

NAME

CLASS:

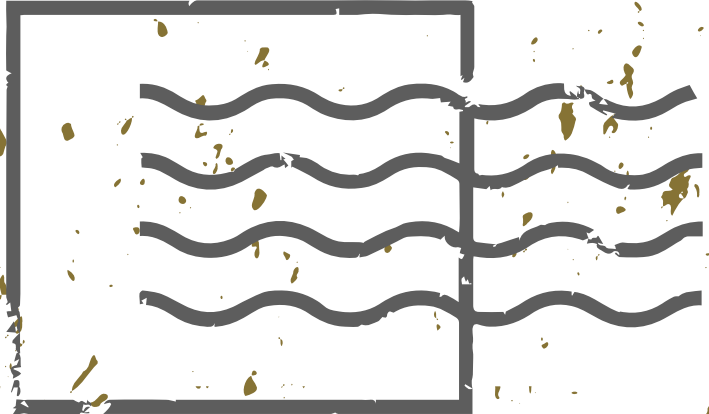
ADDRESS:



Gr. 6 Living Systems

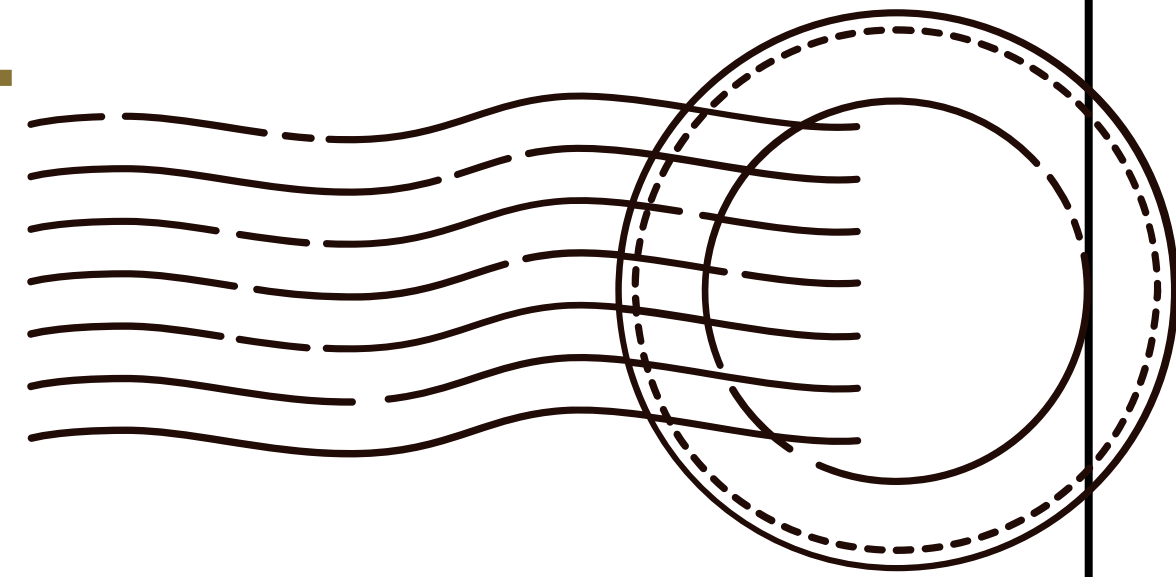
ECOSYSTEM

PASSPORT



- DESERT
- ARCTIC
- GRASSLAND
- WETLAND
- FOREST
- FRESHWATER

DESERT ECOSYSTEM



Locate on Map

Sahara Desert

Atacama Desert

Great Victoria Desert



Common Vegetation

-
-
-

Describe Climate

-
-
-

Common Animals

-
-
-

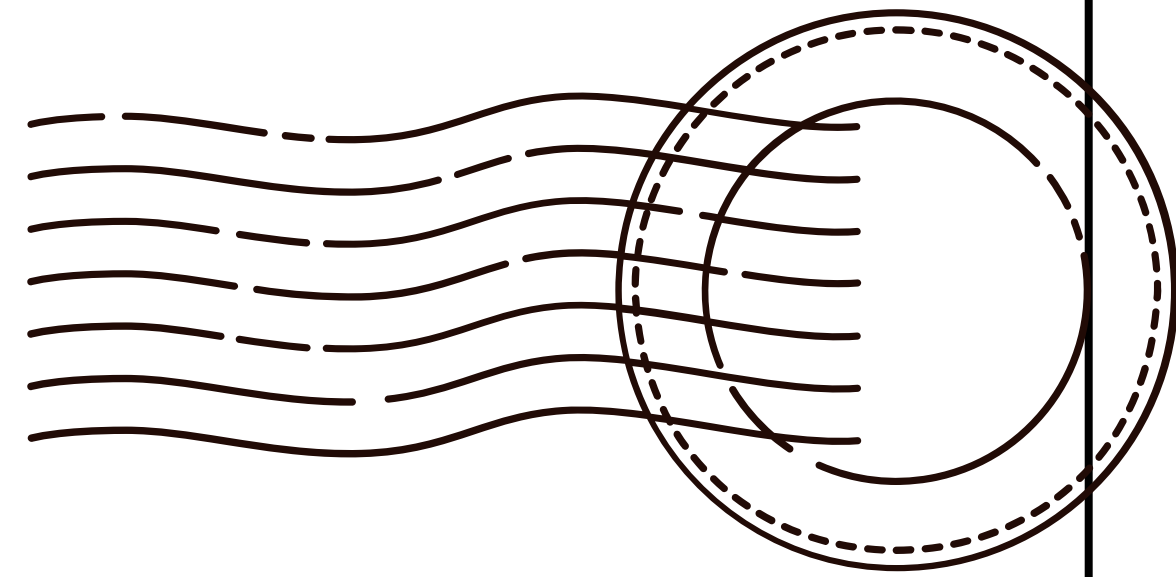
Look at the lists above. Put an 'A' beside anything Abiotic, and a 'B' beside anything biotic

Describe Terrain

Fun Facts

-
-

ARCTIC ECOSYSTEM



Locate on Map

Greenland

Nunavut

Svalbard



Common Vegetation

-
-
-

Describe Climate

-
-
-

Common Animals

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-
-

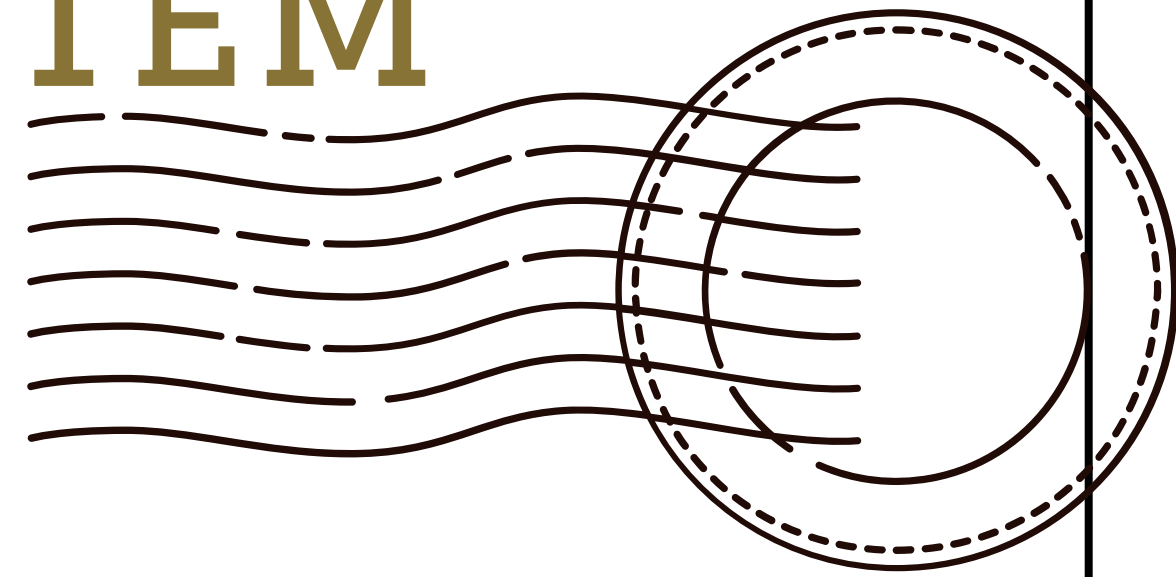
Look at the lists above. Put an 'A' beside anything Abiotic, and a 'B' beside anything biotic

Describe Terrain

Fun Facts

-
-

GRASSLAND ECOSYSTEM



Locate on Map

Serengeti National Park

Great Plains

Mongolian Steppe



Common Vegetation

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-
-

Describe Climate

-
-
-

Common Animals

-
-
-

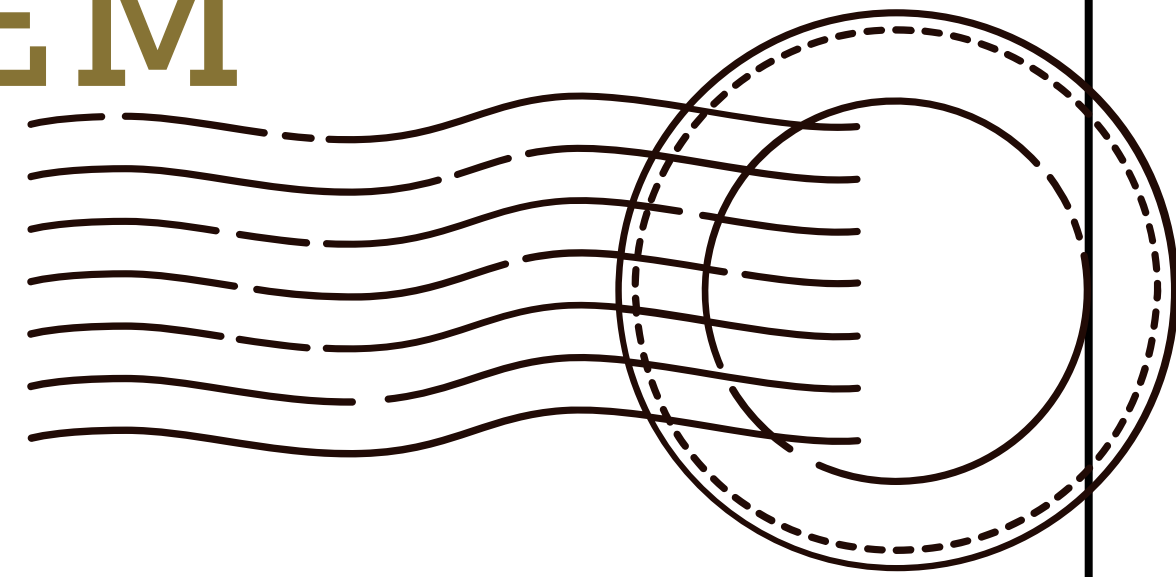
Look at the lists above. Put an 'A' beside anything Abiotic, and a 'B' beside anything biotic

Describe Terrain

Fun Facts

- This ecosystem stores greenhouse gases and prevents them from being released into the atmosphere
-

WETLAND ECOSYSTEM

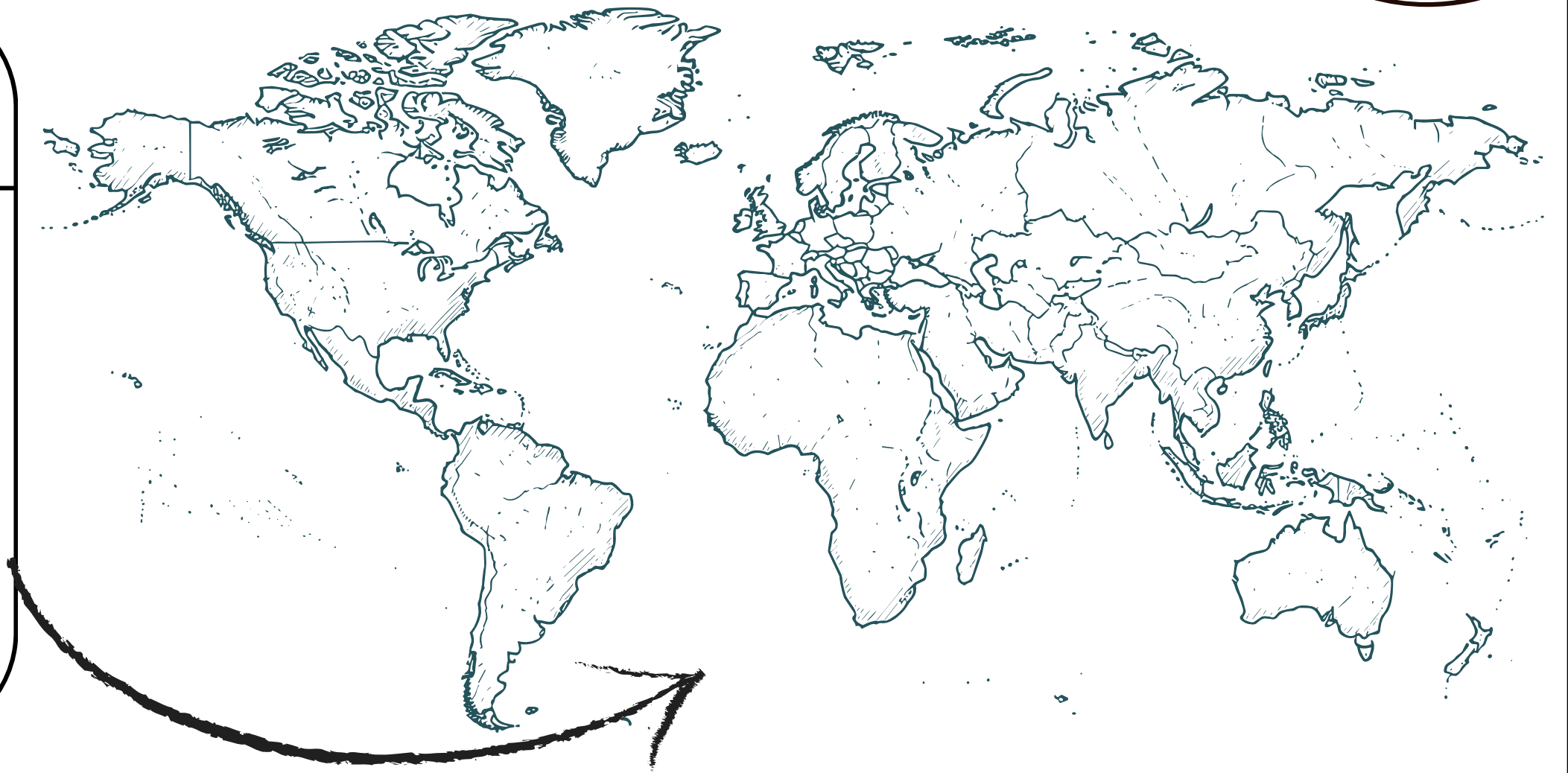


Locate on Map

Everglades

Okavango Delta

Pantanal



Common Vegetation

-
-
-

Describe Climate

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-
-

Common Animals

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-
-

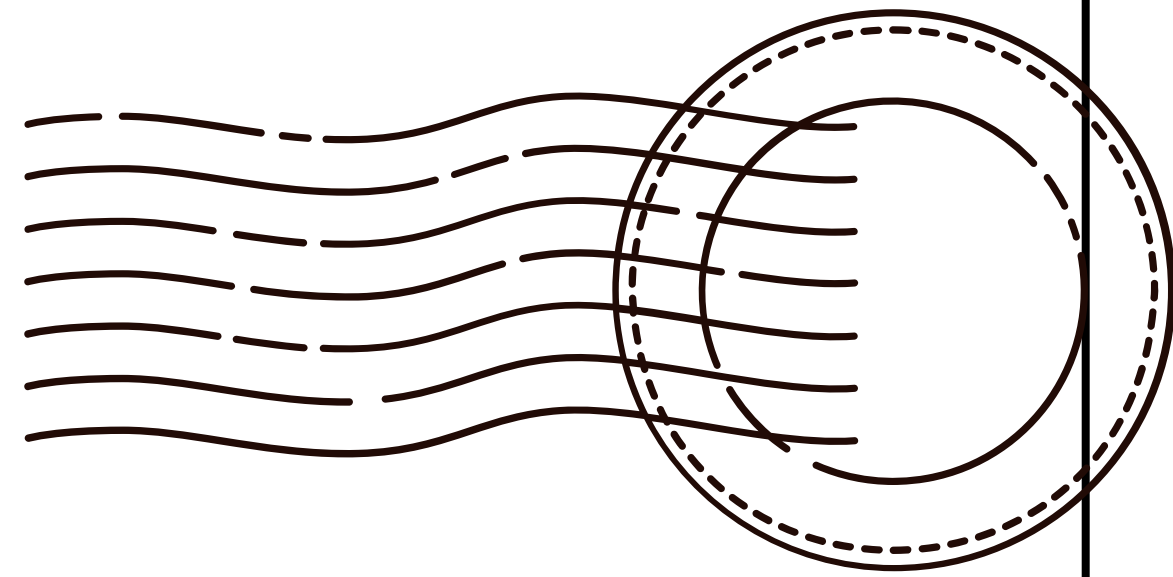
Look at the lists above. Put an 'A' beside anything Abiotic, and a 'B' beside anything biotic

Describe Terrain

Fun Facts

- This ecosystem stores greenhouse gases and prevents them from being released into the atmosphere
-

FOREST ECOSYSTEM



Locate on Map

Amazon Rain Forest

Black Forest

Great Bear Rainforest



Common Vegetation

-
-
-

Describe Climate

-
-
-

Common Animals

-
-
-

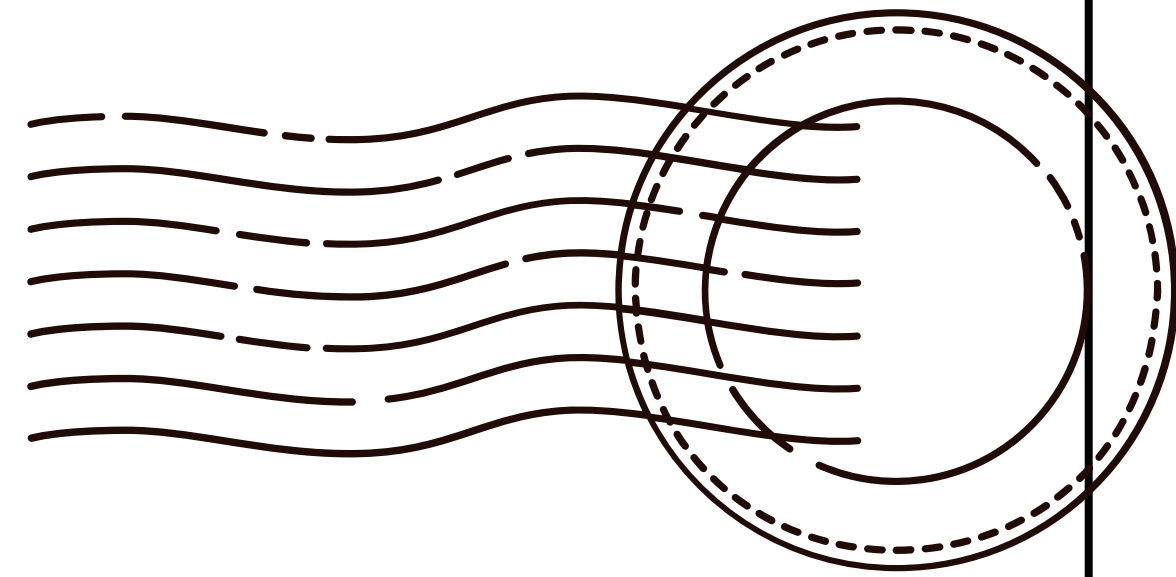
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Describe Terrain

Fun Facts

- This ecosystem stores greenhouse gases and prevents them from being released into the atmosphere
-

FRESHWATER ECOSYSTEM



Locate on Map

Great Lakes

Lake Baikal

Amazon River



Common Vegetation

-
-
-

Describe Climate

-
-
-

Common Animals

-
-
-

Look at the lists above. Put an 'A' beside anything Abiotic, and a 'B' beside anything biotic

Describe Terrain

Fun Facts

- This ecosystem stores greenhouse gases and prevents them from being released into the atmosphere
-



This activity is designed to cover the 1st KUSP of the Grade 6 Living Systems Organizing Idea.

Learning outcome: Students investigate the characteristics and components of and interactions within ecosystems.

Instructions:

1. Introduce the concept of **Biotic** (living or once living) and **Abiotic** (non-living) to the class.
 - a. Biotic Examples: animals, dead animals, plants, microorganisms, humans, etc
 - b. Abiotic Examples: Sunlight, water, soil, air, temperature, etc
 - c. **Card Sort** (click on link)
2. Use **Google Earth** and search the following places for each type of ecosystem. Fill in any information you can in your passport
3. Next, watch **videos** (links below) regarding each ecosystem to complete your passport
4. Go over the passport with your class to ensure everything is correct!

Teacher LINKS

[Google Earth](#)

[Freshwater Video](#)

[Forest Video](#)

[Desert Video](#)

[Grassland Video](#)

[Extra Video](#)

[Arctic Video](#)

[Wetland Video](#)

KEY

Desert Ecosystem

Common Vegetation (Biotic)

- Cactus
- Sagebrush
- Desert grasses
- Joshua trees

Climate (Abiotic)

- Very hot during the day and often cold at night
- Very little rainfall (often less than 25 cm per year)
- Dry air and strong sunlight

Common Animals (Biotic)

- Camels
- Desert foxes
- Snakes
- Lizards
- Scorpions

Terrain (Abiotic)

- Sand dunes
- Rocky ground
- Dry riverbeds
- Sparse soil with very little organic material

Fun Facts

- Some desert plants can store water for months.
- Many animals are nocturnal (active at night) to avoid daytime heat.

Arctic Ecosystem

Common Vegetation (Biotic)

- Mosses
- Lichens
- Arctic grasses
- Small shrubs

Climate (Abiotic)

- Extremely cold most of the year
- Long winters and short summers
- Snow and ice cover much of the land

Common Animals (Biotic)

- Polar bears
- Arctic foxes
- Caribou
- Snowy owls
- Seals

Terrain (Abiotic)

- Frozen soil called permafrost
- Ice sheets and glaciers
- Rocky tundra

Fun Facts

- In summer the Arctic can have 24 hours of daylight.
- Trees cannot grow well because the soil stays frozen.

Grassland Ecosystem

Common Vegetation (Biotic)

- Tall grasses
- Wildflowers
- Small shrubs

Climate (Abiotic)

- Warm summers and cold winters (in many regions)
- Moderate rainfall
- Periodic droughts and fires

Common Animals (Biotic)

- Bison
- Antelope
- Prairie dogs
- Wolves
- Hawks

Terrain (Abiotic)

- Wide, open plains
- Rolling hills
- Deep fertile soil

Fun Facts

- Grassland soil is very rich and often used for farming.
- Fires help grasslands stay healthy by removing dead plants.

Wetland Ecosystem

Common Vegetation (Biotic)

- Cattails
- Water lilies
- Reeds
- Mangrove trees (in some wetlands)

Climate (Abiotic)

- Usually warm and humid
- Frequent flooding or standing water
- Rainfall varies depending on location

Common Animals (Biotic)

- Frogs
- Alligators or crocodiles
- Ducks
- Fish
- Insects

Terrain (Abiotic)

- Water-covered soil
- Marshes and swamps
- Muddy ground with slow-moving water

Fun Facts

- Wetlands act like natural water filters.
- They store large amounts of carbon, helping slow climate change.

Forest Ecosystem

Common Vegetation (Biotic)

- Trees (pine, spruce, oak, maple)
- Ferns
- Moss
- Shrubs

Climate (Abiotic)

- Varies depending on forest type
- Usually moderate to high rainfall
- Can have warm summers and cold winters (temperate forests)

Common Animals (Biotic)

- Deer
- Bears
- Owls
- Squirrels
- Insects

Terrain (Abiotic)

- Dense tree cover
- Rich soil from decaying plants
- Hills, valleys, and streams

Fun Facts

- Forests absorb carbon dioxide from the atmosphere.
- The Amazon rainforest produces a large amount of Earth's oxygen through photosynthesis.

Freshwater Ecosystem

Common Vegetation (Biotic)

- Algae
- Water lilies
- Pondweed
- Reeds

Climate (Abiotic)

- Climate varies depending on location
- Water temperatures change with the seasons

Common Animals (Biotic)

- Fish (trout, bass)
- Frogs
- Beavers
- Turtles
- Dragonflies

Terrain (Abiotic)

- Lakes
- Rivers and streams
- Ponds

Fun Facts

- Freshwater ecosystems contain less than 3% of Earth's water but support many species.
- Many animals depend on freshwater for drinking and habitat.



Part A – Biotic or Abiotic (6 marks)

Write B for biotic or A for abiotic.

- | | |
|------------------|---------------|
| 1._____ Sunlight | 4._____ Deer |
| 2._____ Tree | 5._____ Soil |
| 3._____ Water | 6._____ Grass |

Name:

Date:

Part B – Multiple Choice (4 marks) Circle the best answer.

7. Which ecosystem is usually very dry with little rainfall?

- A. Forest
- B. Wetland
- C. Desert
- D. Freshwater

8. Which ecosystem is very cold and often covered in snow and ice?

- A. Arctic
- B. Grassland
- C. Forest
- D. Wetland

9. Which ecosystem is known for wide open areas with many grasses and few trees?

- A. Wetland
- B. Grassland
- C. Desert
- D. Arctic

10. Which ecosystem has water covering the soil most of the time?

- A. Wetland
- B. Desert
- C. Forest
- D. Arctic

Part C – Short Answer (4 marks)

11. Why are plants important in ecosystems? Give one reason.

12. Give one example of an abiotic factor and explain how it can affect living things in an ecosystem.



Part A – Biotic or Abiotic (6 marks)

Write B for biotic or A for abiotic.

1. **A** Sunlight 4. **B** Deer
2. **B** Tree 5. **A** Soil
3. **A** Water 6. **B** Grass

Name:

Date:

Part B – Multiple Choice (4 marks) Circle the best answer.

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10. Which ecosystem has water covering the soil most of the time?
A. Wetland
B. Desert
C. Forest
D. Arctic

Part C – Short Answer (4 marks)

11. Why are plants important in ecosystems? Give one reason.

- produce oxygen
- make food through photosynthesis
- provide food for animals
- provide shelter

12. Give one example of an abiotic factor and explain how it can affect living things in an ecosystem.

- sunlight
- water
- temperature
- soil

Example explanation:

- Sunlight helps plants grow through photosynthesis.
- Water is needed for plants and animals to survive.