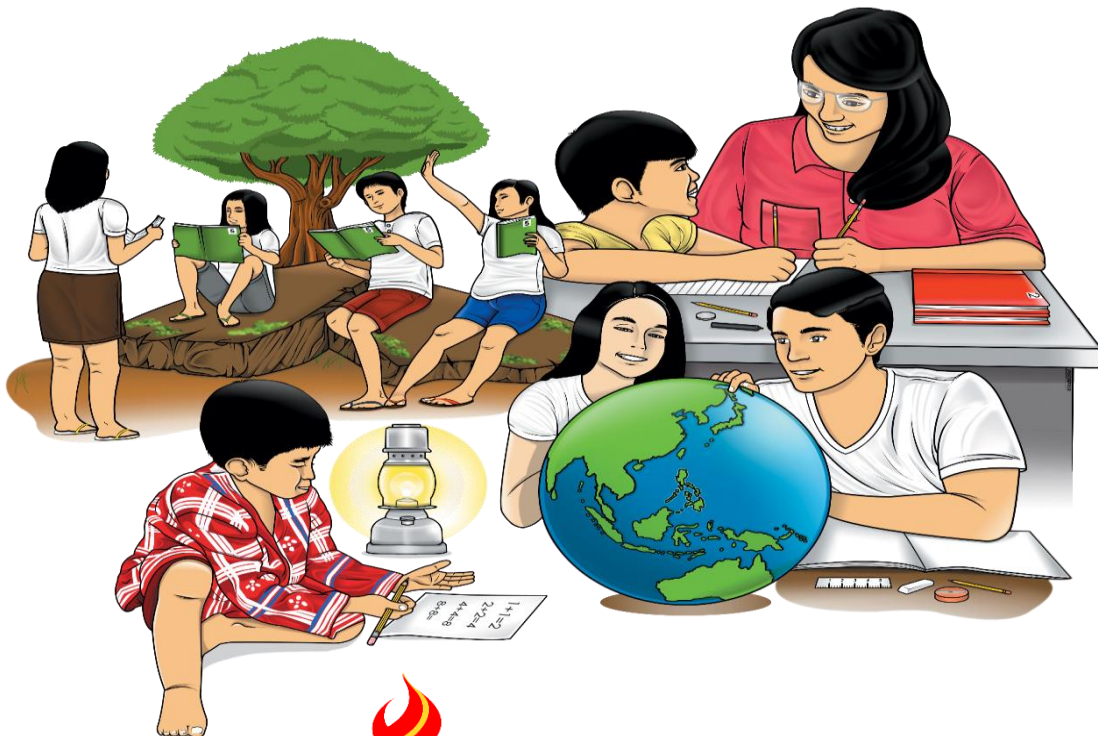


Science

Quarter 2 – Module 3:

“Body Structures of Animals for Adaptation and Survival”



Science – Grade 4
Alternative Delivery Mode
Quarter 2 – Module 3 “Body Structures of Animals for Adaptation and Survival”
First Edition, 2020

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Science
Quarter 2 – Module 3:
“Body Structures of
Animals for Adaptation
and Survival”

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.



What I Need to Know

This module was designed and written for you. It is here to help you master the characteristics of some animals around you including its body structures for adaptation, body movements and specific habitats. The scope of this module permits it to be used in many different learning situations. Please be guided by the instructions in each activity.

The lesson will focus on:

- Lesson 1 – Infer that body structures help animals adapt and survive in their particular habitat (S4LT-IIa-b-4)

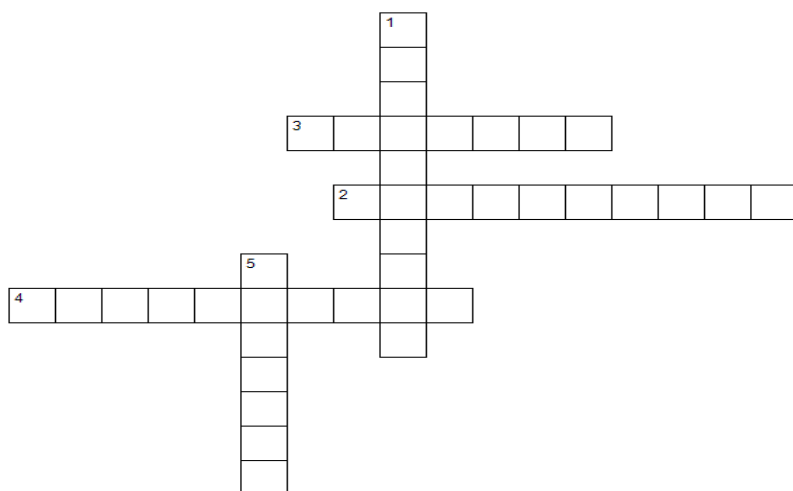
After going through this lesson, you are expected to:

- infer that animals have different body structures that make them adapt in water and on land;
- infer that animals have different body structures in getting or eating their food and have specialized structures that protect themselves from their enemies;
- compare the body movements of animals in their habitat;
- identify animals found in a specific habitat; and
- identify animals that can be adapted in a particular habitat.



What I Know

A. Directions: Solve the puzzle below. Write your answers in your notebook.



Across:

2. blending with surroundings
3. living in or near water
4. helps survive in an environment

Down:

1. number of organisms in an area
5. natural home of organisms

Lesson

1

“Body Structures of Animals for Adaptation and Survival”

Animals play an important yet unique role in human life. We use animals for our own benefit, and sometimes forget that they are also living things. There are times that we forget to treat them like humans. Just like humans, animals also have developed parts of the body adapted for survival in a certain environment. This adaptation can protect them from predators and from harsh weather. There are a number of ways that animals can adapt. In this module, you will be provided with fun and exciting activities where you will understand animals' life both in land and in water.



What's In

Directions: Match Column A with its use in Column B. Write your answers in your notebook.

1. scales 	6. fur 
2. shells 	7. feather 
3. exoskeleton 	8. smooth skin 
4. fins 	9. legs 
5. gills 	10. wings 

Illustrated by: Jotham D. Balonzo

Column A

1. scales
2. shells
3. exoskeleton
4. fins
5. gills
6. fur
7. feather
8. smooth skin
9. legs
10. wings

Column B

- a. an outside covering used by shrimps and lobsters
- b. protection against disease and from other animals
- c. covering of clams and mussels
- d. used for breathing underwater
- e. used for swimming
- f. covering of animals to keep them warm
- g. covering of animals that is used for flying
- h. used for breathing
- i. used for walking
- j. used for flying

















**How did you find answering the test?
 Congratulations! You can now proceed to the next activities.**



What's New

Activity 1: "Animals Habitat"

Directions: Group the following animals according to their habitat. Copy the table in your notebook and write them in their proper column.

 bear	 jellyfish	 starfish	 giraffe
 chicken	 cow	 milkfish	 carabao
 dog	 cat	 dove	 swan
 tilapia	 horse	 pig	 rabbit

Illustrated by: Jotham D. Balonzo





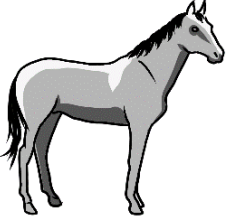
bear	jellyfish	starfish	giraffe
chicken	cow	milkfish	carabao
dog	cat	dove	swan
tilapia	horse	pig	rabbit

Land	Water

Activity 2: “Food Getting”

Directions: In your notebook, write the body parts of the following animals which they use in getting food. Choose your answer from the choices below.

long sucking tubes	sticky tongue
sharp teeth	beak flat teeth

Animals	Body Parts for Food Getting
1. 	
2. 	
3. 	
4. 	
5. 	

Illustrated by: Jotham D. Balonzo

Guide Questions:

Read and answer the following questions in your science notebook.

1. What adaptive structures of animals helped them to live on land and on water?
2. Do you think their body structures affect the way they live? Why?
3. Why do you think different animals eat different kinds of food?
4. How do you think animals protect themselves from enemies?
5. If you are going to choose, what kind of animals are you going to raise in your community? Why?

Congratulations! You made it.



What is It

Points to Remember:

- **Adaptation** is the structure or behavior that helps an organism to survive in its environment.
- **Marine/Aquatic animals** are animals living in water.

Adaptive Structure of Animals Living in Water

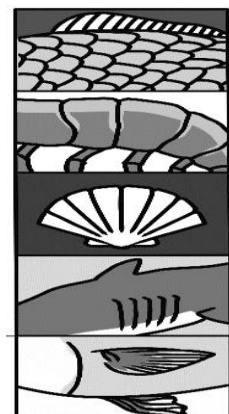
scales- protection against disease and from other animals

exoskeleton- an outside covering used by shrimps and lobsters

shell- covering of clams and mussels

gills- used for breathing underwater

fins- used for swimming



Illustrated by: Jotham D. Balonzo

Land/ terrestrial animals are animals living on land. They have lungs for breathing.

Adaptive Structure of Land Animals

- fur - covering of animals to keep them warm
- feather - covering of animals that is used for flying
- smooth skin - used for breathing
- scales - used for protection
- legs - used for walking
- wings - used for flying



Illustrated by: Jotham D. Balonzo

Some animals use the following to get and eat their food

- claws
- beaks
- teeth
- sticky tongue
- movable jaws
- sucking tubes
- paws



claw



beak



teeth



sticky tongue



movable jaw



sucking tube



paw

Illustrated by: Jotham D. Balonzo



Illustrated by: Jotham D. Balonzo

- **Camouflage** is the ability of an animal to change its color or markings in order to blend to its surroundings
- Ex: leaf-tailed gecko, wrap around spider, and gray tree frog

Example: The leaf-tailed gecko is an exact match to the brown dry leaves it likes to hang out on, making it invisible to predators.



Illustrated by: Jotham D. Balonzo

- **Mimicry** is an adaptation in which one animal copies another animal in appearance or behavior. Viceroy butterfly is a good example because it mimics the monarch butterfly.
- Other animals use mimicry by imitating the shapes, smell, tastes, color or even the sounds of other animals. Examples are zebra, killer whale, and tiger.
- Some animals secrete chemicals to protect themselves like squid, wasp, snakes and jellyfish. Octopus release a cloud of ink to escape.
- Other animals have adaptive behavior that protect their own kind. They move in groups/families/herds/pride/pack. Monkeys, elephants, penguins, hyena, and wolves are examples of this.
- Some animals move fast to protect themselves. Cheetah and ostrich are examples.
- Some animals have protective coverings such as turtles, crabs, snails and oyster. When they sense danger, they keep their bodies inside their shells.
- **Habitat** is an ecological or environmental area where particular species of animal, plant, or other type of organism live.
- Animals move differently depending on their habitat and body structure. Animals that live on land move in different ways. Some walks, hops and jumps. Others flies and crawls.
- Most animals that live in water swim. But some aquatic animals have legs for walking. Examples are crustaceans like shrimp, prawn and crab.
- Animals that can live both in water and land can either walk, hop, jump, or swim.

- **Population** refers to the total number of animals in a particular habitat or community.
- Some of the habitats of animals are pond, grassland, and sea. The body structures of animals for adaptation play an important role in choosing animals to raise in a particular habitat.



What's More

Activity 1: “Adaptive Structures”

Directions: Read each word below. In your notebook, write **W** if the word tells about adaptive structure of animals living in water and **L**, if it is an adaptive structure of animals living on land.

1. gills and fins -
2. fur -
3. feather -
4. legs -
5. wings -

Activity 2: “Body Parts”

Directions: Choose the body part used for getting food of the given animals. Write the letter of the correct answer in your notebook.

1. chicken
 - a. paws
 - b. beak
 - c. feather
 - d. cockscomb
2. cow
 - a. claws
 - b. paws
 - c. teeth
 - d. beaks
3. bird
 - a. teeth
 - b. beak
 - c. feather
 - d. cockscomb

4. iguana

- a. feet b. sticky tongue c. movable jaws d. claws

5. cat

- a. paws b. sucking tube c. movable jaws d. beaks

6. bees

- a. paws b. sucking tube c. beaks d. movable jaws

7. goat

- a. claws b. paws c. teeth d. beaks

8. lizard

- a. sticky tongue b. movable jaws c. paws d. teeth

9. mosquito

- a. sucking tubes b. sticky tongue c. teeth d. beaks

10. horse

- a. claws b. paws c. teeth d. beak

Activity 3: "Body Coverings"

Directions: How does each animal below protect itself? Copy the table in your notebook and check the correct column.

Animals	Changes color/ shapes/ smell	Secretes chemical	Moves in groups	Moves fast	Has protecti ve coverin gs
1. jelly fish					
2. tiger					
3. snail					
4. chameleon					
5. monkey					

6. zebra					
7. ostrich					
8. mussel					
9. octopus					
10. wolf					

Activity 4: “Habitat and Structure”

Directions: Copy the table below. Write their habitat as to land or water and their protective structures.

Animals	Habitat (water/land)	Protective Structure
1. cattle		
2. elephant		
3. hyena		
4. lobster		
5. clam		

Activity 5: “Animals’ Movement”

Directions: How does the following animals move in their habitat? Write **walk, hop, jump, fly, crawl or swim**. Do your answers in your notebook.

1. salamander - _____
2. prawn - _____
3. toad - _____
4. grasshopper - _____
5. turkey - _____
6. tilapia - _____
7. pig - _____

8. blue whale - _____
9. owl - _____
10. king cobra - _____

Amazing! You performed well in the exercises.



What I Have Learned

Directions: Copy and fill in the missing word to complete each statement.

1. _____ is the structure of behavior that helps an organism or animal survive in its environment.
2. Fishes are covered with _____ for protection from diseases and from other animals that live in water.
3. Shrimp and lobsters are covered with outside skeleton or exoskeleton while other animals like clams and mussels are covered with _____.
4. Body coverings of animals are mostly for _____.
5. Animals have body parts like legs for walking for those animals that live on land and _____ for animals that fly in the air.
6. Land or terrestrial animals or animals that live on land have _____ for breathing.
7. Animals with _____ teeth like dog, lion and tiger eat meat and some animals eat both plants and meat.
8. _____ is a protective coloration in animals. This adaptation allows some animals to blend with their surroundings.
9. Other animals imitate the shape, smell, taste, color and even sound of other animals. This behavior is called _____.
10. _____ is an ecological or environmental area that is inhabited by a particular species of animals, plants or organism. It is where animals and plants live.



What I Can Do

Directions: Copy the table below in your notebook. Identify the different animals found in your community. Count and record them using the table.

Animals	Number of Animals	Habitat		
		Land	Water	Both land and water
1				
2				
3				
4				
5				

If you are going to raise a particular animal, what is it? Why?

Very good! You are now ready for the next



Assessment

Directions: Read each question carefully. Write the letter of the correct answer in your notebook.

1. Which group of animals live in a water habitat?
 - a. fish, squid, crab
 - b. horse, goat, monkey
 - c. dolphin, carabao, hawk

d. tadpole, grasshopper, hawk

2. Why can fish live in water?

I. They have tail that helps them swim.

II. They can open their eyes under the water.

III. They have mouth that can drink much water

IV. They have gills that helps them breath in water.

a. I and III b. I and IV c. I and II d. III and IV

3. What characteristic do land animals have?

a. legs for walking

c. fins for swimming

b. wings for flying

d. gills for breathing

4. How are frogs, snakes and grasshoppers protected from their prey?

a. They play dead.

b. They secrete a poisonous substance.

c. They blend color with their environment.

d. They mimic the shape, smell, and sound of their prey.

5. What makes a cat feel warm?



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a

b

c

d

6. The structure or behavior that helps an organism survive in its environment is called _____.

a. adaptation

c. communication

b. camouflage

d. mimicry

7. Which of the following group of animals move in the same way?

a. dog, fish, frog

c. monkey, rabbit, horse

b. snakes, turtle, duck

d. bird, butterfly, mosquito

8. Animals used their legs to move from place to place. How do cows, carabaos, horses and goats use their hooves?

a. to keep them warm

- b. help them move in water
- c. for chewing grass and leaves
- d. help them walk even on hard rocks

9. An animal has big hind legs. Which of the following movement can it do?

- a. flying
- b. hopping
- c. running
- d. walking

10. Mang Tino lives in a mountainous area. He is planning to put up a business. Which of the following may he do?

- a. piggery
- b. poultry
- c. fishery
- d. cattle raising

B. Directions: Copy the table below. Write their habitat as to land or water and their protective structure.

Animals	Habitat (water/land)	Protective Structure
1. cattle		
2. elephant		
3. hyena		
4. lobster		
5. clam		



Additional Activities

Directions: List down 5 animals that can survive in the following environment. Write your answer in your notebook.

Desert

Cold Regions

Congratulations! You did well in this lesson. See you next time.



Answer Key

LESSON 1

Activity 3: "Body Coverings"

Animals	Change color/shapes/smell	Secretive groups	Move in groups	Move fast	Have protective coverings
jelly fish	/	/			
tiger	/				
snail	/				
chameleon	/				
monkey	/	/			
zebra	/	/			
ostrich	/	/			
mussel	/				
octopus	/				
wolves	/				

Activity 4: "Habitat and Structures"

Animal	Habitat (water/land)	Protective Structure
cattle	Land	teeth
elephant	Land	move in groups
hyena	Land	move in groups
lobster	water	outside skeleton
clam	water	shell

Activity 5: "Animals' Movement"

1. walk	2. hop	3. swim	4. hop	5. walk	6. swim	7. walk	8. swim	9. fly	10. crawl
---------	--------	---------	--------	---------	---------	---------	---------	--------	-----------

What I Have Learned

- adaptation
- scales
- shell
- protection
- wings

What I Can Do

Pupils' answer may vary.

Assessment

1. d
2. b
3. a
4. b
5. a
6. a
7. c
8. c
9. c
10. d

Activity 1: "Animals Habitat"

Land	giraffe	carabao
Land	dove	pig
Land	horse	cat
Land	dog	cow
Land	chicken	rabbit
Land	bear	swan
Water	jellyfish	milkfish
Water	tilapia	starfish

Activity 2: "Food Getting"

- long sucking tubes
- sticky tongue
- beak
- sharp tooth
- flat teeth

Guide questions:

- Adaptive structure of land animals – fur, feather, smooth skin, scales, legs and wings while adaptive structures of animals living in water are scales, exoskeleton, shell, gills and fins
- 5. Pupils' answer may vary.

What's More

Activity 1: "Adaptive Structures"

- W
- L
- L
- L
- L

Activity 2: "Body Parts"

- b
- c
- b
- a
- a
- c
- c
- a
- a
- c

What I Know

Across

1. Population	2. Camouflage	3. Aquatic	4. Adaptation
---------------	---------------	------------	---------------

Downward

1. Population	2. Camouflage	3. Aquatic	4. Adaptation
---------------	---------------	------------	---------------

What's In

- b
- c
- a
- e
- d
- f
- g
- h
- i
- j

What's New

Activity 1: "Animals Habitat"

Land	bear	chicken	rabbit	swan
Land	dog	cow	milkfish	jellyfish
Land	horse	cat	tilapia	starfish
Land	dove	pig	carabao	giraffe

Activity 3: "Body Coverings"

Animals	Change color/shapes/smell	Secretive groups	Move in groups	Move fast	Have protective coverings
jelly fish	/	/			
tiger	/				
snail	/				
chameleon	/				
monkey	/	/			
zebra	/	/			
ostrich	/	/			
mussel	/				
octopus	/				
wolves	/				

Activity 4: "Habitat and Structures"

Animal	Habitat (water/land)	Protective Structure
cattle	Land	teeth
elephant	Land	move in groups
hyena	Land	move in groups
lobster	water	outside skeleton
clam	water	shell

Activity 5: "Animals' Movement"

1. walk	2. hop	3. swim	4. hop	5. walk	6. swim	7. walk	8. swim	9. fly	10. crawl
---------	--------	---------	--------	---------	---------	---------	---------	--------	-----------

What I Have Learned

- adaptation
- scales
- shell
- protection
- wings

What I Can Do

Pupils' answer may vary.

Assessment

1. d
2. b
3. a
4. b
5. a
6. a
7. c
8. c
9. c
10. d

Activity 3: "Body Coverings"

Animals	Change color/shapes/smell	Secret chemicals	Move in groups	Move fast	Have protective coverings
jelly fish	/	/			
tiger	/				
snail				/	
chameleon	/				
monkey		/			
zebra		/			
ostrich			/		
mussel				/	
octopus		/			
wolves				/	

Activity 4: "Habitat and Structures"

Animal	Habitat (water/land)	Protective Structure
cattle	land	teeth
elephant	land	move in groups
hyena	land	move in groups
lobster	water	outside skeleton
clam	water	shell

Activity 5: "Animals' Movement"

- walk
- hop
- swim
- hop
- walk
- swim
- walk
- swim
- fly
- crawl

What I Can Do
Pupils' answer may vary.

Assessment

A


1. d 2. b 3. a 4. b 5. a

6. a. 7. c 8. c 9. c 10. d

B.

1. land - teeth
 2. land - move in group
 3. land - move in group
 4. water - outside the skeleton
 5. water - shell

Additional Activities
 Answer vary



References

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