

School: Name of Teacher Teaching Dates and Time:

DepEdClub.com

NOVEMBER 4 - 8, 2024 (WEEK 6)

Grade Level: VI
Learning Area: SC
Quarter: Sec

SCIENCE Second

OBJECTIVES	Monday	Tuesday	Wednesday	Thursday	Friday
A. Content Standard	The learners	The learners	The learners	The learners	The learners
	demonstrate the different	demonstrate the	demonstrate the	demonstrate the	demonstrate the
	characteristics of	different	different	different	different
	vertebrates and	characteristics of	characteristics of	characteristics of	characteristics of
	invertebrates.	vertebrates and	vertebrates and	vertebrates and	vertebrates and
		invertebrates.	invertebrates.	invertebrates.	invertebrates.
B. Performance	1. make an inventory of	1. make an inventory	1. make an inventory	1. make an inventory of	1. make an inventory
Standard	vertebrates and	of	of	vertebrates and	of
	invertebrates that are	vertebrates and	vertebrates and	invertebrates that are	vertebrates and
	commonly seen in the	invertebrates that are	invertebrates that are	commonly seen in the	invertebrates that are
	community	commonly seen in the	commonly seen in the	community	commonly seen in the
	2. practice ways of caring	community	community	2. practice ways of	community
	and protecting animals	2. practice ways of	2. practice ways of	caring and protecting	2. practice ways of
		caring and protecting animals	caring and protecting animals	animals	caring and protecting animals
C. Learning	Discuss the interactions	Discuss the	Discuss the	Discuss the	Discuss the
C. Learning Competency/	among living things and	interactions among	interactions among	interactions among	interactions among
Objectives	non-living things in	living things and	living things and	living things and	living things and
Objectives	tropical rainforests, coral	non-living things in	non-living things in	non-living things in	non-living things in
Write the LC code for	reefs, and mangrove	tropical rainforests,	tropical rainforests,	tropical rainforests,	tropical rainforests,
each.	swamps	coral reefs, and	coral reefs, and	coral reefs, and	coral reefs, and
cacii.	(S6MT-Iii-j-5)	mangrove swamps	mangrove swamps	mangrove swamps	mangrove swamps
	(Solil Itty o)	(S6MT-Iii-j-5)	(S6MT-Iii-j-5)	(S6MT-Iii-j-5)	(S6MT-Iii-j-5)
II COMMENT	Totavations Among	Todaya di ana Amana	Bassardam, Massical	Bassantana Bassinal	December Translat
II. CONTENT	Interactions Among Organisms	Interactions Among Organisms	Ecosystem: Tropical Rainforests, Coral Reefs and Mangrove Swamps	Ecosystem: Tropical Rainforests, Coral Reefs and Mangrove Swamps	Ecosystem: Tropical Rainforests, Coral Reefs and Mangrove Swamps
III. LEARNING RESOURCES					
A. References	K-12 MELC- C.G p 383	K-12 MELC- C.G p 383	K-12 MELC- C.G p 383	K-12 MELC- C.G p 383	K-12 MELC- C.G p 383
1. Teacher's Guide Pages					

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2. Learner's					
Materials pages					
3. Textbook pages					
4. Additional					
Materials from					
Learning Resource					
(LR) portal					
B. Other Learning					
Resource					
III. PROCEDURES					
A. Reviewing	Animals Around Us	What have you learned	What are the different	What are the layers of	What are the
previous lesson or	Directions: Inside the box	in our previous	interactions among	the rainforest?	categories of coral
presenting the new	are names of vertebrates	lesson?	living things that you		reefs?
lesson	and invertebrates.		have learned in our		
	Classify them		previous lesson?		
	according to the place				
	they live and write them				
	in the appropriate				
	column.				
	Montary Octoby Octoby Forest Swamps Sea Octoby Figh Bees Mudish				
	Fish Bees Mudfish				
B. Establishing a	Observe the pictures		Directions: Read each		
purpose for the	below. Identify what	Instructions I: match the picture with the correct term.	item carefully and		
lesson	organisms are harmed,	and the second second	choose the letter of the		计图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图
	benefited,	Competition	best		
	or not affected in each of		answer. Write your		
	the following	Sharing resources	answer on your		
	interactions. Write your		answer sheet.		
	answers in the		1. What are the things	TO STATE OF THE ST	The picture shows a
	table. The first item is	Causing harm	needed by plants to	Can you identify what	mangrove swamp.
	done for you.		make their own food?	is on the picture?	What organisms do
	Interaction Organisms Harmed Benefited Not Affected Involved Rat and Rat snake		a. water, chemicals	What animals live with	you think that live in a
	snake		and oxygen	corals?	mangrove swamps?
			b. oxygen and carbon		
			dioxide	A coral reef is rich with	A mangrove swamp is
			c. oxygen and	marine life. It is a	a home to a diverse
			chemicals	marine biome. It is	living and non-living
			d. carbon dioxide, soil	composed of non-living	things.

Clown flab and sea arremore	and sunlight things and liv	<u> </u>
	2. What kind of things. The live	
Whate and bemade	interaction is shown composed of	crustaceans, fish and
	when worms live in different spec	ies like mollusk compose the
Orchid and tree	the guts and flesh of a fish, sea grass	s, corals, living part of
	fish? sponges and of	other mangrove ecosystem.
	a. mutualism marine	Mangrove plants are
	b. commensalism animals.	the main organism
	c. predation	that dominates this
	d. parasitism	ecosystem. How do
	3. What kind of	living and non-living
	interaction is shown	things interact with
	when monkeys in	each other in this
	tropical rainforest	environment?
	compete for food with	
	other animals?	
	a. mutualism	
	b. commensalism	
	c. competition	
	d. predation	
	Which of the following represents the ecosystem?	
	a. Living Community Non-livin	
	Ecosystem	
	b. Living Community Non-livin Ecosystem	
	c. Living Community Non-livin	
	d. Living Community Non-livin	
	5. Which of the	
	following pairs of	
	organisms shows	
	commensalism?	
	a. butterfly sucking	
	the flowers	
	b. ferns attached to a	
	tree	
	c. flatworms in coral	
	reefs	
	d. snake eating a rat	

C. Presenting examples/ instances of the new lesson

Let us discover the different interactions among organisms.

Let us learn the interactions among things and non-living things in tropical rainforests, coral reefs, and mangrove swamps.

The following are found in tropical rainforests. Classify them as living or non-living things. Write your answers in your Science Journal.

opical shrubs trees birds urbon dioxide sunlight oxygen

Living Things	Non-living Things	
		١.
		l

Directions: The following are found in coral reefs. Classify them as living or non-living things. Write your answers in your Science Journal.

- 1. crab
- 2. turtle
- 3. fish
- 4. sand
- 5. water

Pick out the animals that can be found in mangrove swamps ecosystem.

monitor lisard	oysters	bats	
white heron (tagak)	snake	fish	
fiddler crab	eagle	monkey	
dolphin	rat	clown fish	
corals	sea urchin	sea anemone	

D. Discussing new concepts and practicing new skills #1

Fun with Pics!
Directions: Observe the pictures closely. Choose the best picture that matches the descriptions given. Write the letter of the correct answer on the blank provided before the number.









_____1. Animals of the same species fighting for food and space.

_____2. An animal feeding on another animal.

Tropical rainforest is a very dense, warm, and wet forest located in the band of the equantor. It can be described as a tall, dense jumple. The reason it is called a "rain" forest is because of the high amount of rainfall it gets per year. The climate of a rain forest is very hot and humb do the animals and plants that exist there must learn to adept to this climate. It growdee habitats for tropical plants and



seathores. They are smaller aqualscannot be smaller aqualscannot be smaller aqualscannot be smaller aqualscannot be smaller and smaller aqualpole in the smaller approach and smaller species in these areas which are not found in open seas and oceans. These areas are very important because areas are very important because areas are very important because the prevent large-scale marine pollution. They tan the particulates trought by water before these get into the sea. They also recycle washe matter into nutrients and so recycle washe matter into nutrients and for serve as treeding grounds of folias.







Figure 1: Tropical rainforest

The Ecosystem is an environment where both living and non-living things exist and interact with one another. This interaction enables the survival of living things and affects non-living things. Example of ecosystem



Figure 5: Coral Reef Ecosystem

Just like in other ecosystems, in coral reefs, organisms interact with each other. The producers like sea grass, provide food and nutrients to the consumers. These consumers include sea turtles, crabs, manatees (dugong),



Figure 6: Mangrove swamp in Bago City, Negros Occidenta

Mangrove swamp
ecosystem is
composed mostly of
mangrove plants and
animals like
crustaceans and
migratory birds. The
non-living part
composed of
water, sand, mud,
rocks and sunlight. It
is an important
system that allows for
the
breeding of fishes and

	3. Organisms of	is the tropical	fishes and other	survival of other
d	different species work	rainforests. Living	marine animals.	marine animals. It is
to	ogether benefiting each	things that can be	The factors that	also a part of the
o	other.	found here composed	contribute to the coral	coastal and marine
	4. Interaction of	of	reef formation are	ecosystems.
tv	wo organisms in which	plants and animals.	temperature, light	There are varieties of
0	one is benefited and the	Non-living things	penetration, stable	marine and terrestrial
0	other is neither	include soil, air,	salinity and water	life living in
l h	narmed nor benefited.	humidity, water and	movement.	mangroves. Animals
	5. Organisms that	sunlight.	There are different	like white heron
	cooperate with each	Rainforest has	categories of coral	(tagak), and other
0	other for survival.	different layers	reefs. Fringing reefs are	birds inhabit the
		namely emergent,	reefs	mangrove canopy.
		canopy, understory	that hug the shore of	Fishes and
		and forest floor.	continents or islands.	crustaceans live
		Emergent refers to	Barrier reefs are reefs	underneath the
		trees that are 130 to	that stand	mangrove roots
		180 feet tall.	between the open sea	system. Organisms
		Canopy, on the other	and a lagoon. Coral	like oyster,
		hand, has tall slender	atolls are reefs that	mussels attached
		trees from a dense	enclose a	themselves to the
		platform of	lagoon.	trunk and lower
		vegetation with 60 to		branches of the
		129 feet of the ground.		mangroves.
				Animals like monitor
				lizard, mudskipper
				and crustaceans such
				as shrimps and
				crabs live in mangrove
				swamps. Also,
				migratory birds like
				pelicans, spoon bills
				and
				bald eagles are also
				found in this habitat.
				Some saltwater
				crocodiles can also live
				in Philippine
				mangrove swamps.

E. Discussing new concepts and practicing new skills #2

An ecosystem is composed of living and nonliving things. The living part of an ecosystem consists of the different species of organisms. Each species is a part of the ecosystem's population. The nonliving components of an ecosystem are: the soil, the type of climate (temperature, light, water or moisture, wind) and location. The different populations make up a community. The different populations in the ecosystem interact with each other and their environment. Producers are green plants, algae or microorganisms that are capable of making their own food. Consumers get their energy by feeding on plants and other organisms. Decomposers get energy by breaking down dead organisms and their wastes. A food chain is a sequence of organisms which starts from producers and ends with decomposers. A food

The complex interactions for survival among living things and nonliving things that take place in tropical rainforests, coral reefs, and mangrove swamps include: mutualism, commensalism, predation, competition, cooperation, and parasitism.

Mutualism is a type of interaction when two organisms of different species two others, each breefiting from the reliationship. An example from the Tropical Rainbre ecosystem is the fichen, it consists of an aligne and the aligne growing together. The furgious boot from the photosynthesizing aligne and the aligne gets a facte to the lock in a second control of the photosynthesizing aligned and leading special part of the properties of the lock and the photosynthesizing and an accountable, and the on their tissues for survival Both organisms are benefited. Another examples is the clown fish and see anemones, these two live together showing given the accountable and the original time of the count fish which the count fish and see anemones, these two live together showing given the interactions of the count fish which the clown fish protects the sea anemones room is an example as the calculation that is entirely as in managerous examples, coopsisting the managerous supposes grow and the managroves trap sediments washed from the land, preventification from the country to the country to the protection of the land, preventification of the country to the country of the country of







Commensalism is a type of interaction that occurs between two species in while or organism senties the entitled not harmed. Examp of this in the rainforest ecosystem is an ordrid on the trust of a few, ordriss state the terms of the contribus state their own bodd and on tot late the contribus state their own bodd and on tot late the contribus state their own bodd and on the surrigid. In the coral reef ecosystem, barracters attached thermeakes to the skins while the contribus own their own th





Predation an interaction wherein one arimal consumes another predators may or may not kill their pre-before eating them. The organism that does saling is called predator and the organism that gets set up is the prey. The act predation always causes the death of the prey and taking in the prey's body parts into the predator as body. Example of this in the rainforest ecosystem is a sine-bedfore or predator as low. It is not some the predation and the present the present salies small fish is an example in the mangrove ecosystem.

competition is a fight between organisms to survive. When populations in a ecosystem have the same needs and utilize the same resources, the resource becon scarce, and competition exists. Examples of this in the rainforest ecosystem is; plan competing for space (they try to outgrow one another by treaking) out for sunlight with help them in the manufacture of food) and animals of the same species lighting for foot





The **understory** is about 59 feet and below and consists of trunks of canopy, shrubs, trees and small plants. The **forest floor** is home to animals like jaguars, tigers and cassowaries which thrive in a deep shade part of the forest where plant life is thin. This is because only a small percent of sunlight gets through the thick canopy and understory and reaches the forest floor. Organisms like fungi, insects, worms and litter from taller trees that fall on the forest floor can be found here.

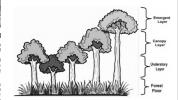


Figure 2: Layers of the rainfores

Producers provide food for the consumers which include herbivores-plant There are interactions that exist in the coral reefs' ecosystem.



Commensalism is an interacti where organisms live togeth without harming one another; example, barnacles attached skin of turtles without harmi them. Barnacles are benefitt while the host is not harmed.



In mutualism, both organisms benefit in the relationship, for example, the corals receive oxygen from the algae; the algae get protection from them.



Competition is an interaction wherein organisms compete for survival. For example, the fishes compete for source of food and space in the coral reef.



Predation is a kind of interaction in which one organism kills small organisms for food. An example of the same of

The symbiotic interaction found in a mangrove ecosystem includes many organisms that depend on mangrove for survival. Animals like oysters, mollusks and barnacles are dependent on mangrove for their source of food and habitat. Commensalism is shown when barnacles and oysters attach themselves to the roots of mangroves. Fishes stay in the mangroves during a particular stage of their life to grow and develop into a mature fish.

Mutualism is shown when animals like crabs and mollusks help break down plant litter in a mangrove ecosystem through grazing.
White heron (tagak) eating a fish shows predation in this kind of ecosystem.

	web is a combination of multiple food chains. In food chains, we get to know how organisms are connected to each other.	Cooperation is a type of interaction where organisms cooperate with each of for their survival. Each member has specific task to do. Examples include: work colonies of ants, bees, and termities in a rainforest ecosystem. **Representation of the cooperation of	carnivores-flesh eating animals. Herbivores provide food to the carnivores. Producers		Pigure 7. Oysters attached to mangrove Figure 8: White heron eating Mangrove swamp ecosystem is important for they serve as breeding and nesting
		therto in mouth by flozono, 64.5., 2012 https:// washinedumbers inv./b.72988.86.2.2 ashinedumbers inv./b.72988.86.2.2	like food chain and food web occur among species in the forest ecosystem. Food chain starts with producer, a series of consumers and decomposers. Food web results from the interconnected food chains.		grounds of animal species. The mangrove shelter is used as shelter by fishes as breeding and nursing grounds before heading to the open ocean. Mangroves are also important habitat of organisms. Numerous animal species find protection and
			Figure 4 Park TV)		abundant food in this environment. It also acts as natural barrier and flood defense as they defend coast lines from flooding and erosion. Lastly, mangrove is an important source of livelihood of people living in coastal areas.
F. Developing	Living things like	Explain the concept		Directions: Answer the	Directions: Identify
mastery (leads to	animals and plants can	further.		following questions.	and discuss the
Formative	interact with the			Write your answers in	interaction between
Assessment 3)	non-living environment,	Directions: Identify the		your	living
	including the soil,	type of interaction		Science journal.	and non-living things

climate and water, to cause effects on each other that can be positive. negative or neutral. For example, animals benefit from a non-living environment with plenty of water and air because these are essential for survival. If a living organism cannot adapt to its non-living surroundings (such as a lack of sunlight or too hot or cold temperature) or cannot get what it needs from these surroundings (such as water), then the living organism will have problems surviving and thus will be negatively affected. In addition, living organisms in an environment without sufficient non-living resources may have trouble getting what they need for survival due to competition for those resources. Some examples on interactions between non-living and living things include plants getting their

described. Choose your answer from the box and write it on the space provided before the number.

Mutualism Competition
Commensalism Cooperation
Predation Parasitism

_____1. An interaction between organisms or species in which both the organisms or species are harmed.

______2. A type of interaction where organisms cooperate with each other for their survival.

______3. An interaction wherein one animal consumes another.

______4. A type of interaction that occurs between two species in which one organism benefits while the other organism is neither benefited nor harmed.

_____5. A relationship where one organism is benefited while the other one is harmed.

_6. A

There are different organisms living in this ecosystem which intera with each other. There are interactions that exist among the tropical rainforest.



where organisms live together without harming one another for example orchids is attached to the trunk of a tree without harming it.



In mutualism both organisms benefit in the relationship for example, a bee or butterfly suck nectar from a flower and the flower reproduces.



Competition is an interaction wherein organisms compete for survival. For example, grass, shrub lowers, and trees grow together in one area where they compete for source of food, sunlight, soil nutrients and other things needed for their survival.



Predation is a kind of interaction in which one organism kills smaller organisms for food. An example of this is when a snake eats a rat for food. Predator usually organisms which are stronger, bigger and fiercer compared to prey.

Directions: Read carefully and answer the following items. Write your answers in your Science Journal.

- What are the interactions that exist among living things and non-living things in the tropical rainforest?
- Discuss interaction between plants and sunlight in a tropical rainforest ecosystem.
- What will happen if producers will decrease in a rainforest ecosystem?
- Are the interactions among living things

1. What are the living and non-living things found in the coral reefs?

- 2. How do they interact with each other?
 Discuss the relationship or interaction between:
- 3. Big fish and small fish
- 4. Worm in the fleshand guts of fish5. Are theseinteractions important?Why?

in a mangrove swamp ecosystem. Write your answers in your Science Journal.

- 1. oyster and mangrove
- 2. white heron and water
- 3. crab and mud
- 4. mangrove and bird

					,
	minerals from the soil	type of interaction	and non-living		
	and making food using	when two organisms of	things important?		
	sunlight, animals	different species	Why?		
	needing a specific	"work together," each			
	temperature range for	benefiting from the			
	their body processes to	relationship.			
	function properly and	Telecionemp.			
	sea creatures needing				
	either saltwater or				
	freshwater.				
G. Finding practical	Directions: Using the box	Directions: Match the	Read the paragraph	Read the paragraph	The YES-O members
application of	below, draw a poster on	different types of	and answer the	and answer the	of Bago City, Negros
concepts and skills	how you can help protect	interactions in Column	questions that follow.	questions that follow.	Occidental
in daily living	and	A with its	Write your answer in	Write	participated
III daily living	conserve our ecosystems	corresponding	your Science Journal.	it in your Science	in the conduct of
	following the elements of	examples in Column	Living things and	Journal.	mangrove planting
	arts (Color, Space, Shape,	B. Write your answer	non-living things	Living things and	and clean-up drive at
	Form, Value, Line, and	on the blank provided	interact with each	non-living things	Purok Batad,
	Texture. Choose only one	before the number.	other in a Tropical	interact with each	Brgy. Sampinit, Bago
	ecosystem from the three		Rainforest Ecosystem.	other in a Coral	City.
	types discussed. The	Column B 1. Commensalism 2. Mutualism 3. Parasitism 4. Whate earling smaller fish. 3. Parasitism 4. Competition 5. Cooperation 5. Cooperation 6. Cooperation 6. Cooperation 7. Contracting the service of the whate and the whate in the flower. 8. Cooperation 8. Co	This interaction	reef ecosystem. Coral	City.
	given rubric will be used	2. Multialism 3. Parasilism C. Two morkeys fighting over a potato. 4. Competition 6. Predation F. Working on the body of the whale and the whale it C. Two morkeys fighting over a potato. D. Bee and the flower. S. Cooperation F. Working colonies of bees. F. Working colonies of bees.	enables the survival of	reef is composed of	
	in giving points of your		living things and	non-living components	44.
	output.		affects non-living	such as	Photo creals: Ester I. Roseday
	RUBRIC:		things. Can you	water and sand. It	Again of many assessment
	Excellent Good Poor Needs		identify the living and	serves as breeding	
	Following All directions were bloomed instructions followed were followed infections were followed collections were followed collections were followed follo		non-living things in a	place for fish,	Mary margin França I. Pasadas
	appropriate appropriate appropriate appropriate appropriate Clearliness Clear from errors Some errors were observed observed were observed were observed		Tropical Rainforest?	crustaceans, mollusks,	During the mangrove
	Relevance to the Clearly shows the Fairly shows the Concept Concept Fairly shows the Fairly sh		Discuss their	cnidarians, sponges	planting, pupils were
			interaction.	and echinoderms.	asked identify
			Example: Plants and	Their interaction	the different factors
			carbon-dioxide -	enables the survival	that would ensure the
			Plants need carbon	of living things and	survival of plants
			dioxide for food-	affects non-living	and other living things
			making,	things. Can you	in the mangrove
			in return, it releases	identify the living and	ecosystem.
			oxygen during the	non-living things in	Directions: Identify
			process of	Coral Reef Ecosystem?	the living and
			photosynthesis.	Corai Reci Ecosystems	non-living things in
			photosymmesis.		

	,				
				Discuss their	the
				interaction.	mangrove ecosystem
					and discuss how they
					interact.
					Living Things and Non-living Interaction Things
					Example: water and mangrove Water enables the growth mangrove, mangrove in return he filter the pollutants from the ri
					run-offs making the water free fr harmful build-up of sediments.
					2.
TT 76 1 .	TT71	XX71	0 1 4 41	0 1 4 41	
H. Making	What have you learned in	What have you learned	l *	Complete the	Complete every
generalizations	this lesson?	in this lesson?	paragraph below.	paragraph. Choose	statement by
and abstractions	I learned that	I learned that	Choose your	your answer from the	supplying the blank
about the lesson	(Tropical rainforests,		answer from the	words given inside the	with a word or group
	Mangrove swamps, Coral	(Commensalism,	words inside the box.	box below.	of words from the box
	reefs) are very dense,	Cooperation,	mutualism ecosystem understory canopy predation emergent forest floor food cha	water movement temperature coral reefs fringing reefs	below.
	warm, and wet forest	Competition) is an	food web commensalism	parasitism	commensalism mangrove swamp habitat of organisms predation
	located in the band of the	interaction between	I learned that	coral Atolls predation	natural barrier and flood defense
	equator. Coral reefs are	organisms or species	The is an environment	barrier reefs	I learned that
	large	in which both the	where both living and	I learned that	Ecosystem is
	underwater structures	organisms or species	non-living	The serve as a breeding	composed mostly of
	composed of the	are harmed. A	things exist and	ground of marine life.	mangrove plants
	skeletons of colonial	relationship where one	interact with one	The factors that	and animals like
	marine invertebrates	organism is benefited	another.	contribute to the reef	crustaceans and
	called (corals, crabs,	while the other one is	The different layers of	formation are light	migratory birds.
	shrimp).	harmed is	the rainforest are	penetration,	Mangroves are
	(Coral reefs, Mangrove	called (cooperation,		, stable salinity and .	important because,
	swamps, Tropical	mutualism,	and	The , and are	they serve as
	rainforests) are smaller	parasitism).		categories of coral	breeding and nesting
	aquatic ecosystems	(Cooperation,	is a series of	reefs is an	grounds of animal
	where mangrove trees	Predation,	feeding relationship,	interaction where	species,
	abound.	Parasitism) is the term	while is	organisms live together	,, a source of
	Mutualism is a type of	used when referring to	an inter-connected	without harming one	livelihood of people
	interaction when two	interactions among	food chain.	another, for	living in coastal areas.
	organisms of different	organisms that	is an	example, barnacles	In this kind of
	species	cooperate with each	interaction where	attached on skin of	ecosystem, is
	work together, each	other.	organisms live	turtles without	shown when animals
	(benefited, harmed, not		together	harming them. In	like crabs and
	affected) from the		without harming one	both organisms benefit	mollusks help break
	relationship.		another, for example,	in the relationship. For	down
			and the champie,	_	

Compis an one a const (Com Compis a tintera between which benefit the oneith	mmensalism, mpetition, Predation) in interaction wherein animal isumes another. mmensalism, mpetition, Predation) itype of eraction that occurs ween two species in ich one organism mefits while other organism is ther harmed nor mefited.		the orchids are attached to the trunk of a tree without harming it. In, both organisms benefit in the relationship is a kind of interaction in which one organism kills smaller organisms for food.	example, the corals receive oxygen from the algae; the algae get protection from them. is a kind of interaction where one organism, the parasite, depends on another organism for food, production and reproduction. is a kind of interaction in which one organism kills	plant litter in a mangrove ecosystem through grazing is shown when white heron (tagak) ate fishes.
is an one a const (Com Comp is a trintera between which benefit the one in the const t	an interaction wherein animal asumes another. mmensalism, mpetition, Predation) type of eraction that occurs ween two species in ich one organism aefits while other organism is ther harmed nor		of a tree without harming it. In, both organisms benefit in the relationship is a kind of interaction in which one organism kills smaller organisms for	oxygen from the algae; the algae get protection from them. is a kind of interaction where one organism, the parasite, depends on another organism for food, production and reproduction. is a kind of interaction in which	through grazing is shown when white heron
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between which benefit the o	ween two species in ich one organism efits while other organism is ther harmed nor		one organism kills smaller organisms for	organism for food, production and reproduction. is a kind of interaction in which	
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neith	ther harmed nor			of interaction in which	
neith	ther harmed nor				
benef	nefited.			one organism kills	•
				one organism kins	
				smaller organisms for	
				food. An	
				example of this is when	
				a big fish eats a	
				small fish.	
I. Evaluating Direct	ections: Read each		Directions: The table	Directions: Identify the	Directions: Choose the
learning item	n carefully. Encircle	Here you have different examples of interaction between living things. Write below each picture the correct word cooperation, competition,	below shows the	interaction between the	letter of the best
the le	letter of the correct	mutualism, commercialism, predation or parasilism	different interactions	given pair of organisms	answer. Write your
answ	swer.	Non Many	in a	in	chosen answer on a
1. In	in a coral reef		tropical rainforest.	column A and its	separate sheet.
ecosy	system, clown		Choose the correct	interaction in column	1. Which group of
fishe	nes and sea		organism that shows	B.	organisms can be
anem	emones live		the		found in the mangrove
toget	ether.		kind of interaction in	Column A Column B	ecosystem?
	at type of	WE NAME OF THE OWNER OWNER OF THE OWNER OWNE	a given ecosystem.	sea urchin-corals a. mutualism	a. mussels, fish,
	ationships do they		Interaction in Organisms	2. barnacles-turtle b. competition 3. worm-fish c. predation	corals
have			Tropical rainforests 1. Mutualism a. The shrubs, flowers and trees grow in one are b. The butterfly sucks nectar from a flower; flow	4. tuna fish-blue marlins d. commensalism 5. clown fish-sea anemone e. parasitism	b. worm, rat, fish
A. Co	Commensalism		reproduces. 2. Commensalism a. The birds eat worms. b. The orchids attach to a branch of a tree.		c. butterfly, snake,
B. Mı	Mutualism		Competition The orchids attach to a branch of a tree. b. The grass, flowers, trees grow together in one area.		bird
C. Pa	Parasitism		Cooperation a. The ants in a colony. b. The snake eats a rat.		d. mangrove trees,
D. Pr	Predation		Predation a. The snake eats a rat. b. The ferns attach on a tree.		fiddler crab, fish
2. Co	Colonies of ants				2. What are the things
work	rk together for				needed by plants to
	vival, what do you				make their own food?

call this interaction?

- A. Mutualism
- B. Parasitism
- C. Cooperation
- D. Commensalism

3. Which organisms show commensalism?

- A. Fish living on corals
- B. Sea urchin eating corals
- C. Barnacle living on a whale
- D. Clownfish living on a sea anemone

4. Which phrase best describes mutualism?

- A. It is a predator-prey relationship
- B. an interaction when one is benefited and the other is harmed
- C. an interaction when two organisms of different species work together

benefiting each other

D. a relationship that occurs between two species in which one organism

benefits while the other organism is neither benefited nor harmed

5. From what you have learned in the discussion, how will you describe predation?



- a. water, chemicals and oxygen
 b. oxygen and carbon dioxide
 c. oxygen and chemicals
 d. carbon dioxide, soil and sunlight
- 3. Which of the following describes a canopy of the rainforest?
 a. composed of trees
- a. composed of trees that are 130 to 180 feet tall
- b. about 59 feet and consists of trunk of canopy, shrubs, small plants and trees
- c. consists mostly of fungi, insects, worms and litter from taller trees
- d. has slender trees from a dense platform of vegetation with 60 to 129 feet.
- 4. What kind of interaction is shown when one organism kills another organism for food?
- a. mutualism
- b. commensalism
- c. parasitism
- d. predation
- 5. It is an environment where both living and non-living things exist

A. an interaction wherein		and interact with one
one animal consumes		another.
another.		a. ecology
B. an interaction when		b. ecosystem
one is benefited and the		c. community
other is harmed.		d. population
C. an interaction when		6. One example of
two organisms of		competition in tropical
different species work		rainforest is when the
together.		shrubs and trees are
D. a type of interaction		growing together in
where organisms		one area. What do
cooperate with each		they
other for their		compete for?
survival.		a. sunlight and soil
Survivar.		nutrients.
		b. oxygen and carbon
		dioxide.
		c. chemicals and
		.
		oxygen. d. water and
		chemicals.
		7 results
		from the
		interconnected food
		chains.
		a. consumer
		b. producer
		c. food web
		d. biotic component
		8. Why is the
		relationship between
		the corals and the
		algae in the
		coral reefs considered
		mutualistic?
		a. The corals benefit in
		the interaction and
		not the algae.

			b. The corals receive oxygen from algae, the algae get protection from corals. c. The corals receive oxygen from algae
			while the algae are harmed.
			d. The corals and
			algae live together without harming each
			other.
			9. What kind of
			interaction is shown when animals like
			crabs and
			mollusks help break
			down plant litter in a
			mangrove ecosystem
			through grazing?
			a. competition
			b. commensalism
			c. parasitism d. mutualism
			10. Why is producer
			important in an
			ecosystem?
			a. It is the source of
			food to the
			consumers.
			b. It is an organism
			that eats plants.
			c. It breaks down
			organism into smaller
			particles. d. It is a series of
			feeding relationship.
J. Additional			
activities for			

application or			
remediation			
IV. REMARKS			
V. REFLECTION			