Section 1: Ecosystems: Everything Is Connected

Read the passage below and answer the questions that follow.

An ecosystem is made up of both living and nonliving things. Biotic factors are the living and once-living parts of an ecosystem, including all of the plants and animals. **Biotic factors** include dead organisms, dead parts of organisms, such as leaves, and the organisms’ waste products. The biotic parts of an ecosystem interact with each other in various ways. They also interact with the **abiotic** (ay bie AHT ik) **factors**, the nonliving parts of the ecosystem. Abiotic factors include air, water, rocks, sand, light, and temperature.

IDENTIFYING MAIN IDEAS

One reading skill is the ability to identify the main idea of a passage. The main idea is the main focus or key idea. Frequently, a main idea is accompanied by supporting information that offers detailed facts about main ideas.

Read each question and write the answer in the space provided.

1. What is an ecosystem made up of?

   _________________________________________________________________
   _________________________________________________________________

2. Biotic parts of an ecosystem interact with ___________________________ and
   with ___________________ and ____________________

   _________________________________________________________________

VOCABULARY DEVELOPMENT

Read each question and write the answer in the space provided.

3. Biotic factors are the __________________________ and
   __________________________ parts of a ecosystem.

4. Abiotic factors are the __________________________ parts of an ecosystem.

5. The root word *bio* means “life.” If you know that *biotic* means “having life,” what can you guess is one of the meanings of the prefix a-?

   _________________________________________________________________
   _________________________________________________________________
RECOGNIZING SIMILARITIES AND DIFFERENCES
One reading skill is the ability to recognize similarities and differences between two phrases, ideas, or things. This is sometimes known as comparing and contrasting.

In the space provided, write “B” next to biotic factors and “A” next to abiotic factors.

_____ 6. animals
_____ 7. temperature
_____ 8. air
_____ 9. dead parts of organisms
_____ 10. organisms’ waste products
_____ 11. water
_____ 12. rocks
_____ 13. plants
_____ 14. sand
_____ 15. dead organisms
_____ 16. light

SEQUENCING INFORMATION
One reading skill is the ability to sequence information, or to logically place items or events in the order in which they occur.

Sequence the statements below to show the order in which the information was presented in the passage. Write “1” on the line in front of the first information presented, “2” in front of the next information presented, and so on.

_____ 17. The definition of biotic factors is given.
_____ 18. Examples of abiotic factors are given.
_____ 19. Examples of biotic factors are given.
_____ 20. Interactions of biotic and abiotic factors are discussed.
_____ 21. The definition of abiotic factors is given.
Section 1: Energy Flow in Ecosystems

Read the passage below and answer the questions that follow.

Energy from the sun enters an ecosystem when a plant uses sunlight to make sugar molecules by a process called photosynthesis. During photosynthesis, plants, algae, and some bacteria capture solar energy. Solar energy drives a series of chemical reactions that require carbon dioxide and water. The result of photosynthesis is the production of sugar molecules known as carbohydrates. Carbohydrates are energy-rich molecules which organisms use to carry out daily activities. As organisms consume other plants or animals, energy is transferred from one organism to another. Plants produce carbohydrates in their leaves. When an animal eats a plant, some energy is transferred from the plant to the animal. Organisms use this energy to move, grow, and reproduce.

IDENTIFYING MAIN IDEAS

One reading skill is the ability to identify the main idea of a passage. The main idea is the main focus or key idea. Frequently a main idea is accompanied by supporting information that offers detailed facts about main ideas.

In the space provided, write the letter of the term or phrase that best completes each statement or best answers each question.

1. Plants, algae, and some bacteria capture _____________ during photosynthesis.
   a. solar energy  
   b. carbohydrates  
   c. carbon dioxide  
   d. organisms

2. The chemical reactions driven by solar energy require
   a. carbon dioxide and water.  
   b. plants and algae.  
   c. organisms and water.  
   d. carbon dioxide and sugar molecules.

3. During photosynthesis, plants make
   a. carbohydrates.  
   b. carbon dioxide.  
   c. water.  
   d. None of the above

4. Where does the production of carbohydrates in a plant take place?
   a. in the carbohydrates  
   b. in the leaves  
   c. in the ecosystem  
   d. in the stems
VOCABULARY DEVELOPMENT

Read each question and write the answer in the space provided.

5. Energy-rich molecules that organisms use to carry out daily activities are.

______________________

6. The process by which a plant uses sunlight to make sugar molecules is called

______________________

SEQUENCING INFORMATION

One reading skill is the ability to sequence information, or to logically place items or events in the order in which they occur.

Sequence the statements below to show the steps in the process of energy production and consumption. Write “1” on the line in front of the first step, “2” on the line in front of the second step, and so on.

_____ 7. Photosynthesis produces carbohydrates.
_____ 8. Plants, algae, and some bacteria capture solar energy.
_____ 9. Energy is transferred from one organism to another.
_____ 10. Solar energy drives a series of chemical reactions.
_____ 11. Other organisms consume carbohydrates found in plants, algae, and some bacteria.

RECOGNIZING CAUSE AND EFFECT

One reading skill is the ability to recognize cause and effect.

In the space provided, write the letter of the effect that best matches the cause.

_____ 12. Organisms consume food and use energy from carbohydrates.
   a. Carbohydrates are produced.
   b. Energy is transferred from one organism to another.
   c. Energy from the plant is transferred and used to move, grow, and reproduce.


Section 3: How Ecosystems Change

Read the passage below and answer the questions that follow.

When farmland is abandoned a type of secondary succession called old-field succession occurs. When a field is no longer cultivated, pioneer species such as grasses and weeds quickly grow and cover the abandoned land. The grasses and weeds produce many seeds to cover large areas. Over time, taller plants grow in the area and shade the ground, keeping light from the shorter plants. The long roots of the taller plants also absorb most of the water in the soil. The pioneer plants soon die from lack of sun light and water. As succession continues, growing trees deprive the taller plants of light and water. Finally, slower-growing trees, such as oaks, hickories, beeches, and maples, take over the area and block sunlight to the smaller trees. The area can eventually establish a climax community dominated by a mature oak forest.

IDENTIFYING MAIN IDEAS

One reading skill is the ability to identify the main idea of a passage. The main idea is the main focus or key idea. Frequently a main idea is accompanied by supporting information that offers detailed facts about main ideas.

Read each question and write the answer in the space provided.

1. What type of succession is old-field succession?

2. Summarize what happens to a field when a farmer stops cultivating it.

VOCABULARY DEVELOPMENT

Read each question and write the answer in the space provided.

3. What key terms are used in this passage?
4. Define the terms you identified in the previous question.

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

SEQUENCING INFORMATION

One reading skill is the ability to sequence information, or to logically place items or events in the order in which they occur.

Sequence the statements below to show the steps in old-field succession. Write “1” on the line in front of the first step, “2” on the line in front of the second step, and so on.

_____ 5. Taller plants grow in the area and shade the ground.
_____ 6. A climax community exists.
_____ 7. Pioneer grasses and weeds grow and produce many seeds.
_____ 8. A farmer stops cultivating a field.
_____ 9. Trees grow and shade the taller plants.
_____ 10. The taller plants die.
_____ 11. The pioneer plants die.
_____ 12. Slower-growing trees shade the smaller trees.

RECOGNIZING CAUSE AND EFFECT

One reading skill is the ability to recognize cause and effect.

Read each question and write the answer in the space provided.

13. What causes pioneer grasses and weeds that have grown in an abandoned field to die?

_______________________________________________________________

_______________________________________________________________

14. What happens after a farmer abandons a field and the stages of old-field succession take place?

_______________________________________________________________

_______________________________________________________________
Section 1: What Is a Biome?

Read the passage below and answer the questions that follow.

Biomes, climate, and vegetation vary with latitude and altitude. **Latitude** is the distance north or south of the equator and is measured in degrees. **Altitude** is the height of an object above sea level. Climate varies with latitude and altitude. For example, climate gets colder as latitude and altitude increase. So, climate also gets colder as you move farther up a mountain.

As latitude and altitude increase, biomes and vegetation change. For example, the trees of tropical rain forests usually grow closer to the equator, while the mosses and lichens of the tundra usually grow closer to the poles. The land located in the temperate region of the world, between about 30° and 60° north latitude and 30° and 60° south latitude, is where most of the food in the world is grown. This region includes biomes such as temperate forests and grasslands, which usually have moderate temperatures and fertile soil that are ideal for agriculture.

**IDENTIFYING MAIN IDEAS**

One reading skill is the ability to identify the main idea of a passage. The main idea is the main focus or key idea. Frequently, a main idea is accompanied by supporting information that offers detailed facts about main ideas.

Read each question and write the answer in the space provided.

1. Authors often use examples to help explain the main idea. What examples does this author use to explain how climate varies?

2. What example does the author use to explain how biomes and vegetation change with climate?

3. What clue does the author provide to make you aware that he or she is providing an example?
4. Where is the temperate region of the world located?

________________________________________________________________________

5. Name two biomes that are located in the temperate region.

________________________________________________________________________

VOCABULARY DEVELOPMENT

Read each question and write the answer in the space provided.

6. The distance north or south of the equator is called ___________________.

7. The height of an object above sea level is called ____________________.

RECOGNIZING SIMILARITIES AND DIFFERENCES

One reading skill is the ability to recognize similarities and differences between

two phrases, ideas, or things. This is sometimes known as comparing and

contrasting.

Read each question and write the answer in the space provided.

8. Compare vegetation near the poles and vegetation near the equator.

________________________________________________________________________

9. How are latitude and altitude similar? How are they different?

________________________________________________________________________

RECOGNIZING CAUSE AND EFFECT

One reading skill is the ability to recognize cause and effect.

Read each question and write the answer in the space provided.

10. What causes climate to vary?

________________________________________________________________________

11. What causes biomes and vegetation to change?

________________________________________________________________________

12. Why is the temperate region of the world a good place to grow food?

________________________________________________________________________

13. What happens as you move farther up a mountain?

________________________________________________________________________
Section 2: Forest Biomes

Read the passage below and answer the questions that follow.

Tropical rain forests once covered about 20 percent of Earth’s surface. Today, they cover less than 7 percent. Every 60 seconds, nearly 150 acres of tropical rain forest are cleared for logging operations, agriculture, cattle ranching, or oil exploration. Habitat destruction occurs when land inhabited by an organism is destroyed or altered. This destruction is the usual reason for a species becoming extinct. Warming temperatures and changes in precipitation from climate change also threaten rain forests.

An estimated 50 million people live in tropical rain forests. These people are also threatened by habitat destruction. Their food, building materials, culture, and traditions come from and are uniquely connected to the rain forest. Habitat loss also destroys their way of life.

IDENTIFYING MAIN IDEAS

One reading skill is the ability to identify the main idea of a passage. The main idea is the main focus or key idea. Frequently a main idea is accompanied by supporting information that offers detailed facts about main ideas.

Read each question and write the answer in the space provided.

1. How much tropical rain forest is cleared every minute?

2. List three organisms that live in the rain forest.

3. How many people are estimated to be living in rain forests?

4. Where might people go when they are threatened by habitat destruction?
VOCABULARY DEVELOPMENT

Read each question and write the answer in the space provided.

5. When land inhabited by an organism is destroyed or altered, __________ occurs.

6. If something is habitable, it is suitable for living in. Using this information, how would you define habitat?

RECOGNIZING SIMILARITIES AND DIFFERENCES

One reading skill is the ability to recognize similarities and differences between two phrases, ideas, or things. This is sometimes known as comparing and contrasting.

Read each question and write the answer in the space provided.

7. What percentage of Earth’s surface was once covered by tropical rain forests? What percentage is covered by tropical rain forests today?

8. How are animals, plants, and humans similarly affected when a tropical rain forest is cleared?

RECOGNIZING CAUSE AND EFFECT

One reading skill is the ability to recognize cause and effect.

Read each question and write the answer in the space provided.

9. Why are tropical rain forests cleared?

10. What might be the cause of an organism’s disappearance?
Section 3: Grassland, Desert, and Tundra Biomes

Read the passage below and answer the questions that follow.

All desert plants have adaptations for obtaining and conserving water, which allows the plants to live in dry, desert conditions. Plants called succulents, such as cactuses, have thick, fleshy stems and modified leaves called spines that store water. Their spines also have a waxy coating that prevents water loss. Sharp spines on cactuses keep thirsty animals from devouring the plant’s juicy flesh. Rainfall rarely penetrates deeply into the soil, so many plants’ roots spread out just under the surface of the soil to absorb as much rain as possible.

Many desert shrubs drop their leaves during dry periods and grow new leaves when it rains again. When conditions are too dry, some plants die and drop seeds that stay dormant in the soil until the next rainfall. Then, new plants quickly germinate, grow, and bloom before the soil becomes dry again. Some desert plants have adapted so that they can survive even if their water content drops to as low as 30 percent of their mass. Water levels below 50 to 75 percent are fatal for most plants.

IDENTIFYING MAIN IDEAS

One reading skill is the ability to identify the main idea of a passage. The main idea is the main focus or key idea. Frequently, a main idea is accompanied by supporting information that offers detailed facts about main ideas.

In the space provided, write the letter of the term or phrase that best complete search statement or best answers each question.

1. A waxy coating on a desert plant’s leaves prevent it from a. germinating too quickly. c. losing water b. being eaten by thirsty animals. d. Both (b) and (c)

2. What types of adaptations help all desert plants survive?
   a. adaptations that help the plants obtain and conserve water
   b. adaptations that help the plants fend off snakes
   c. adaptations that allow the plants to produce more carbohydrates
   d. adaptations that allow the plants to quickly germinate

3. An example of a succulent is a a. seed. c. desert plant.
   b. cactus. d. spine.
RECOGNIZING SIMILARITIES AND DIFFERENCES
One reading skill is the ability to recognize similarities and differences between two phrases, ideas, or things. This is sometimes known as comparing and contrasting.

Read each question and write the answer in the space provided.

4. When most plants lose water, what percentage of water content is low enough to be fatal?

__________________________________________________________________

5. When a desert plant loses water, what percentage of water content is low enough to be fatal?

__________________________________________________________________

RECOGNIZING CAUSE AND EFFECT
One reading skill is the ability to recognize cause and effect.

Read each question and write the answer in the space provided.

6. Explain how and why a desert plant’s roots grow as they do.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

7. What adaptations in a desert plant prevent water loss?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

8. What adaptation helps desert plants keep animals away?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

9. How can a desert plant’s death cause more plants to grow?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
Design Your Own Luxury Resort!

Terrestrial Biomes
Let’s go to the beach, beach... let’s get away!

Now that you have learned about the different types of biomes that can be found around the world... it’s time to show us what you got! Please read the following directions -

**Your Role:** Real Estate Developer  
**Your Task:** Design a luxury resort for Ms. Chiem and Ms. Stine to visit once the quarantine is over :)

**Overview**

1. Choose a specific biome from the list provided on the following page  
2. Using the readings/online resources, answer the questions in the slides titled “Research” (pages #5-7)  
3. Design your resort - either by drawing sketch or writing a thorough description  
4. Create an advertisement to attract tourists to your resort.

* * * IMPORTANT! * * *

Answer every question or prompt anywhere you see a PINK TEXT BOX. You can do this by tapping or double clicking the text box. Read the directions and instructions in every blue text box.
**Part 1 - Pick a Biome!** Where do you want your resort to be?

**My Biome:**  ____________________________________________________________________________

<table>
<thead>
<tr>
<th>Biome</th>
<th>Description</th>
<th>Location Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tundra</strong></td>
<td>Arctic, very cold and mostly treeless</td>
<td>Siberia</td>
</tr>
<tr>
<td></td>
<td>Animals like polar bears, caribou</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Tundra location example:</strong> Siberia</td>
<td></td>
</tr>
<tr>
<td><strong>Taiga</strong></td>
<td>Coniferous and boreal forests</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long, cold and winters, short and wet summers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lots of tall trees- evergreens, pines, spruces</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animals like bears, wolves, lynxes</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Location example:</strong> Alaska</td>
<td></td>
</tr>
<tr>
<td><strong>Rainforest</strong></td>
<td>Two types: tropical and temperate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diverse plant and life</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Tropical location example:</strong> Thailand</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Temperate location example:</strong> West Coast of New Zealand</td>
<td></td>
</tr>
<tr>
<td><strong>Savanna</strong></td>
<td>Mostly warm with wet and dry seasons</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plants are mostly grasses and some scattered trees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animals like elephants, zebras, lions</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Savanna location example:</strong> Africa</td>
<td></td>
</tr>
<tr>
<td><strong>Temperate Forest</strong></td>
<td>Deciduous forest (trees that lose their leaves in winter!)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 distinct seasons (fall, winter, spring, summer)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animals that hibernate (squirrels, bears)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Location example:</strong> CT!!!</td>
<td></td>
</tr>
<tr>
<td><strong>Temperate Grassland</strong></td>
<td>Grasslands with rich soil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hot summers, cold winters,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animals like bison, antelope,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>gophers, prairie dogs</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Location example:</strong> Midwest United States</td>
<td></td>
</tr>
<tr>
<td><strong>Alpine</strong></td>
<td>Cold and mountainous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tough place for plants to live</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animals like mountain goats, sheep, elk, chinchilla</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Location example:</strong> Andes Mountains</td>
<td></td>
</tr>
<tr>
<td><strong>Chaparral</strong></td>
<td>Hot and dry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plants: shrubs, cacti, trees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coyotes, jackrabbits, horned toads</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Location example:</strong> California</td>
<td></td>
</tr>
<tr>
<td><strong>Desert</strong></td>
<td>Extremely dry, little rain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can be hot or cold!</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cacti and succulent plants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animals like snakes, lizards</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Location example:</strong> Ethiopia</td>
<td></td>
</tr>
</tbody>
</table>
Part 2 - Research

Directions: Circle or mark the location of your resort.

World Map
**Part 2 - Research**

**Directions:** Conduct research on the biome you have chosen. You can use information from the provided readings as well as any research that you gather online.

---

### Flora & Fauna

<table>
<thead>
<tr>
<th>What FLORA (plants) could Ms. Chiem &amp; Ms. Stine expect to find here?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What FAUNA (animals) could Ms. Chiem &amp; Ms. Stine expect to take a great selfie with?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
</tr>
</tbody>
</table>

*** This can include insects, birds, reptiles, and mammals!

---

**Unique Characteristics of Plants**

*Example: Plants in the desert have very thick outer skins (think of a cactus!) this helps them hold in water in dry weather*

---

**Unique Characteristics of Animals**

*Example: Animals in the tundra often hibernate during the worst parts of the winter to reduce energy loss (heat).*
**Part 2 - Research**

**Directions:** Conduct research on the biome you have chosen. You can use information from the provided readings as well as any research that you gather online.

## Climate & Weather

### RAINFALL

How much rainfall does the location of your resort receive throughout the year?

*Answer - *

Does the amount of rainfall vary throughout the year? If so, describe the amount of rainfall (in inches) Ms. Stine and Ms. Chiem should expect each month so we can plan our trip accordingly!

*Answer - *

### TEMPERATURE

What is the average temperature (low and high) at the location of your resort?

*Answer - *

Does it change throughout the year? Describe what temperature range Ms. Stine and Ms. Chiem should expect each month so we can plan our trip accordingly!

*Answer - *
**Part 2 - Research**

**Directions:** Conduct research on the biome you have chosen. You can use information from the provided readings as well as any research that you gather online.

---

**Climate & Weather**

**SEASONS**

How does weather change in your biome? Are there 4 seasons like we experience in CT? 2 seasons? Is there a designated season for rain?

Describe all main weather patterns and seasonal patterns that occur during a year in your biome.

Answer -

**EXTREME WEATHER**

Are there any potential extreme weather events we might have to prepare for?

*Example: From June to November, it is considered Hurricane Season in Puerto Rico.*

Answer -

What might a shelter look like in the event of a weather-related emergency?

Answer -
Part 3 - Design Your Resort!

Directions: It’s now time to flex those creativity muscles and design your new luxury resort!

What do you want your resort to include? For example, the Great Wolf Lodge has an indoor, year-round water park that draws people to it. The Sofitel in Bangkok, Thailand has an infinity pool that gives you a 360 view of the city.

Please PICK ONE of the options provided below -

- **Option # 1** – Sketch out the design of your resort and label the intentional design elements that you chose to add to your resort (*Page 8 & 9*)

- **Option # 2** – Describe the design elements how you would design your resort. Your descriptions should be detailed enough so that Ms. Chiem & Ms. Stine can imagine what your resort would look and visualize the different design elements (*Pages 10 & 11*)

* * * Whichever option you choose, you MUST provide at least FOUR design elements as well as the reasoning behind the design elements you chose based off of your knowledge of the biome you have chosen for the location of your new luxury resort * * *
Sketch of Your New Luxury Resort

Directions: Sketch out the design of your resort and *label the intentional design elements* that you chose to add to your resort.
### Design Elements Reasoning

<table>
<thead>
<tr>
<th>ADAPTATIONS TO THE ENVIRONMENT</th>
<th>MODIFICATIONS TO THE ENVIRONMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: a hotel at a resort in the tropical rainforest would need AC to keep guests cool in hot weather.</td>
<td>Example: In order to build a mountain getaway in a temperate forest, you need to cut down several deciduous trees.</td>
</tr>
</tbody>
</table>

**Directions:** Sort your design elements into either “adaptations” or “modifications” using the table above. If you think of additional adaptations or modifications, you can also include them here!
<table>
<thead>
<tr>
<th>Design Element # 1</th>
<th>Design Element # 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description -</td>
<td>Description -</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Element # 3</td>
<td>Design Element # 4</td>
</tr>
<tr>
<td>Description -</td>
<td>Description -</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Directions:** Describe the design elements that you chose for your resort. Your descriptions should be *detailed enough* so that Ms. Chiem & Ms. Stine can imagine what your resort would look and visualize the different design elements.
## Design Elements Reasoning

<table>
<thead>
<tr>
<th>ADAPTATIONS TO THE ENVIRONMENT</th>
<th>MODIFICATIONS TO THE ENVIRONMENT</th>
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<tr>
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</tr>
</tbody>
</table>

**Directions:** Sort your design elements into either “adaptations” or “modifications” using the table above. If you think of additional adaptations or modifications, you can also include them here!
**Part 4 - Advertise Your Resort!**

**Directions:** Pick one of the following options below to advertise your new luxury hotel!
Ms. Stine & Ms. Chiem will then choose which three resorts (from each class) that they would like to go to when they go on vacation once quarantine is over. Those lucky students will receive a personal postcard from us during our travels :)

<table>
<thead>
<tr>
<th>Advertisement Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option # 1</strong></td>
</tr>
<tr>
<td>Record a podcast</td>
</tr>
<tr>
<td><strong>Option # 2</strong></td>
</tr>
<tr>
<td>Create a promotional poster</td>
</tr>
<tr>
<td><strong>Option # 3</strong></td>
</tr>
<tr>
<td>Write and/or record a jingle or rap</td>
</tr>
<tr>
<td><strong>Option # 4</strong></td>
</tr>
<tr>
<td>Record a Tik Tok</td>
</tr>
</tbody>
</table>

**SUBMISSION GUIDELINES** – this part of the project will be submitted separately. You can submit your advertisement in one of the following ways:

- If you have Ms. Chiem – email it to rchiem@bridgeportedu.net
- If you have Ms. Stine – email it to sstine@bridgeportedu.net
- OR you can send it to your teacher via direct message on Teams!

**FOR 20 BONUS POINTS** – post your advertisement to your Environmental Science Class Team page!!!
Online Resources  Visit these sites for more detailed information about your biome!

- [http://kids.nceas.ucsb.edu/biomes/grassland.htm](http://kids.nceas.ucsb.edu/biomes/grassland.htm)

- [https://openoregon.pressbooks.pub/envirobiology/chapter/3-3-terrestrial-biomes/](https://openoregon.pressbooks.pub/envirobiology/chapter/3-3-terrestrial-biomes/)

- [https://opencurriculum.org/5380/terrestrial-biomes/](https://opencurriculum.org/5380/terrestrial-biomes/)

- [https://www.youtube.com/watch?v=Y0ov1D_o9Xs](https://www.youtube.com/watch?v=Y0ov1D_o9Xs)
  ○ (this one is a 11 minute video about each biome and gives an example of each seen in popular movies!)