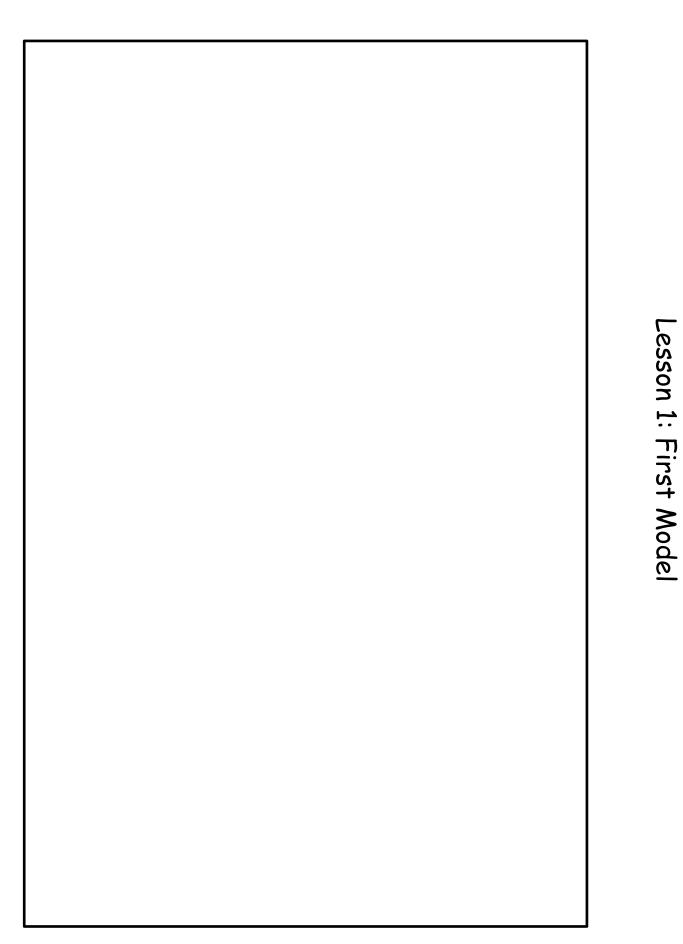
Lesson 1: What's important to the environment? How do we keep Should our school turn one soccer field into a garden to attract butterflies? your ideas below. Writing #1:	
Writing #2:	
Look back at your model examining how organisms interact with their environm Does it give you any ideas about why butterflies are important? Write your idealow.	
	

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 <u>words</u> and/or <u>numbers</u> to label parts of your model



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Ι	think this is how all kinds of butterflies, animals, insects,
р	eople, and plants interact with their environment
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•	ecause
•	ecause
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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

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 data:

Today's date:		
Foday's date:	 	

Today's date:	 	 	
- 1 /. 1 .			
Foday's date:	 	 	

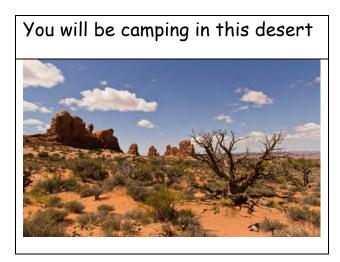
Today's date:		
Today's date:	 	

Today's date:	 	
Today's date:	 	

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



Enough water for trip Bow and arrow Socks Money

Teddy Bear
Photos
Bug Spray
Food packs
Pocket knife
Toilet Paper
Batteries
Bowl
Plane Ticket

Portable Shower

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.

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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.

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Lesson 4: Habitats and Ecosystems

Look back at your original model that you drew at the beginning of the unit and decide how well it shows how organisms survive within a habitat, shows that ecosystems are made up of habitats, and that organisms live in habitats that have the things they need				
to survive. On the lines below write how well you think your model				
shows interactions among living things.				

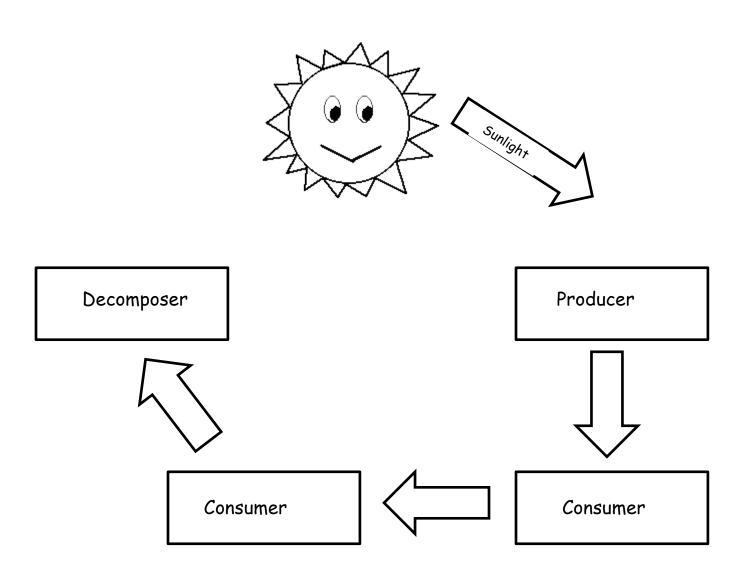
Go to your original model that you drew in Lesson 1. Use the color **BLUE** to make changes to your model to show interactions among living things.

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 organsim.



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?

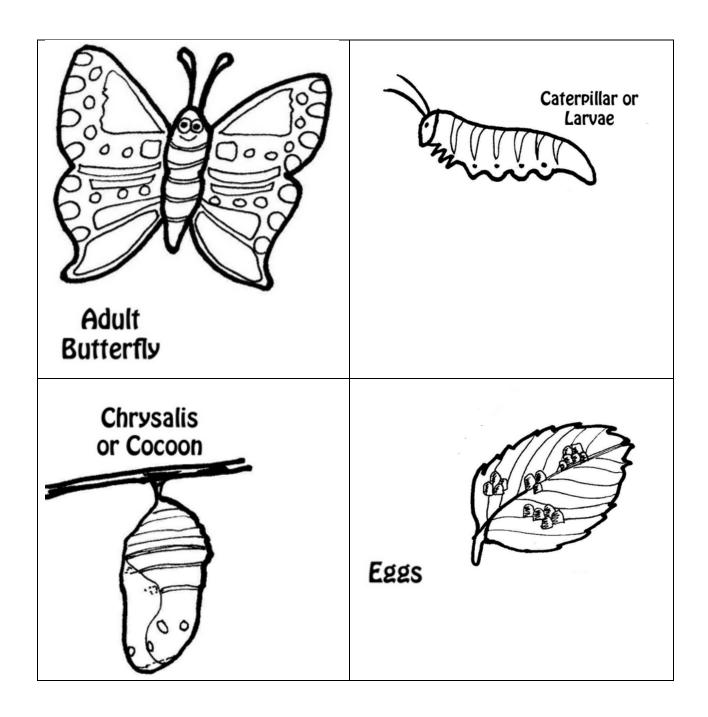
Producers, Consumers, and Decomposers

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



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

ook back at the predicitions you made in Lesson 3 for what a butterfly, worm, and a fish needs to survive in their habitat. Write lown what you now think of each of your predictions and what changes ou would make.

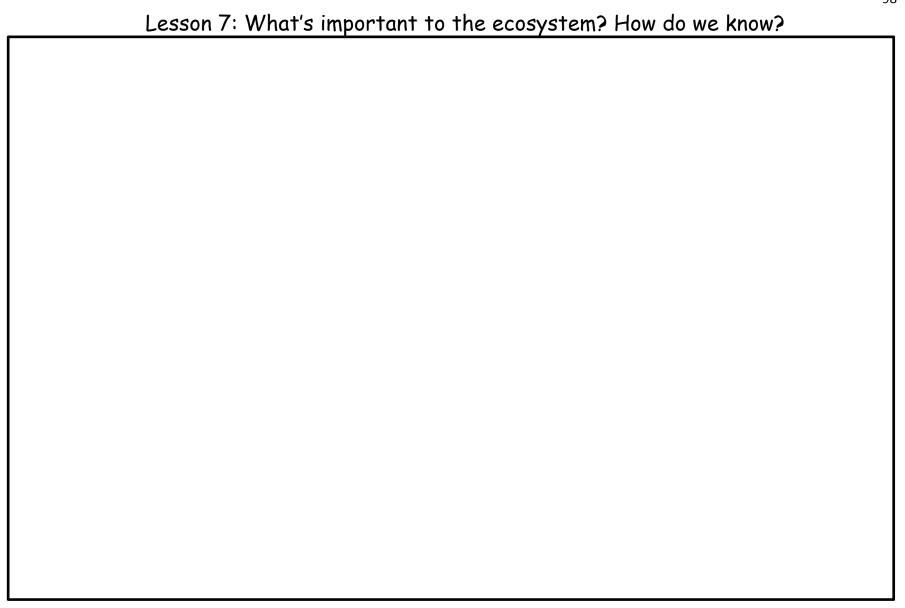
Look back at your original model that you drew at the beginning of the unit and decide how well it shows interactions among living things, how important plants are, and how animal life cycles are dependent on other organisms. What would you change on your model to show interactions? Use **RED** to show changes on your model.

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 <u>most important things</u> for organisms to interact
- If helpful, use <u>words</u> and/or <u>numbers</u> to label parts of your model



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

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 8: What can we do to protect our Earth? What can we do to fix our Earth? And whose responsibility is it?

An elementary school has a prairie habitat in their back yard next to a soccer field. But more students want to be able to play soccer and have asked for a second soccer field. The principal is thinking about turning the prairie habitat into the second soccer field. Write a letter to the school principal about whether or not the prairie should be turned into a second				
soccer field. Use the ideas you have learned during the Ecosystem unit to				
support your answer.				