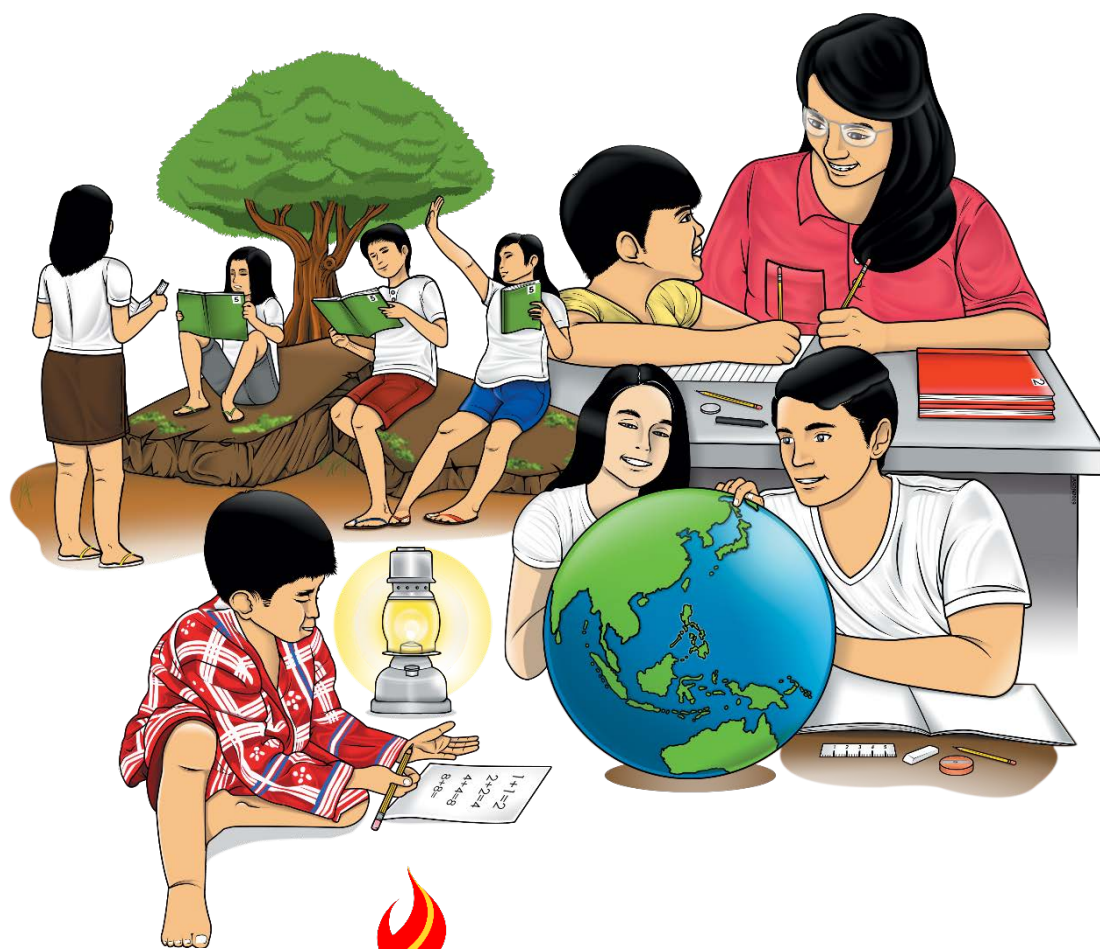


Science

Quarter 2 – Module 3: Animals: Characteristics of Vertebrates



Science – Grade 6
Alternative Delivery Mode
Quarter 2 – Module 4: Animals: Characteristics of Vertebrates
First Edition, 2019

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Science

Quarter 2 – Module 4: Animals: Characteristics of Vertebrates

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 discussion are carefully stated for you to understand each lesson.

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

Pre- test are are provided to measure your prior knowledge on lesson on each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator on 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 key 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, Note 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 facilitator.

Thank you.

The following are the parts of this module that will help you finish your tasks. Read the following descriptions below to better understand each part.

This module has the following parts and corresponding icons:



What I Need to Know

This will give you an idea of the skills or competencies you are expected to learn in the module.



What I Know

This part includes an activity that aims to check what you already know about the lesson to take. If you get all the answers correct (100%), you may decide to skip this module.



What's In

This is a brief drill or review to help you link the current lesson with the previous one.



What's New

In this portion, the new lesson will be introduced to you in various ways; a story, a song, a poem, a problem opener, an activity or a situation.



What is It

This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.



What's More

This comprises activities for independent practice to solidify your understanding and skills of the topic. You may check the answers to the exercises using the Answer Key at the end of the module.



What I Have Learned

This includes questions or blank sentence/paragraph to be filled in to process what you learned from the lesson.



What I Can Do

This section provides an activity which will help you transfer your new

knowledge or skill into real life situations or concerns.



Assessment

This is a task which aims to evaluate your level of mastery in achieving the learning competency.



Additional Activities

In this portion, another activity will be given to you to enrich your knowledge or skill of the lesson learned.



Answer Key

This contains answers to all activities in the module.

At the end of this module you will also find:

References

This is a list of all sources used in developing this module.

The following are some reminders in using this module:

1. Use the module with care. Do not put unnecessary mark/s on any part of the module. Use a separate sheet of paper in answering the exercises.
2. Don't forget to answer *What I Know* before moving on to the other activities included in the module.
3. Read the instruction carefully before doing each task.
4. Observe honesty and integrity in doing the tasks and checking your answers.
5. Finish the task at hand before proceeding to the next.
6. Return this module to your teacher/facilitator once you are through with it.

If you encounter any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator. Always bear in mind that you are not alone.

We hope that through this material, you will experience meaningful learning and gain deep understanding of the relevant competencies. You can do it!



What I Need to Know

This module was designed and written with you in mind. It is here to help you master the lesson about animals. The scope of this module permits is used in many different learning situations. The language used recognizes the diverse vocabulary level of students. The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook you are now using.

This module is about:

1. Describing the distinguishing characteristics of each group of vertebrates.

After going through this module, you are expected to:

1. Describe the distinguishing characteristics of each group vertebrates.
2. Classify each group of vertebrates
3. List examples of each group of vertebrates



What I Know

Direction: Match the column A with B. Write the letter of the correct answer.

Write in on your Science journal.

A

1. They have mammary gland to feed their young.
2. They have moist skin and can live on land and water.
3. They have dry scaly skin.
4. They have beak and wings used in flying.
5. They have gills and fins and they live in water.

B

- A. birds
- B. amphibians
- C. mammals
- D. fish
- E. reptiles

Identify the classification of animals by writing mammals, amphibians, fish, birds or reptiles on the blanks provided.

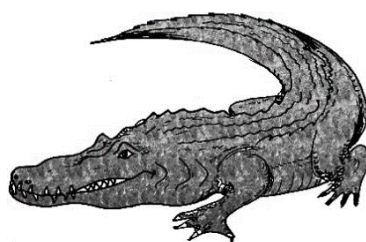
6. _____



7.



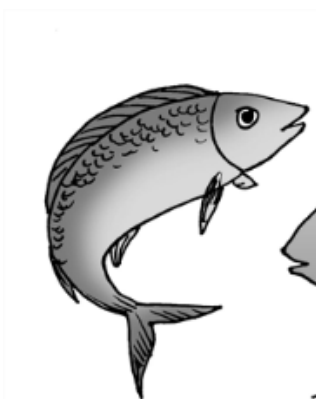
8. _____



9. _____



10.



Lesson

Animal: Describe the Distinguishing Characteristic of each group of Vertebrates.

Animals can be found anywhere in our environment; in the sea, grassland, forests, ponds, sanctuary, and even in our homes. These animals in different ecosystem and habitat are classified as vertebrates and invertebrates. Vertebrates are animals with backbones and have varying body parts used in walking, swimming, flying, climbing, and hopping. They eat grass, meat, insects, and seeds as their food.



What's In

Direction: Choose the letter of the correct answer using your Science journal.

1. Which of the following animals can be found in the locality?

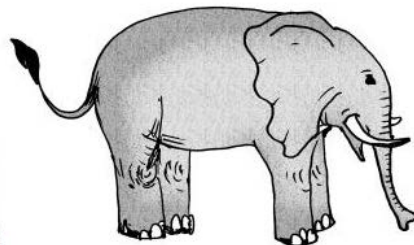
A.



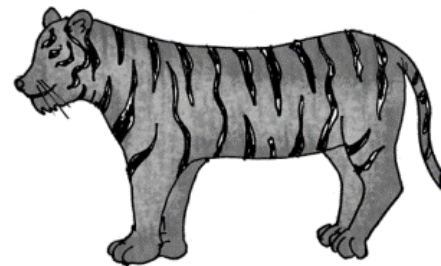
C.



B.



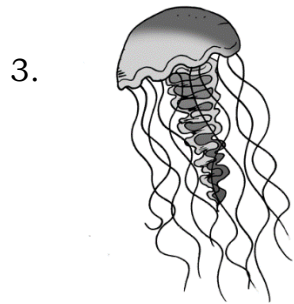
D.



2. Animals are classified as vertebrates and invertebrates. Vertebrates are those animals with backbones while invertebrates are animals without backbones.

Direction: Identify animals as vertebrates and invertebrates by writing your answers on your journal.

- A. butterfly - _____
- B. carabao - _____
- C. chicken - _____
- D. snail - _____
- E. praying mantis - _____



To what group of animals does the illustration belong?

- A. vertebrates
- B. arthropods
- C. invertebrates
- D. insects

4. Which is the distinguishing characteristic of invertebrates?

- A. They have backbones .
- B. They have spinal cord.
- C. They have no backbones.
- D. They have brain.



What's New

Guessing Game:

1. What animals live in water with gills, fins and scales?

F _ _ _ h

2. What animals with backbones called?

_ e r _ _ b _ _ t _ s

3. What animals with wings, feathers that love to fly?

B _ _ _ s

4. What group of vertebrates is a dog?

M _ _ _ a _ s

5. What group of vertebrates is a frog?

A _ _ _ i b _ _ n s

6. What group of vertebrates is snake?

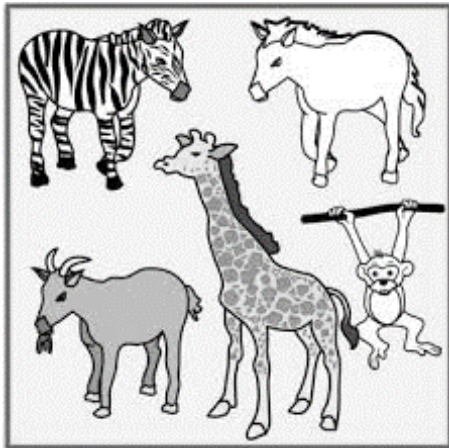
R _ _ t i _ _ s



What is It

Animals found in the locality are classified into vertebrates and invertebrates. Vertebrates are animals with backbone while invertebrates are animals with no backbone. They can be oviparous and viviparous or they are born alive with their parents such as dogs, carabao, and cats, while oviparous animals are those that are hatched from egg such as chicken, duck, and snake.

Vertebrates are group into the following:

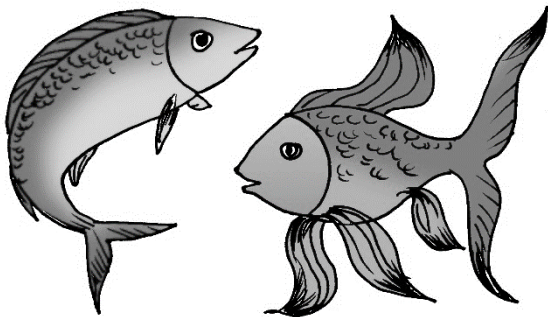


Mammals

Mammals are warm blooded animals that are born alive or viviparous. They have hair or fur as their body covering and mammary gland to feed their young with their milk.

Fish

Fish are cold-blooded animals covered with scales. They have tails and fins that help them to swim. They are animals hatched from egg and breathe through their gills.



Birds

Birds are warm-blooded animals hatched from egg or oviparous. They have a pair of limbs for hopping and a pair of wings used in flying. There are birds who have wings but can't fly. A beak or bill is used in getting food as well as for protecting themselves from their enemies.



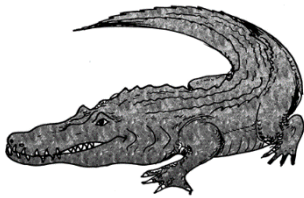
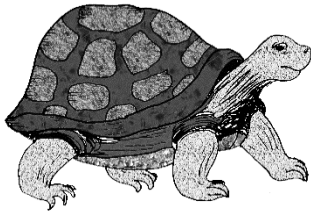
Amphibians

Amphibians are cold-blooded animals hatched from egg. They spend part of their lives in water and part on land. They have moist and scaleless skin. Some examples of it are salamander, newt, toad and caecilian.



Reptiles

Reptiles are cold-blooded vertebrates hatched from egg. They have dry scaly skin and some have shells. Some examples of it are turtles, chameleon, snake, lizard, and gecko.





What's More

Activity 1.1

Direction: Fill in the table with the distinguishing characteristics of the following group of vertebrates by completing the chart.

Characteristics	Mammals	Reptiles	Amphibians	Fishes	Birds
Body Covering					
Warm or cold blooded					
Organs for locomotion					
Viviparous or oviparous					
2 examples					

Activity 1.2

Direction: Answer the following questions below. Write your answers on your Science journal.

1. What characteristics are similar to all vertebrates?
2. In what way is a mammal different from reptiles, amphibians, birds, and fish?
4. How do reptiles and amphibians differ?



What I Have Learned

Direction: Write the answers on your journal.

I learned that.....

Vertebrates are classified as _____,
 _____, _____, and _____.

The _____ are animals that are born alive and have hair or fur as their body covering. The _____ are animals that have scales, fins, and gills and live in water.

While _____ are animals that have dry scaly skin and hatched from egg. The _____ are animals that have moist skin and can live both land and water, and _____ are animals with beak or bills and has wings.



What I Can Do

Direction: Answer the questions using your Science journal.

1. Frogs are useful animals that eat insects that are harmful to human and other animals. People living in a rural area exploit it by consuming them as food. Since frog population is already diminishing in number, in what way you can be of help to remind the people the importance of frogs?

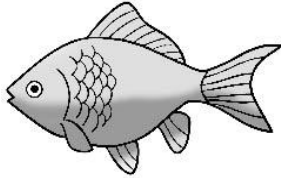
2. Mammals such as dogs and cats were cared as pet. They were furry animals that usually have ticks and fleas in their bodies that were parasitic. These parasites harmed their host and often cause health problems to animals. How will you get rid of these pests that threatened your pet?



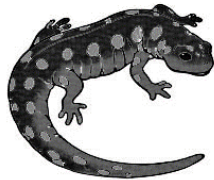
Assessment

Direction: Write the correct classification of vertebrates as illustrated. Write the answers on your journal.

1.



2.



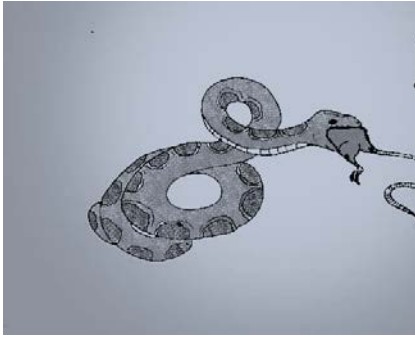
3.



4.



5.



6. Which set of vertebrates does **Not** belong to the group?

I. gecko, snake, crocodile, iguana

II. dolphin, cat, horse, sheep

III. ostrich, bat, penguin, duck

IV. toad, newt, salamander, frog

A. I

B. II

C. III

D. IV

7. Goats, cats, dogs, and rabbits are mammals that have characteristics that differ from other vertebrates. Which of the following features does not describe a mammal?

A. Mammals have mammary gland.

B. Mammals have scales and feathers.

C. Mammals have fur or hair.

D. Mammals are warm blooded animals.

8. In what way do amphibians differ from reptiles?

A. Amphibians have backbones.

B. Amphibians can live both on land and water.

C. Amphibians can crawl.

D. Amphibians are oviparous.

9. Some animals were taken from their natural habitat by hunters or people and were brought sold in pet shops. List down ways you can do to preserve wildlife that were kept as pets?

10. Ostrich and penguin are flightless birds. Why?



Additional Activities

Direction: Classify the following vertebrates in its proper column. Put it on your Science journal.

- | | | |
|--------|------------|--------------|
| bangus | maya | frog |
| lizard | cat | galonggong |
| snake | swamp frog | gecko “tuko” |
| bat | stingray | crocodile |

Mammals	Amphibians	Reptiles	Birds	Fishes

- | | | |
|---------|------|---------|
| tilapia | toad | carabao |
|---------|------|---------|



Answer Key

<p>What I Have Learned Mammals, reptiles, amphibians, birds, and fish (in any order) Mammals Fishes Reptiles Amphibians Birds</p> <p>What I Can Do Answers vary:</p> <p>Assessment fish amphibian mammal bird reptile C B B Answers may vary Answers may vary</p> <p>Additional Activities Mammals: bat, cat, carabao Amphibians: swamp frog, toad, frog Reptiles: lizard, snake, crocodile Birds: maya, white heron, chicken Fish: bangus, tilapia, stingray</p>	<p>What's New</p> <ol style="list-style-type: none"> 1. Fish 2. Vertebrates 3. Birds 4. Mammals 5. Amphibians 6. Reptiles <p>What's More Activity 1.2 Characteristic similar to all vertebrates are the presence of backbones. Mammal differs from amphibians, reptiles, birds, and fish because mammals are born alive, feed their young with their milk, and have skin or fur as their body covering. Reptiles differ from amphibians in their body covering, reptiles have dry scaly skin while amphibians have moist skin.</p>	<p>What I Know C B E A D man mals birds reptil es amph ibians fish</p> <p>What's In C A. invertebrates B. vertebrates C. vertebrates D. vertebrates E. invertebrates C C invertebrates</p>
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