

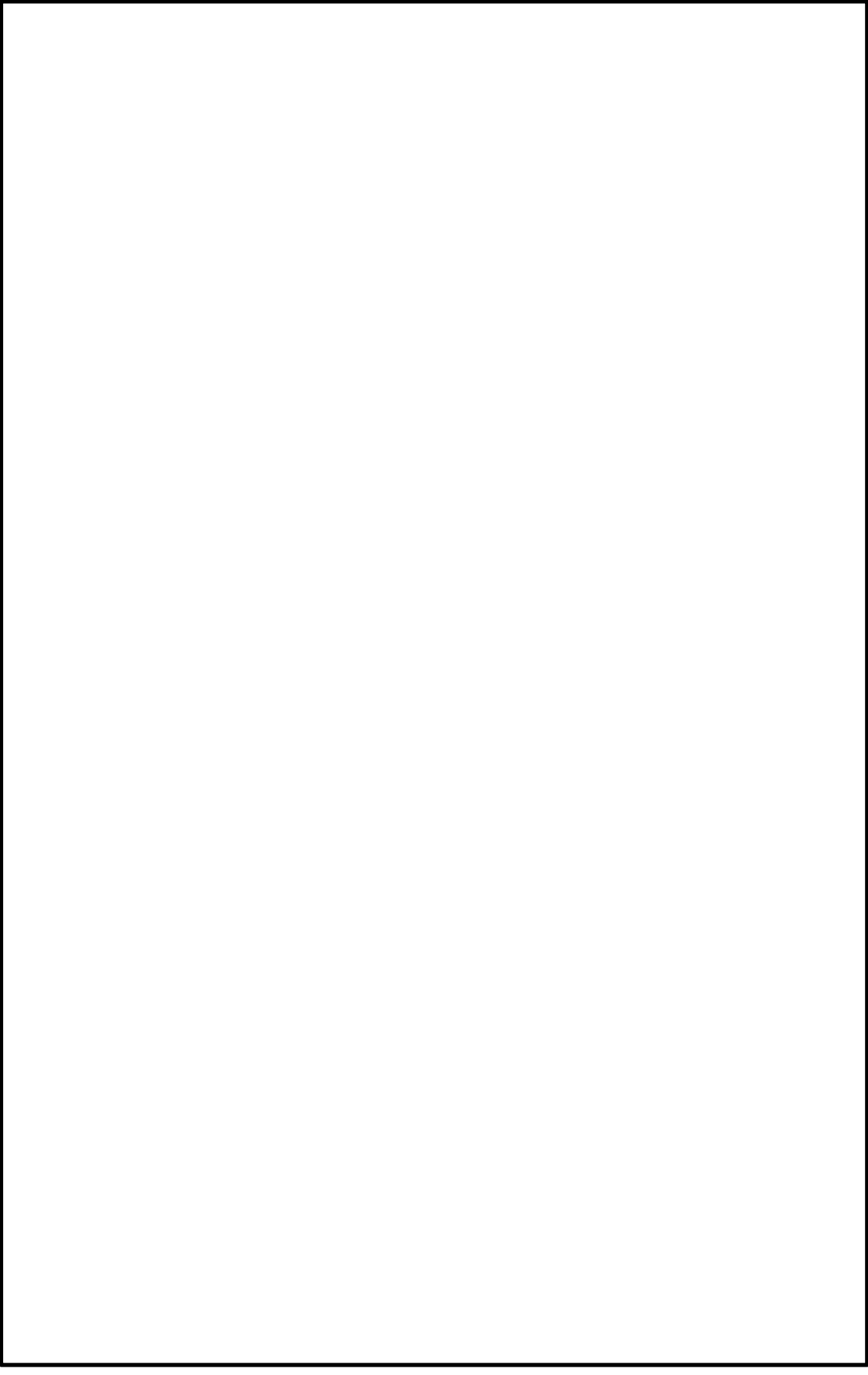
Lesson 2: Introduction to Modeling

How do animals interact with their ecosystem?

Use the box on the next page to draw a model of how you think all kinds of **organisms** interact with each other and their environment.

- Include what you think are the very most important things for organisms to interact
- If helpful, use words and/or numbers to label parts of your model

Lesson 1: First Model



Look at the model you drew to help you answer these questions.

1. My model shows _____

2. I think this is how all kinds of butterflies, animals, insects,
people, and plants interact with their environment

because _____

3. The observations that I have made that help me understand how all kinds of butterflies, animals, insects, people, and plants interact with their environment are_____

4. I could use my model to tell people about my ideas

by_____

Lesson 3: Habitats

Prediction

Look back at your model. What things are on your model do you think a butterfly needs to survive? Let's find out more! Use your model to make a prediction about what you think a butterfly needs to survive, a fish needs to survive, and a worm needs to survive.

I predict a butterfly needs

because _____

I predict a fish needs

because _____

I predict a worm

needs _____

because _____

Investigating

Use the next few pages to draw and write your observations about what is occurring in the three habitats!

Today's date: _____

Lesson 3: Habitats

Today's date: _____

Today's date: _____

Lesson 3: Habitats

Today's date: _____

Today's date: _____

Lesson 3: Habitats

Today's date: _____

Today's date: _____

Lesson 3: Habitats

Today's date: _____

Today's date: _____

Lesson 3: Habitats

Survivor Challenge

You and your friends are going on a camping trip in the desert. You will have to survive out in the wilderness. The problem is that your group can only bring four things. You have to decide what you need to bring and what to leave behind. With your group, decide which four things to bring on the camping trip. Everyone in your group must agree on what to bring

- Band Aids
- Four cans of soda
- New shoes
- Hand sanitizer
- Tent
- Matches
- Chairs
- A fun game
- Cell phone
- Enough water for the whole trip
- Bow and arrow
- Socks
- Money
- Teddy Bear
- Photos
- Bug Spray
- Food packs
- Pocket knife
- Toilet Paper
- Batteries
- Bowl
- Plane Ticket
- Portable Shower

You will be camping in this desert



Our group has decided to bring:

1. _____
2. _____
3. _____
4. _____

Lesson 4: Habitats and Ecosystems

Habitat Comparison Study

1. List the four things that habitats provide butterflies
2. Find as many different examples of these four things in the **garden** and draw them in the correct box.

Lesson 4: Habitats and Ecosystems

Habitat Comparison Study

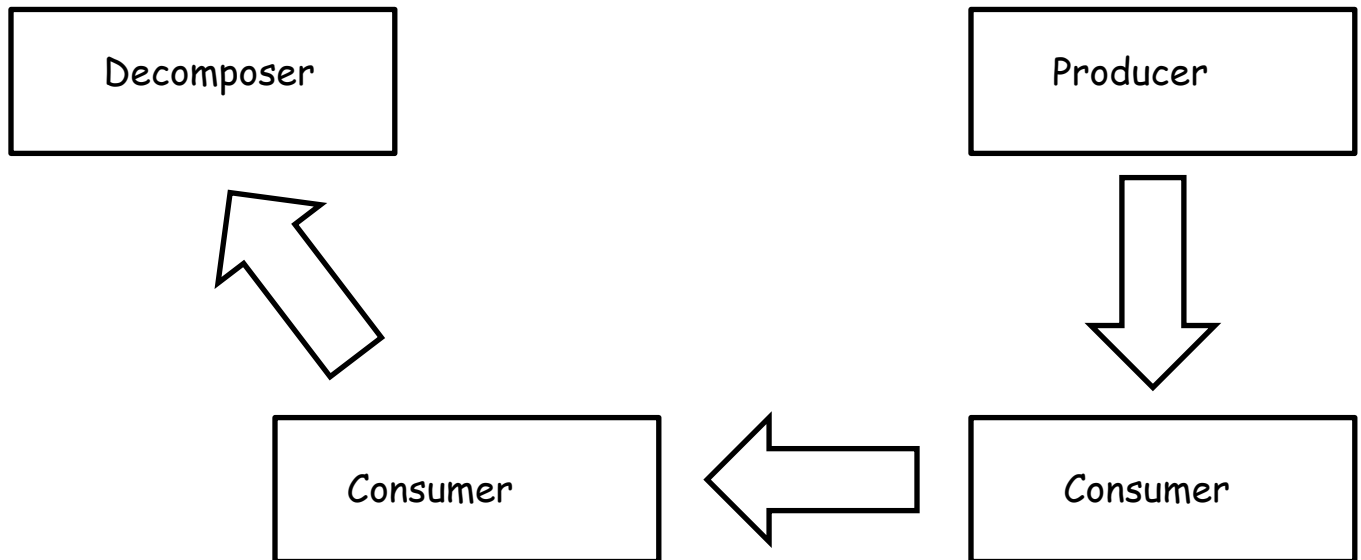
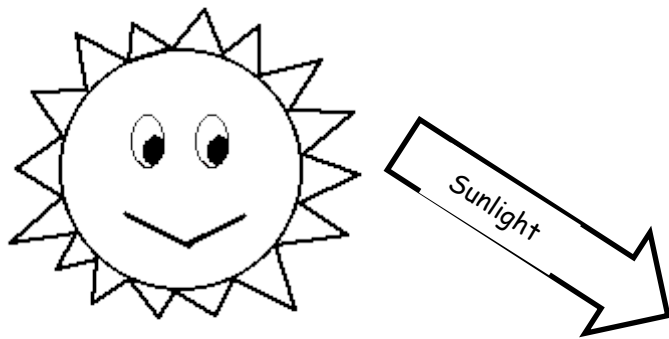
1. List the four things that habitats provide butterflies
2. Find as many different examples of these four things on your **playground** and draw them in the correct box.

Lesson 5: What is a food chain?

Complete the food chain by putting the following organisms in order and writing them in the correct box.

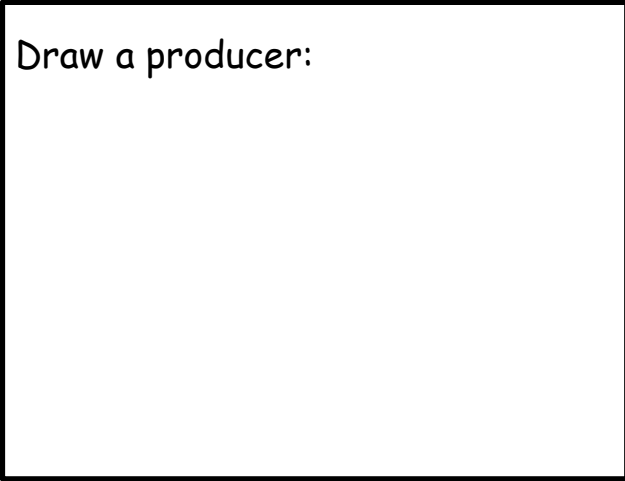
Bird Plant Worm Butterfly

Draw a picture to go with each organism.



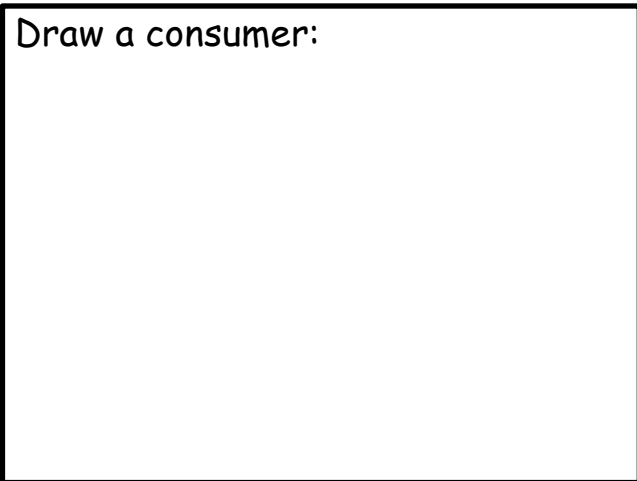
Lesson 5: What is a food chain?

Draw a producer:



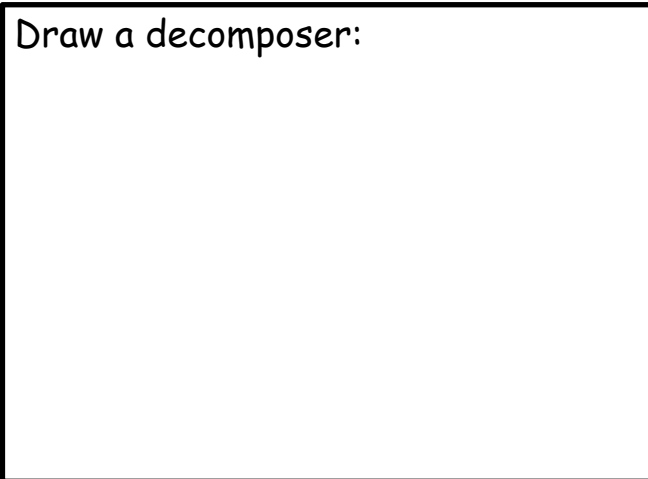
Define what is a producer:

Draw a consumer:



Define what is a consumer:

Draw a decomposer:



Define what is a decomposer:

Lesson 5: What is a food chain?

Producers, Consumers, and Decomposers

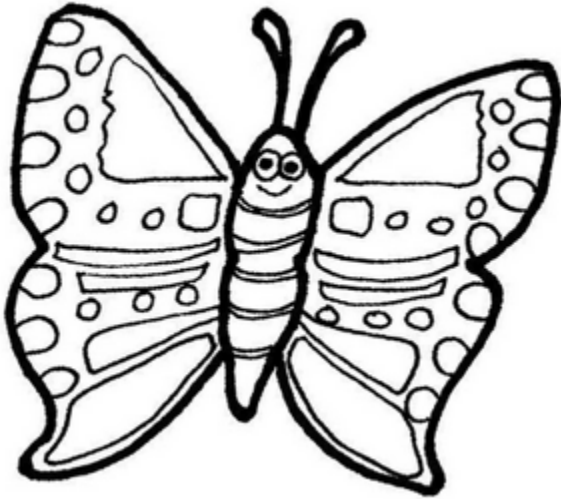
1. What are the differences between producers, consumers, and decomposers?

2. What would happen if we no longer had any producers in the world?

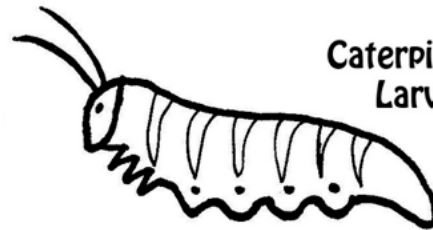
Lesson 6: Butterflies and Food Chains

The Butterfly Life Cycle

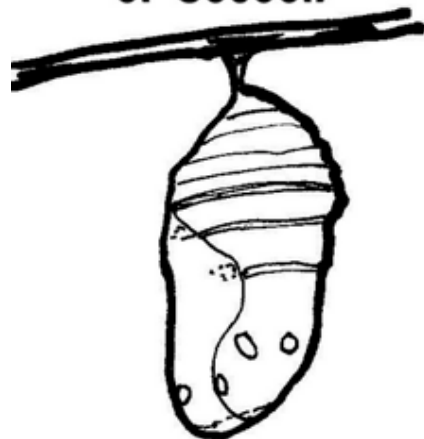
Below are the stages of a butterfly life cycle. Cut them out and put them in order on the next page. Add what other things a butterfly needs from its habitat for each stage of its life cycle



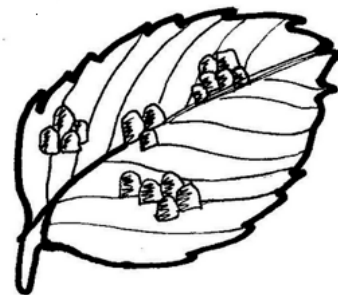
**Adult
Butterfly**



**Caterpillar or
Larvae**



**Chrysalis
or Cocoon**



Eggs

Lesson 6: Butterflies and Food Chains

Life cycle stage	Water	Food	Shelter	Space
Egg	From leaves	Nutrients inside egg	Plant shelters egg	Room on leaf
caterpillar	From Leaves	Eats Leaves	Plant shelters caterpillar	Room on plant

Lesson 6: Butterflies and Food Chains

chrysalis	Stores water inside chrysalis during metamorphosis	Stores food inside chrysalis during metamorphosis	Needs to hang vertically from plant or leaf	Room on plant to hang undisturbed for a week or two.
Butterfly	From Nectar	Nectar	Grass & flowers	Many plants flowering

Lesson 7: What's important to the ecosystem? How do we know?

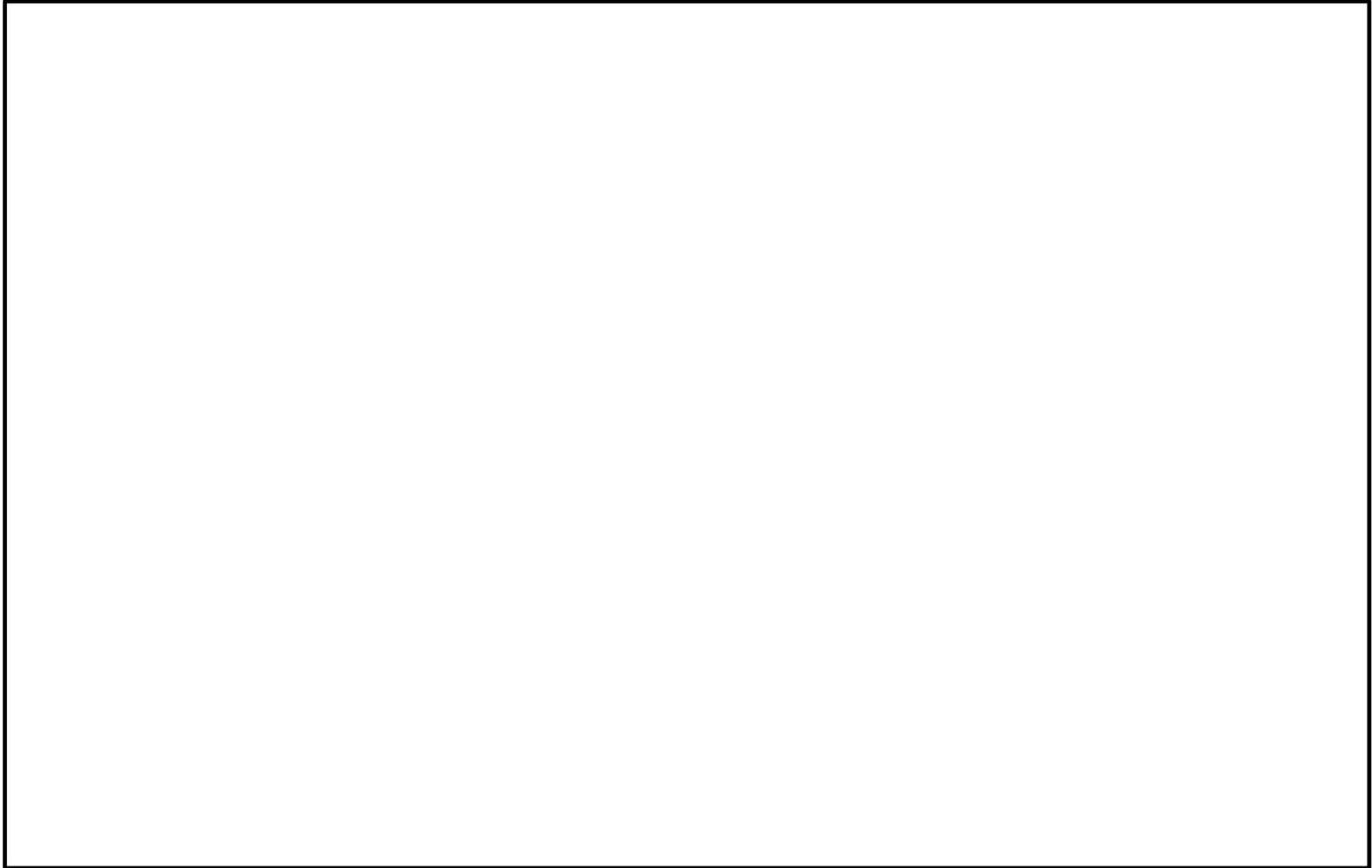
Final Model

How do animals interact with their ecosystem?

Use the box on the next page to draw a model of how you think all kinds of **organisms** interact with each other and their environment.

- Include what you think are the very most important things for organisms to interact
- If helpful, use words and/or numbers to label parts of your model

Lesson 7: What's important to the ecosystem? How do we know?



Lesson 7: What's important to the ecosystem? How do we know?

Look at your model to help you answer these questions.

1. My model shows _____

2. I think this is how all kinds of butterflies, animals, insects, people, and plants interact with their environment

because _____

Lesson 7: What's important to the ecosystem? How do we know?

3. The observations that I have made that help me understand how all kinds of butterflies, animals, insects, people, and plants interact with their environment are_____

4. I could use my model to tell people about my ideas by
