

Johnny Morris
WONDERS OF WILDLIFE

**NATIONAL MUSEUM &
AQUARIUM**

Presents

Rainforests

Vocabulary

Abiotic: Parts of an ecosystem that are not made up of biological organisms. Air, soil, rocks, weather, water, and nutrients are all considered abiotic. They are not, and have never been, alive.

Adaptation: A characteristic or trait that allows an organism to be better suited for survival and reproduction within a given habitat.

Biodiversity: When many different types of animal and plant species live in a particular ecosystem or habitat.

Biodiversity Hotspot: An ecosystem or region with a significantly high amount of biodiversity that is also currently under threat of being destroyed.

Biome: Areas on earth that have similar climates, plants, and animals. Biomes are defined by their average precipitation rates and temperature.

Biotic: The parts of an ecosystem that are made from living or formerly living organisms. Plants, animals, and bacteria are all biotic. Even if something is rotting or decomposing, it is considered biotic.

Carbon: Carbon is an essential element for all life on Earth.

Carbon Sink: A natural part of our environment that absorbs and stores massive amounts of carbon from the atmosphere.

Carbon Sequestration: The process of capturing and storing atmospheric carbon dioxide.

Climate: The regular prevailing weather and temperature conditions of an area over a long period of time.

Deforestation: The removal of a large number of trees or even entire forests in order to use the land for other purposes.

Endangered Species: A species of animal or plant that is in danger of going extinct.

Erosion: The process of wind, water, or other natural forces breaking down something over a period of time.

Evaporation: The process by which liquid water becomes water vapor.

Extinction: Event when an entire species dies out and no longer exists.

Habitat: The natural home of a living thing.

Organism: An individual living thing.

Photosynthesis: The process whereby plants turn sunlight into food.

Pollution: When a harmful substance is out in the wrong place and/or in the wrong quantity and has a harmful effect on the environment.

Precipitation: Water vapor that has condensed to fall to earth as rain or snow.

Soil Death: Soil that has been depleted of all nutrients.

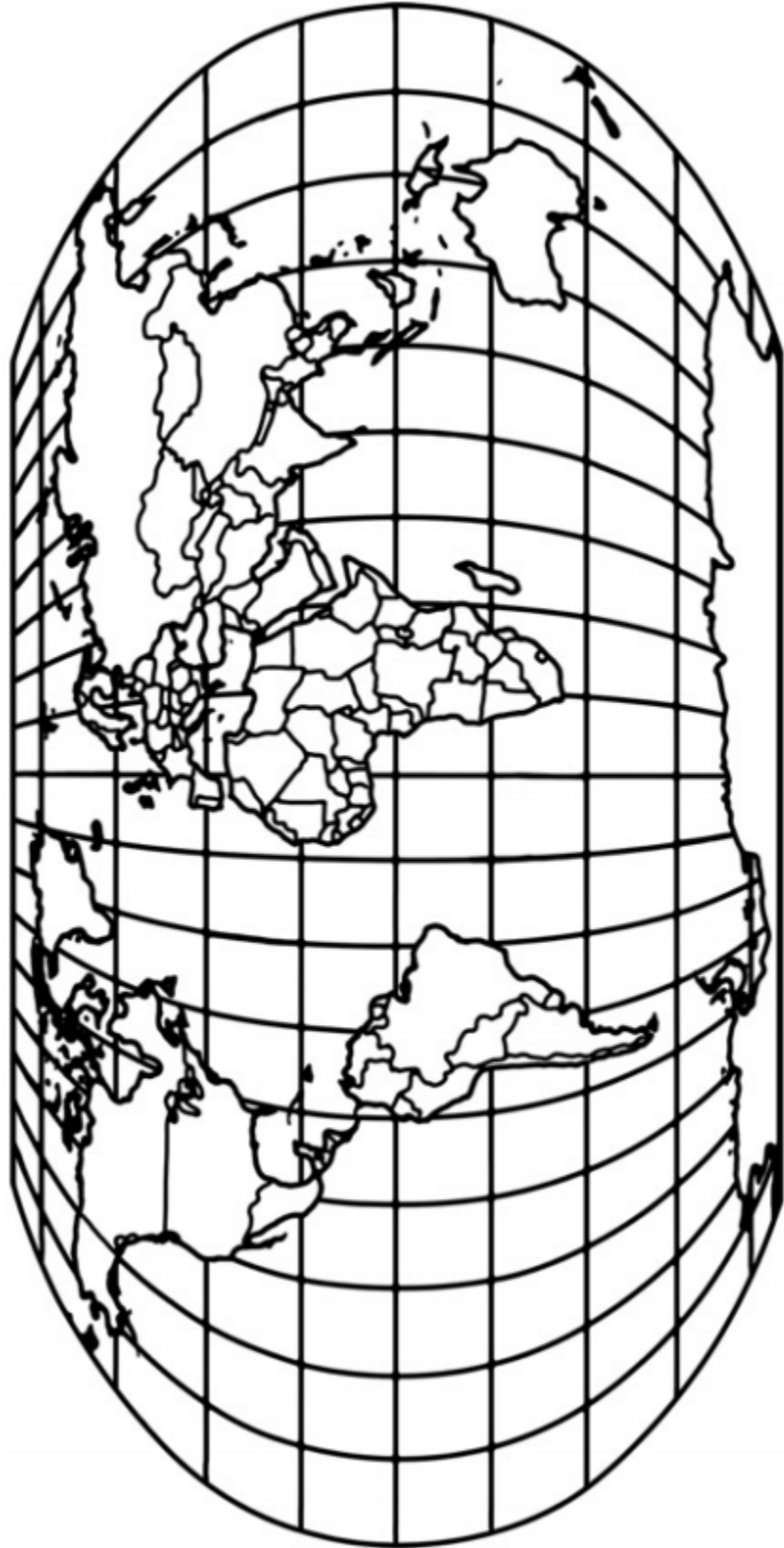
Sustainability: Use of the earth's resources without destroying or depleting them.

Student Name:

Where in the WORLD are Rainforests!?

Color in on the map the regions tropical rainforests can be found.

Hint: The equator is the key!



The emergent layer is the tallest part of the rainforest. The giant trees in this layer can grow to be over 200 feet tall with trunks that are 16 feet around! There's lots of sunshine up here!

The canopy layer is the second tallest part of the rainforest. It acts like a roof over the bottom two layers by blocking a lot of sunlight. This area is a maze of leaves, vines, and branches.

The understory layer is below the canopy and does not get a lot of sunshine. The plants have to grow very large leaves to absorb enough light. These leaves can be as big as an umbrella!

The forest floor is the ground level. Almost no plants grow here because there's hardly any sunlight. The forest floor is very dark which allows things to decay, or break down, very quickly.

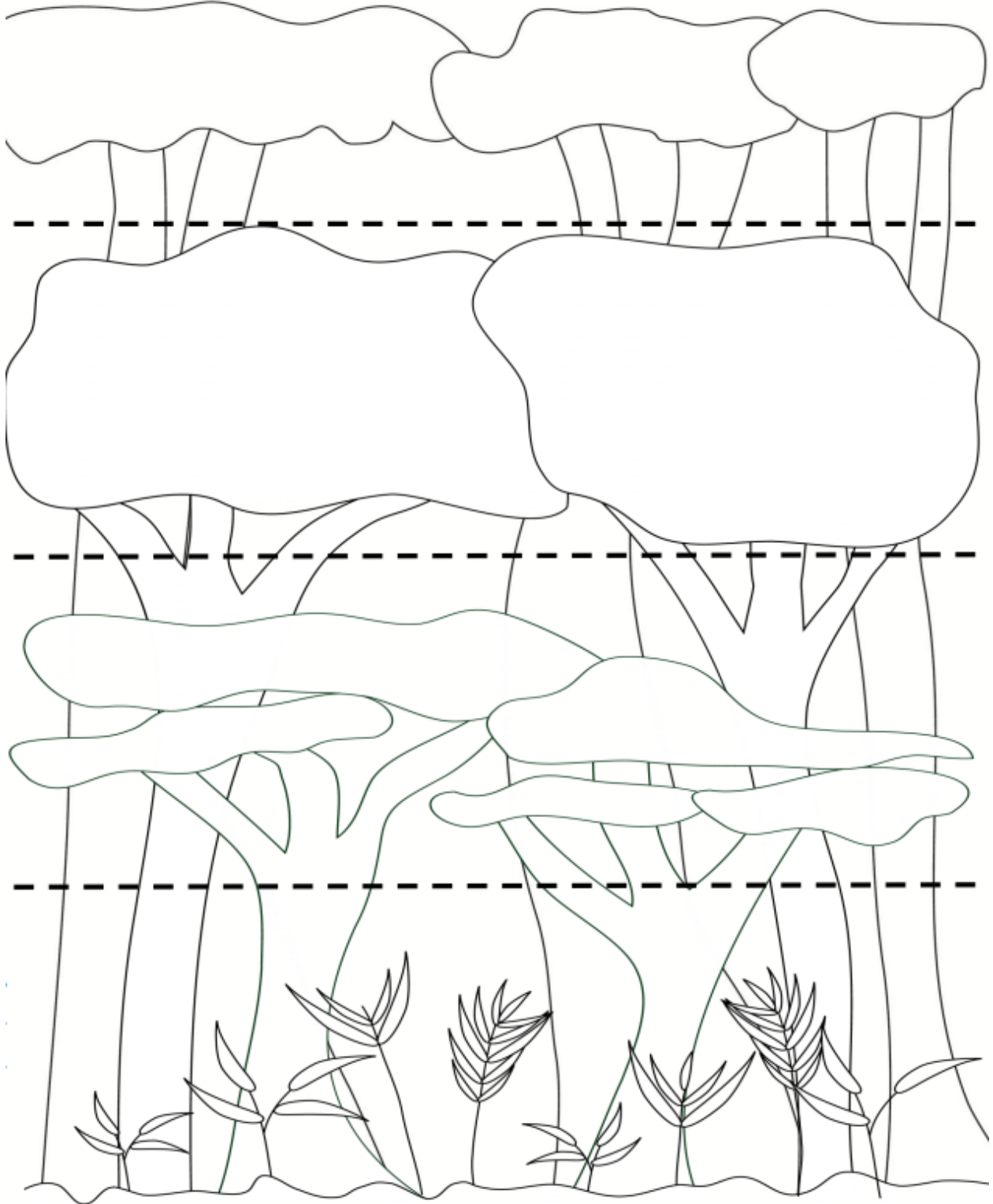
Emergent

Canopy

Understory

Forest
Floor

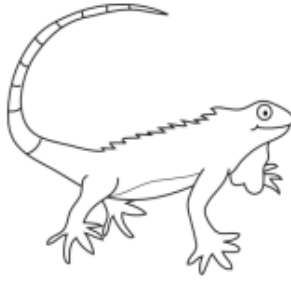
Layers of the Rainforest



Animal Cutouts For Rainforest Layer Flipbook



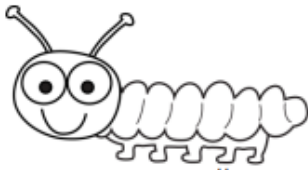
Boa Constrictor



Iguana



Macaw



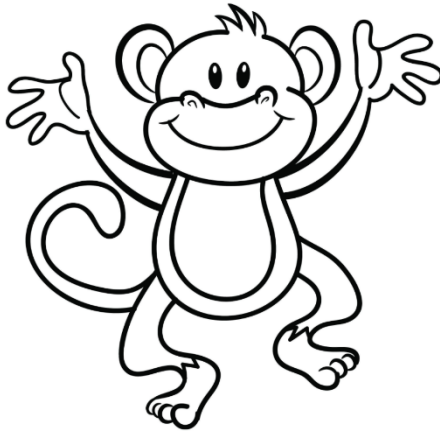
Caterpillar



Toucan



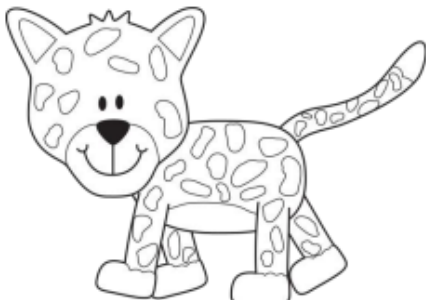
Tree Frog



Howler Monkey



Sloth

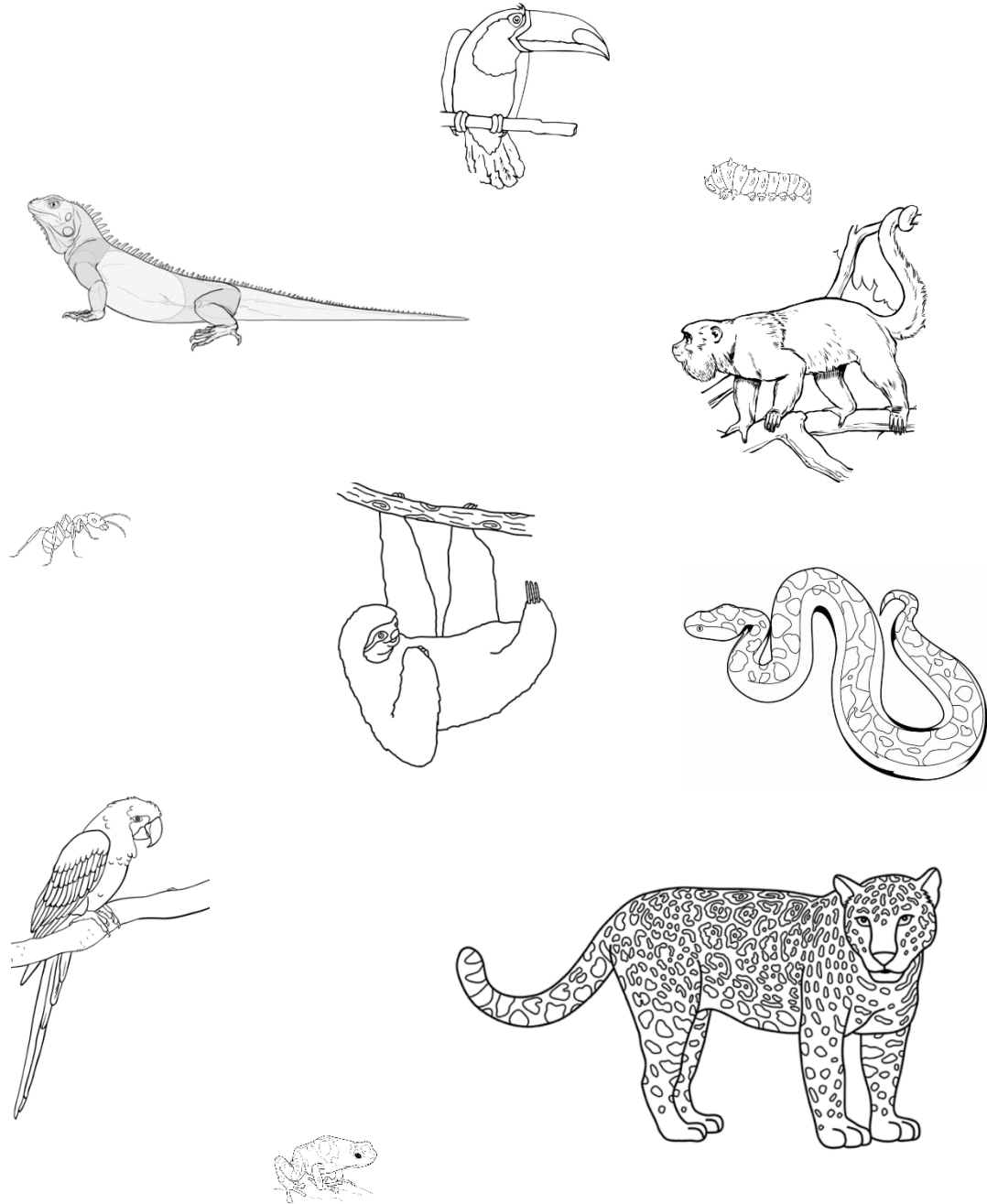


Jaguar



Ant

Animal Cutouts For Rainforest Flipbook



Where in the Rainforest?

Cut-and-Paste Pieces

DIRECTIONS: Cut out the pieces below. Read the description on each piece and glue it in the correct box on the other page.

birds, bats, and
butterflies

tallest layer

Jaguars

ground level

directly below the
canopy

monkeys, birds, sloths

insects, frogs, snakes,
small mammals

has giant trees that can
grow to over 200 feet

acts like a roof blocking sun
from the bottom layers

large bright flowers

has almost no sunlight

has plants with leaves as
big as an umbrella

Student Name:

Rainforest Layers

EMERGENT

CANOPY

UNDERSTORY

FOREST FLOOR

Student Name:

Rainforest Word Search

E L Y Z N T C G I P C C U N E N J F Q C
A V G T T O T L M C A X O A M O O A E A
D K A F I J I S I R S I A K O I Q N H R
A N D P S L I T B M T X F G I T D E T B
P U R I O N I O U A A K S A B A E R A O
T N M N A R N B T L Q T T O N T H O E N
A Q A G Y S A I A V L Y E G J S E S D S
T E R Y I S P T Q N W O E D K E W I L E
I O P N C I T O I B I R P Y L R Q O I Q
O T K I C W S N E O E A G H Z O M N O U
N M J E P E Z H Q D N Z T V W F K R S E
B R R X N O A D S V C B F S B E I B M S
Q P M Z S B F P L Q Q G A S U D B E V T
B I O D I V E R S I T Y H O T S P O T R
N V G T B C B Q K N O I T C N I T X E A
B O A S I S E H T N Y S O T O H P W D T
P T B E X Q J R P U G W O V Y B S G V I
V G S R K O L C U S G F H A D P H R K O
B C C A A U P T A B I O T I C Q L L H N
K K X W S C J R A H Y H G M V H K Y B G

Abiotic - Adaptation - Biodiversity - Biodiversity Hotspot - Biome - Biotic

Carbon - Carbon Sink - Carbon Sequestration - Climate - Deforestation

Endangered Species - Erosion - Evaporation - Extinction - Habitat

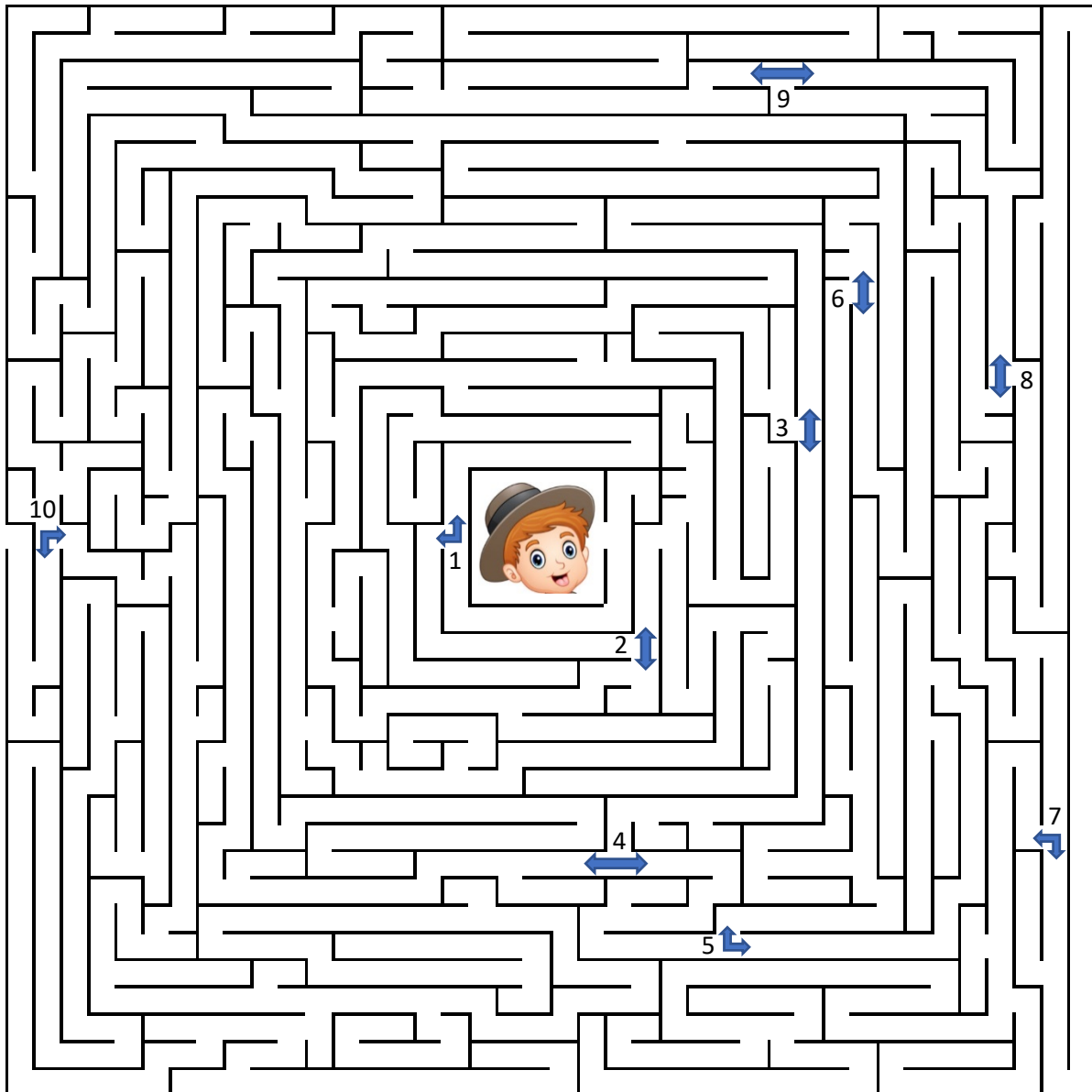
Organism - Photosynthesis - Pollution - Precipitation - Soil Death - Sustainability

Student Name:

Escape the Amazon Maze!

Hey there rainforest experts! You have had quite the journey today, are you up for one last challenge? Explorer Eric dropped his compass and needs your help! Can you help guide him back out of the dense jungle? You will have to use the knowledge you have learned today to help Explorer Eric back home. Goodluck adventurers!

Directions: When you reach a number, flip to the other page and answer the question to know which way to go! Travel through EVERY number before reaching the end! (Path based on direction traveled)



Student Name:

Escape the Amazon Maze Questions

Directions: Match corresponding number from maze with questions listed below. Use the knowledge you have gained today and your other projects to help you! (Circle your answer)

1. What best describes a rainforest?
 - a. Very Dry (Up)
 - b. Very Wet (Left)
2. Which type of rainforest is typically found along the equator?
 - a. Tropical (Up)
 - b. Temperate (Down)
3. What are characteristics of a tropical rainforest?
 - a. Colder and along the coasts (Up)
 - b. Warm and humid (Down)
4. This layer of the rainforest receives almost ZERO sunlight.
 - a. Understory (Left)
 - b. Forest Floor (Right)
5. Which layer is the topmost layer?
 - a. Emergent (Up)
 - b. Canopy (Right)
6. Where would you most likely find primates in the rainforest?
 - a. Understory Layer (Up)
 - b. Canopy Layer (Down)
7. What life giving cycle do rainforests play a vital role in?
 - a. Carbon Cycle (Down)
 - b. Cosmic Cycle (Left)
8. Rainforests are full of valuable natural resources.
 - a. True (Up)
 - b. False (Down)
9. _____: Use of the earth's resources without destroying or depleting them.
 - a. Deforestation (Right)
 - b. Sustainability (Left)
10. Who benefits from healthy rainforests?
 - a. The Entire World (Down)
 - b. No One (Right)