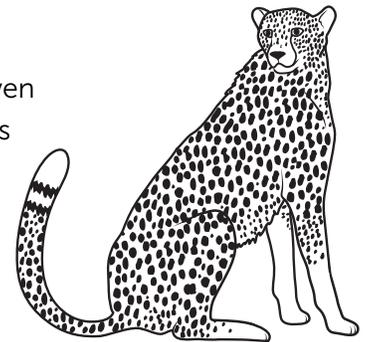
Grasslands Scramble

Read all about the grasslands. Check your knowledge by unscrambling the word in each of the sentences below.



About Grasslands:

Grasslands are a very diverse range of habitats that are all characterized by a dominance of grasses and herbaceous (non-woody) plants. The flora may be very short or very tall, and will sometimes include the occasional shrub or tree. Grasslands can be temperate, tropical, and even can be found in the tundra or desert! Many types of animals and insects can be found in grasslands, including lions, cheetahs, wolves, bison, zebra, elephants, rhinoceros, deer, prairie dogs, mice, coyotes, snakes, wild horses, grasshoppers, spiders, and many types of birds, such as hawks, vultures, sparrows, and quail.



Example: The most important plants in the grasslands biome are sssrage (grasses).

1. The hreeawt weather changes a lot in the grasslands.
2. The summers in the grasslands are oht hot and the winters are locd cold.
3. eetrs Trees are almost never found in the grasslands.
4. Common kinds of grass found in the grasslands biome are: purple eenldrgass needlegrass, dwil wild oats, foxtail, ryegrass, and fubloaf buffalo grass.
5. Animals that live in the grasslands do not have trees to hide behind, so they have to blend in with the ssrga grass.
6. Many of the animals have the adaptation of long elsg legs so they can get away from predators quickly.
7. There are many iderffnet different types of animals that live in the grasslands.
8. Most of the animals that live in the grasslands are ieoehrbvrs herbivores; they only eat plants.
9. Here are some examples of animals that live in the grasslands: ibosn bison, tanoleep antelope, sdrib birds, phoergs gophers, and ctsein insects.

Answer Sheet

Name: _____

Date: _____

Going Across the Deciduous Forest

Read all about the deciduous forest. Check your knowledge by completing the crossword puzzle below. The first clue has been completed for you.

About Deciduous Forests:



Deciduous forests are widespread across the globe, and have four changing seasons, including winter, spring, summer, and fall. Many animals that are found in taiga can also be found in these temperate forests, among others. Animals that make the forests their home include deer, elk, mountain lions, bobcats, bears, giant pandas, red pandas, koalas, opossums, foxes, many predatory birds and songbirds, raccoons, boar, snakes, coyotes, and wolves. Common plants include birch, oak, rose, fir, maple, ferns, wildflowers, fungi, and mosses.

Across:

1. In _____, deciduous trees shed their leaves.
3. Some animals that live in deciduous forests _____ during winter.
5. Most deciduous forests have warm, mild _____.
7. During autumn, deciduous trees lose their _____, which causes their leaves to change from green to vibrant yellows, oranges, and reds.
9. Deciduous forests are characterized by well-defined _____.
11. Many plants and trees in the deciduous forest produce _____ in the spring.
13. Black bears are _____, which means they eat plants, insects, and other animals.

Down:

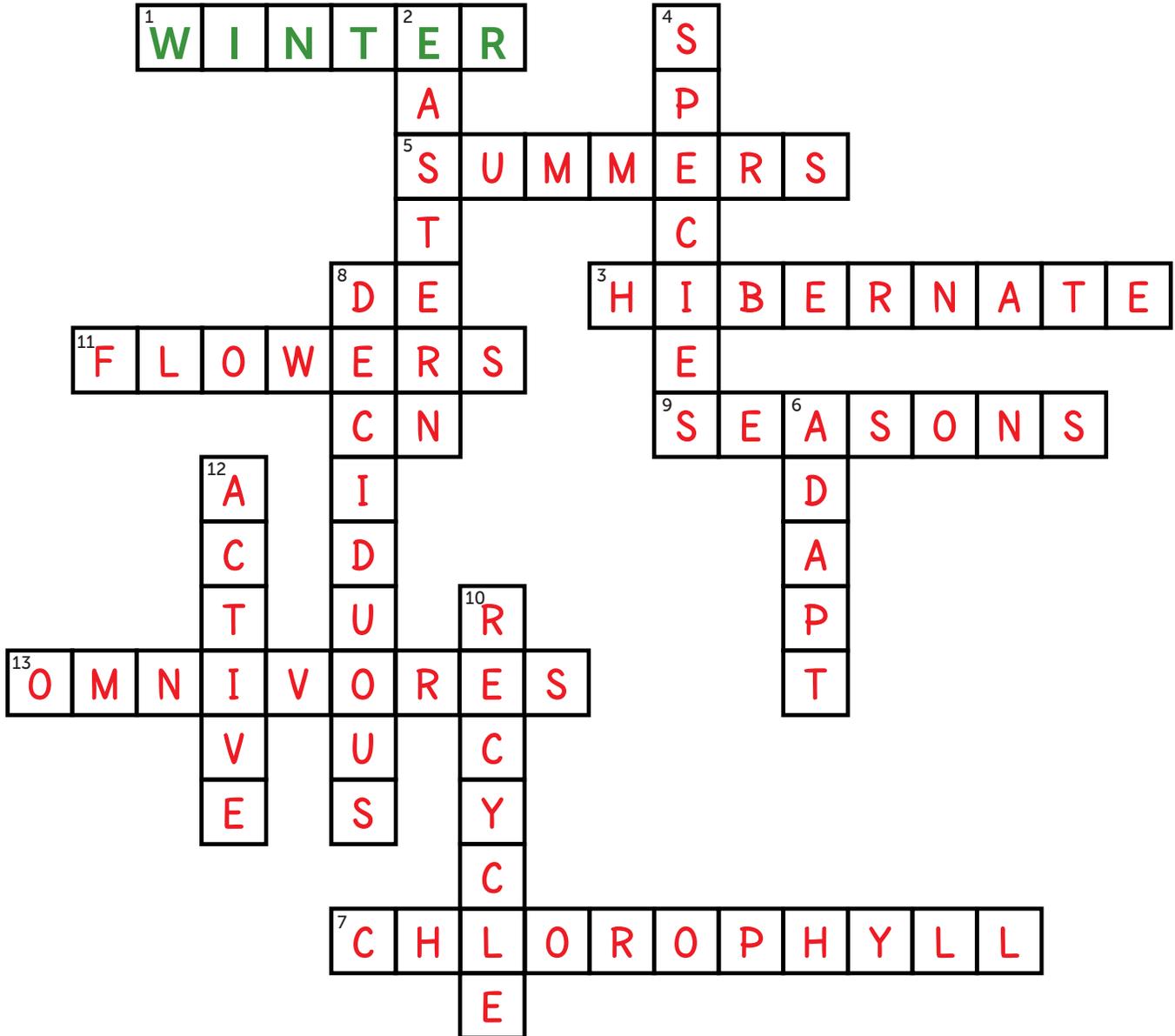
2. There is a large swath of deciduous forest in _____ North America.
4. Deciduous forests have a large variety of _____.
6. Animals that live in deciduous forests must be able to _____ to the changing seasons.
8. _____ refers to a plant's ability to shed leaves to better survive the winter season.
10. When a plant or animal dies, fungi and insects _____ the nutrients and return it to the soil.
12. Bobcats and deer are animals that do not hibernate and stay _____ throughout winter.

Answer Sheet

Name: _____

Date: _____

Going Across the Deciduous Forest



Answer Sheet

Name: _____

Date: _____

Animals and Plants Galore in the Rainforest

ANSWERS

...about the rainforest. Then, find all the plants and animals in the rainforest scene.

About Rainforests:

Tropical rainforests are forests of tall trees in locations of very warm and wet weather. They are home to a huge number of different plants, insects and animals. Even though tropical rainforests now cover six percent of the Earth's land surface, it is estimated that they hold more than half of the world's species! There is a huge variety of insects such as ants, butterflies, moths, dragonflies, and beetles. Animals that can be found in tropical rainforests include birds, such as toucans, birds of paradise, and parrots; mammals, such as monkeys, rhinos, tapirs, bats, apes, and jaguars; and reptiles and amphibians like frogs, pythons, vipers, and lizards. Many of these organisms are endangered.



Find Me:



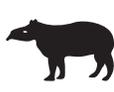
jaguar



hummingbird



monkey



tapir



orchid



parrot



frog



butterfly



fern

Answer Sheet

Name: _____ Date: _____

ANSWERS

Welcome to the Alpine Biome

Read all about the alpine biome. Check your knowledge by matching the sentence starter from column A with the correct ending from column B.



About the Alpine Biome:

The alpine biome is found in mountainous regions worldwide, including the Andes, Alps, and Rocky Mountains. The alpine biome is usually dry, since it gets only about 12 inches of rain each year. Temperatures range from 40 to 60°F but can be below freezing in the winter. Alpine plants and animals have adapted to stay low to the ground in this biome. It is a tough place for plants to live since the soil is sandy and rocky. Most plants are groundcovers, grasses, small-leafed shrubs, and dwarf trees. Common animals include mountain goats, sheep, elk, beetles, grasshoppers, and butterflies.

A

B

1. It is so windy in the alpine biome that most plants are

hibernating, migrating to warmer areas, or insulating their bodies with fur or fat.

2. Most alpine plants are adapted to grow in

small groundcover plants.

3. Alpine animals adapt to the cold by

breathe the air since it has less oxygen.

4. Animals in the alpine biome have shorter legs, tails, and ears in order to

sandy rock and soil.

5. Alpine animals have larger lungs and more blood cells so they can

stay warmer.

Answer Sheet

Name: _____

Date: _____

Where in the World is the Desert Biome?

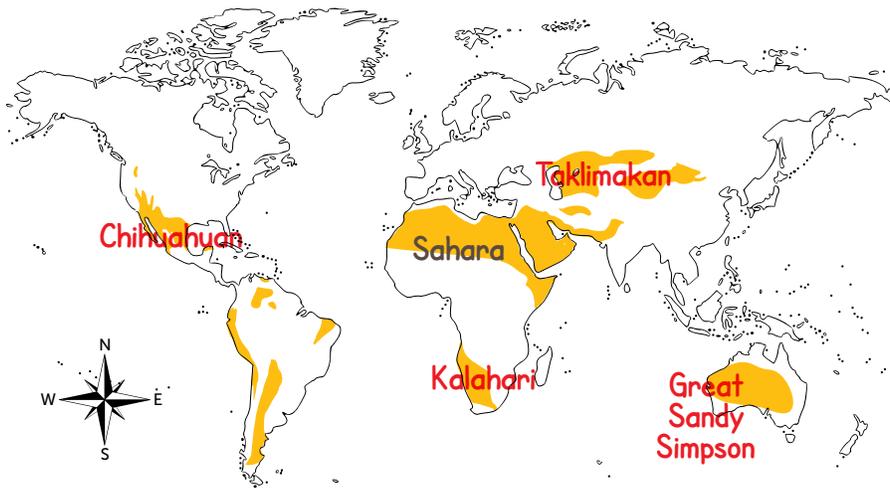
ANSWERS

Learn all about the desert. Then, put the names of the deserts on the correct places on the globe. Use the compass rose to help you with directions.



About the Desert:

When most people think of deserts they think of hot, dry land with sand, cactuses, and few plants. Deserts can actually be very hot or very cold (technically Antarctica is a desert!), but they all receive very little rainfall. Plants and animals that live here are highly adapted to deal with the extreme conditions, including little water, high heat, and little plant life. Animals and plants that make hot deserts their home include coyotes, cactus, camels, lizards, many kinds of insects and arachnids, snakes, jackrabbits, and many types of birds. In hot deserts, rainfall will often come in heavy storms, frequently causing flash floods.



Desert	Location
Sahara	Northern Africa
Great Sandy Simpson	Australia
Kalahari	Southern Africa
Taklamakan	Central Asia
Chihuahuan	Mexico

Answer Sheet

Name: _____

Date: _____

ANSWERS

Welcome to the Savanna

Read all about the savanna. Cut out the savanna animals at the bottom of the page. Then, read the description of each animal that lives in the savanna and match it with the correct picture.



About the Savanna:

Savannas are a type of grassland characterized by warm temperatures year round and support not only lots of grasses, but also scattered trees and shrubs. Savannas are also called tropical grasslands, because they are most common close to the equator. Instead of four seasons, savannas have a dry season, during which virtually no rain falls, and a wet season that is hot, humid, and very rainy. The most well-known savannas are in Africa, but there are also savannas in South America and Australia. The plants and animals of the savanna are highly adapted to survive the long dry season. Many plants store water, have spines, or are bitter in flavor to help protect them from herbivores. Animals that live in savannas include zebras, gazelle, wildebeest, giraffe, elephants, lions, cheetahs, leopards, and hyenas.

A. These animals have long necks to help them reach the leaves on the tall trees of the savanna.

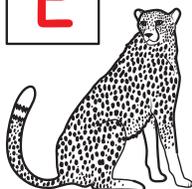
C. These small animals can survive the fires that occur during the dry season on the savanna by burrowing underground into tunnels.

E. These animals have spots for camouflage and are the fastest land mammal on earth.

B. These animals use their strong trunks to pick up dirt and put it on their huge backs to protect their skin from the sun.

D. These birds fly towards fires on the savanna to eat the roasted insects.

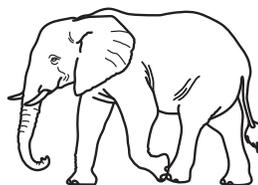
E



D



B



C



A

