

A Detailed Lesson Plan in Science in Grade IV

I. Objectives

At the end of the session, the pupils are expected to:

- A. enumerate the five ecological relationships;
- B. define each ecological relationships of each of the ecological relationships; and
- C. appreciate the importance of ecological relationship through participating the discussion.

II. Subject Matter

A. Topic

Five Ecological Relationships: Mutualism, Predation, Parasitism, Competition and Commensalism

B. Reference

Hunter, Nancee. "Ecological Relationships." Online Posting. 2010. Species.

Ryczkowski, Angela. "Five Types of Ecological Relationships" Online posting. 2010. Education. Ecosystem.

C. Materials

colored powder, picture of sorts, illustrations, scroll

D. Strategies

Discovery Approach, Interactive Approach, and Integrative Technique

E. Values Integration

Appreciate the importance of the different ecological relationships and how it contributes to ecological balance.

III. Procedure

Teacher's Activity	Pupils' Activity																																																																																
<p>A. Preparation</p> <p>1. Greetings - Good morning, class. -How are you today?</p> <p>2. Classroom Rules/Standards -Before we start our lesson for today, what are our rules and regulations?</p> <p>B. Motivation (The teacher presents a word puzzle wrapped as a gift.)</p> <p>- Do you know what this is? - That's right! - Inside this gift holds very important information of my grandfather. He gave me this gift to unlock the secret inside it, but I need your help. - Can you help me unlock the mystery of this scroll? - All right. Let's open it.</p> <table border="1" data-bbox="285 1299 781 1619"> <tr><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table> <p>- What can you see? - Can you spot the hidden information here? - So what do you see?</p>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<p>-Good morning too, teacher. -We are fine. Thank you.</p> <p>-1. Sit properly. -2. Listen to teacher. -3. Raise your right hand if you want to talk in the class. -4. Respect each other.</p> <p>-A gift!</p> <p>-Yes, Teacher!</p> <p>-We can see many letters, Teacher. -Yes! We can see it!</p> <p>-I see the words Mutualism,Parasitism, Competition, Predation and Commensalism.</p>
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- Please come up here in front and color in what you see.

- Great job!

C. Presentation

- We have just uncovered the words Mutualism, Parasitism, Competition, Predation and Commensalism, which are the Ecological Relationships.

- And today we will know more about these relationships.

- Are you ready?

- All right. Here I have pictures of animals in the ecosystem.

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- What can you see in the picture?

- That's correct! What do you think is this ecological relationship?

- Very good!

- What can you see in the picture?

-



-Okay, Teacher.

-Yes, we are!

-The tiger is eating the deer.

- Predation, Teacher.

- The bee gets nectar and honey from the flower.

- That's correct! What do you think is this ecological relationship?

- Very good!



- What can you see in the picture?

- That's correct! What do you think is this ecological relationship?

- Very good!



- What you see in the picture?

- That's correct! What do you think is this ecological relationship?

- Very good!



-Mutualism, Teacher.

-The pilot fish follows underneath a shark.

-Commensalism, Teacher.

- A mosquito is sucking blood.

-Parasitism, Teacher.

- Bears are fighting.

-What can you see in the picture?

- That's correct! What do you think is this ecological relationship?

- Very good!

- What do we call these relationships?

- That's right! We call these as Ecological Relationship.
(Post property on board)

D. Discussion

- Based on the pictures, what do you think is Ecological Relationship?

- That's correct!

- Now, look at this picture.
What do you think is Predation?



- Exactly!

- What do you call an organism that is eaten by another organism?

- That's correct! How about the organism that eats the prey?

- Very good!

-Squirrels are fighting for food, Teacher.

-Competition, teacher.

-Relationships in the ecosystem.

- Ecological Relationship is the relationship between organisms in an ecosystem.

- Predation is when an organism eats another organism.

-Prey, Teacher.

-Predator, Teacher.

- I have more pictures about Predation.



- Which of the animals shown are predators?
- Which of the animals shown are preys?
- Now, look at this picture. What do you think is Mutualism
- Correct! Mutualism is a relation in which both organisms are helped in some way.



- In this picture, what can a bee give to the flower?

-Grizzly Bear and Eagle

-Fish

-Mutualism is when organisms help each other.

-A bee can spread pollens so that a flower can reproduce.

- What can a flower give to the bee?

- I have more pictures here.

-



- Why do you think these picture are considered Mutualism?

- That's correct!

-Bee gets nectar and honey from the flower.

-In the first picture, birds are on Impala's back to eat the ticks. Ticks are parasite. Therefore,they both benefit each other.

-In the second picture, clownfish hiding in the anemone. A sea anemone makes an ideal home for a clownfish. Its poisonous tentacles provide protection from the predators while a clownfish makes its meals from the anemone's leftovers.

- Now, look at this picture.



- What do you think is Commensalism?

- Very good!

- In the picture, why do you think the pilot fish is underneath the shark?

- That's right!

- I have more pictures here.



- Commensalism is a relationship where one organism benefits and the second is neither harmed nor helped.

-When the shark eats something the pilot fish eats the scrap pieces of the shark.

- Why do you think these pictures show Commensalism?

-In the first picture, there are birds in the tree. The tree is the shelter for birds. However, the tree is not getting anything in return.

-In the second picture, we can see the shrimp hiding in the corals. The shrimp hides in the coral in order predators can't see. However, coral is not getting anything in return.

- Very good!
- Now, look at this picture.



- What do you think is Competition?
- That's right!
- In this picture, what animals are fighting for food?
- That's right!
- I have more pictures here.

- Competition is when organisms compete for the same resource.

-Two squirrels are fighting for food.





- Why do you think these pictures are considered Competition?

- Exactly!

- Now, look at this picture.



- What do you think is Parasitism?

- What do you call an organism that depends on the other organism?

- How about the other organism that is harmed?

- That's right! In this picture, which do you think is a parasite? host?

- What will happen if there are no

-In the first picture, cats are fighting for food.

-In the second picture, birds and squirrel are fighting for the same resource.

- Parasitism is a relation in which one organism benefits and the other organism is harmed, but not always killed.

-Parasite, Teacher.

-Host, Teacher.

-The parasite is the mosquito and the host is the human.

-There will be ecological imbalance.

ecological relationships?

- In your own opinion, why are these relationships important in our ecosystem?

E. Application

- I will group you into five groups. Each group will be given a puzzled picture. All you have to do is to form the puzzle. Also, identify what ecological relationship is it. A representative in each will say something about it.

- Am I understood?

- Group 1



- Group 2



-Ecological relationships are important because it displays the movement of energy in the ecosystem.

-Yes, Teacher.

-Parasitism

A tick on a hog.

-Competition

Birds are fighting for the same food.

- Group 3



-Mutualism
A bird on the back of Zebra.

- Group 4



-Mutualism
Remora is under shark. It usually eats the scrap pieces of what the shark will eat.

- Group 5



-Predation
A Fox is eating a mouse.

F. Generalization

- What are the five ecological relationships?

-The five ecological relationships are Mutualism, Parasitism, Commensalism, Competition and Predation.

- What will happen if there are no ecological relationships?

-There will be ecological imbalance.

<p>- In your own opinion, why are these relationships important in our ecosystem.</p>	<p>-Ecological relationships are important because it displays the movement of energy in the ecosystem.</p>
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IV. Evaluation

1-5 List down the 5 Ecological Relationship.

Write what kind of Ecological Relationship in each sentence.

1. A tick feeding on a host is a good example of parasitism.
2. The ecological relationship between the blackbirds and the caterpillar.
3. Hundreds of soil insects were burrowing in and out of the soil, pausing to feed on dead plant leaves.
4. An orchid on a tree.
5. A crab covered by mosses.

Teacher's Activity	Student's Activity
<p>IV. Assignment</p> <p>- Who among you here is fond of watching National Geographic Channel?</p> <p>-Have you seen their documentaries of the animals in Antartica?</p> <p>-What have you noticed about the animals there?</p> <p>-That's correct!</p> <p>-What kind of ecosystem do they have?</p> <p>-To find out what are the different ecosystems, study on page 30 of your Science book. Am I understood?</p>	<p>-I watch it everyday, teacher.</p> <p>-Yes, teacher.</p> <p>-Animals in Antartica can tolerate extreme cold weather.</p> <p>-We don't know, teacher.</p> <p>-Yes, teacher.</p>

-Our class is over. Goodbye, class.

-Thank you and good bye, teacher.