



Activity One

PRODUCERS, CONSUMERS, DECOMPOSERS Writing a Short Essay

Based on what you have learned from the reading passages, choose TWO PRODUCERS and TWO CONSUMERS that you would like to learn more about. You may choose any organisms you wish.

Here are a few suggestions if you are stuck:

- producers (a cactus, a maple tree, a sunflower)
- consumers (a human, a monkey, a grizzly bear)

Step 1

Begin by making **TWO CHARTS** like the ones below to research and record information about the four organisms you have chosen.

Name of Producer	Where They Live	What They Depend on for Food	What Depends on Them for Food
(Producer 1)			
(Producer 2)			

Name of Consumer	Where They Live	What They Depend on for Food	What Depends on Them for Food
(Consumer 1)			
(Consumer 2)			

Step 2

Next, write a **SHORT ESSAY** using each of the column titles as the topics of the paragraphs. Introduce each of the producers and consumers, informing the readers on what you have learned about them. In your last paragraph, discuss how the producer's role in its ecosystem is different from the consumer's role.

For this activity, you may present your information in a different form if you wish. You will present the same information, but you may show it in **DIAGRAM FORM**. If you choose to do this, you should construct a diagram similar to the food chain diagrams we looked at in the reading passages. Remember to use lots of arrows to show how the organisms are dependent on others for food and energy. Don't forget to label all parts of your diagram!









Activity Two

ECOSYSTEMS Creating a Model or Diorama



Choose ONE ECOSYSTEM from the list below.

Pick one you know very little about. If you know of another ecosystem you would prefer to create, run the suggestion by your TEACHER.

Puddle Rainforest Ocean Handful of soil The Earth



Before creating your diorama, you will need to COLLECT INFORMATION on your chosen ecosystem.

You will be looking for the following INFORMATION:

- What does your ecosystem look like (water, trees, dirt, etc.)?
 - What organisms live in your ecosystem?
- How do these organisms live and work together? How do they interact?



Once you have collected this information, you are ready to begin CONSTRUCTION!

The PROJECT should fit into a shoebox-sized container.

You can however use any craft materials you like. Use your imagination! Here are some suggestions of materials which work well with such a project:

- Plasticine (for figures)
- Colored construction paper (for background)
- Tape, scissors Paint, markers, colored pencils Popsicle sticks

When designing your MODEL or DIORAMA, think about the following things:

- a) How can I best show the different organisms that live together in this ecosystem?
- **b)** Which materials should I use to best create these figures?
- c) How can I best show how these organisms interact with each other?
- **d)** How will I describe the ecosystem when I present my diorama to my class?

Enjoy your construction!











Activity Three

HARMFUL MICROORGANISMS Television News Report

You have just been hired to be a news reporter for your local TV news channel. In groups of three or four, you will form the new HEADLINE REPORT NEWS TEAM.

This week's report is called:
"HARMFUL MICROORGANISMS: HUMANS WATCH OUT!"

Together as a team, you will research **one harmful microorganism** from the list below. Focus your research on this one microorganism. This should allow you to find enough information so that you can put together a **TEN-MINUTE NEWS REPORT**.

HIV herpes measles influenza

In your NEWS REPORT, you should include the following information:

- Basic information about the microorganism (is it a virus, bacteria, etc.)
 - How the microorganism is harmful to humans
 - How it is passed from one person to another
 - Suggestions and recommendations on how humans can avoid it

Before beginning your RESEARCH, spend half an hour in the evening watching a news program. While watching, think of the following things:

- How is a new topic introduced?
- How does a news team work together?
- How does the reporter use eye contact to keep the viewer's attention?
 - Are pictures or any other visuals used besides talking?

For the actual PRESENTATION to the class, you should begin with...

"Good evening and welcome to the (name of news channel) evening news.

Today is (the date). Our special headline report today will look at
harmful microorganisms and how they can be harmful to humans.

In particular, we will be looking at...

Have fun making your report!









IT'S A POPULATION MATCH! Designing a Board Game

In groups of two or four (your group should be an even number) you will be DESIGNING A BOARD GAME.

Think back to when you last played **THE MEMORY GAME**. You flip twenty cards over so that the players can not see what is on their front side. Each card has a partner which creates a match. Each player has a turn to flip over two cards. If the cards match, the player holds on to the cards and is given an extra turn. The objective is to uncover as many matches as you can.

Now do you remember this game?

Since you are in grade school now, you will design a game that is a bit more difficult. You will use pictures of POPULATIONS as matches. Before playing the game however, you will need to design and construct it.

Part A

Use twenty square pieces of paper or cardboard (provided by the teacher) and as a team, come up with ten examples of different **populations**. Draw a picture of this population on two cards. Remember to draw the same picture on two cards so that each card has a match!

By the end of your designing, you should have **TEN population examples** on **TWENTY** cards.

Part B

Now you're ready to PLAY your game!

Here are the instructions:

- 1. Play against one other person, or in teams of two.
- 2. Flip all the cards over so that you cannot see them. Line them up in rows.
- **3.** First player takes a turn: flip over two cards. Are they two different populations? If yes, then flip them over and the next player or team has a turn.
- 4. If the two populations are the same, then keep the match. You get another turn!
- **5.** The winner is the player or team who has flipped over the most matches.











IT'S DRAMA TIME! Writing a Play on Photosynthesis

For this activity, you will work in groups of SEVEN.
Six of you will be actors and one of you will be the narrator.
It's time to write your play about PHOTOSYNTHESIS!

Work together as a team to write a play using DIALOGUE. Each of you will have a part in this play.

Step 1

Divide the following ROLES among your team members:

The Sun Water Oxygen Carbon Dioxide Sugar Food Narrator

The narrator will be guiding the audience (your class) through the play but each actor will have lines to rehearse as well.

Step 2

Begin this activity by RESEARCHING the process of photosynthesis.

Remember, it is the process where plants use sunlight, water and carbon dioxide to make food, oxygen and water. Use books and the internet to find out more details and information about how it works.

Step 3

Once you have collected enough information, you are ready to start WRITING your play.

If you are stuck and you need a kick start to begin the writing, follow the outline below:

- Narrator introduces the topic to the audience
- Narrator introduces each actor
- Each actor might hold a sign or a picture to show the audience what character they are playing
- Dialogue begins: take the audience through the photosynthesis process
- Actors' dialogue should show or tell the audience what role they play in the photosynthesis process

Have fun and use your imagination. What creative costumes can you come up with which would make your play even more interesting to watch?









TAKE A TRIP THROUGH THE WATER CYCLE! Creating a Travel Brochure

You have graduated from school and now work as an AWARD-WINNING TRAVEL AGENT!

Your job is to **SELL HOLIDAYS AND TRIPS** to families during their summer holiday.

You have recently added a new holiday to your list of trips:
A TRIP AROUND THE WATER CYCLE!

Yes, you will need to use your imagination for this one. This is obviously not a real place to visit and you can not fly in an airplane to get there. For this activity however, you will pretend it is a real place!

When someone walks into a travel agency, they can find many brochures advertising trips and holidays. Your job is to **DESIGN A BROCHURE** that will promote this trip around the water cycle.

You will need to collect information about the water cycle to include in your brochure. Use books, the internet and any information you learned from the reading passages.

Be sure to include information about water as it moves through the FOUR main stages of the water cycle:

1. evaporation 2. condensation 3. precipitation 4. collection

Use colored pencils and markers to color your brochure. Someone should be able to look at your brochure and be convinced that this would be an exciting and fun holiday!

Use a regular piece of blank paper and fold it into three sections like in the diagram below. Fill in both the front and the back. You shouldn't be able to see any blank space on the page!



