

SCIENCE 6

To My Grade 6 Students,

It is so unfortunate that we had to call off classes for over a week before I got the chance to meet you. The time you are away from school should not mean that your learning should stop. Which is why I prepared these worksheets for you to do so that you'll be ready for greater educational challenges in Science when classes resume.

The topics that these two worksheets are about are not new to you. They are about *Classification of Organisms*. Assign *two days* to accomplish each worksheet. I would appreciate it very much if you could complete these worksheets with your best effort and without receiving any help from others. I do not mind wrong answers as long as the work is completely your own. Print the worksheets after downloading them and bring the completed copy to class. Read and follow directions carefully. Use **pencils** to write your answers so you can make corrections when we discuss the answers in class.

I've heard many wonderful things about your batch and I can't wait for us to start working together.

Your Science Teacher,

Mr. Espejo

NAME: _____

SCORE: _____

GRADE/SECTION: _____

DATE: _____

MYSTERY ORGANISMS

OBJECTIVE: Students will identify specific organisms based on known characteristics.

BACKGROUND:

Life on earth is made up of millions of organisms that possess common and different traits. Scientists use these traits to organize organisms into groups. Classifying organisms helps scientists in labeling and identifying organisms correctly.

In this activity, students will use known characteristics to identify particular organisms.

MATERIALS:

1. List of organisms
2. List of characteristics of organisms

PROCEDURE:

PART I

- A. You are provided with names of animals on **page 3**. Browse through the list and quickly think of some unique characteristics for each animal.
- B. On the **Data Sheet** of this activity is a list of characteristics of organisms. Read each of these clues and *delete* the animals that *do not have* that characteristic. You may *cross out* the names of the animals that are *eliminated* from the list.
- C. On the *line* provided, *write* the *names* of the animals that *remain* on the list.
- D. Continue down the list of characteristics and eliminate names of animals *until only one* animal remains. *Circle* the name of the remaining animal on the list. This is the *mystery animal* for that group.

PART II

- A. You are provided with another list of animals on **page 4**. The *circled name* is the *mystery animal*.
- B. Browse through the names of the animals on the list and think of some characteristics that are unique to each animal.
- C. Use these characteristics as clues to eliminate some animals from the list, until you are only left with the mystery animal. You are *required* to come up with and use **exactly 5 clues** to isolate this mystery animal from the rest.
- D. With each clue you make, *write* that clue and the names of the animals that remain on the list. Pattern the format of your answers from Part I.

DATA:

PART I

ALLIGATOR

GERMAN SHEPHERD

OSTRICH

ANTEATER

JELLYFISH

PARROT

BAT

LEOPARD

TIGER

COYOTE

LION

TIMBER WOLF

1. CLUE #1: *“This organism is an animal.”*

2. CLUE #2: *“This organism has a backbone.”*

3. CLUE #3: *“This organism is warm-blooded, has fur or hair, and feeds its young with milk from its mammary glands.”*

4. CLUE #4: *“This organism eats flesh.”*

5. CLUE #5: *“This organism has a long snout and bushy tail. It also barks and howls.”*

6. CLUE #6: *“This organism is domesticated or tame.”*

PART II

BUFFALO	CHAMELEON	PYTHON
PENGUIN	BAT	PARROT
CROCODILE	TURTLE	GRAY WOLF
COBRA	LION	BEE

1. CLUE #1: “ _____ ”

2. CLUE #2: “ _____ ”

3. CLUE #3: “ _____ ”

4. CLUE #4: “ _____ ”

5. CLUE #5: “ _____ ”

QUESTIONS:

1. What process did you use in narrowing the list of animals from a large group down to just one animal?

2. Why were some of the animals eliminated from the list after each clue?

3. Write down all the characteristics that were used to describe the mystery animal in *Part I*.

4. If the *Chihuahua* were included in the list in *Part I*, what characteristic (or clue) would you use to *differentiate* it from the mystery animal? (You may research on the answer for this one.)

5. Write down all the characteristics that were used to describe the mystery animal in *Part II*.

6. If the *Anaconda* were included in the list in *Part II*, what characteristic (or clue) would you use to *differentiate* it from the mystery animal? (You may research on the answer for this one.)

NAME: _____

SCORE: _____

GRADE/SECTION: _____

DATE: _____

TAXONOMY

OBJECTIVE: Students will put organisms into groups using different types of classification systems.

BACKGROUND:

Taxonomy is the science of grouping living things based on similar characteristics. The ones most often used in classifying organisms into groups are external structure, internal structure, and behavior. This method sometimes leads to grouping together organisms that seem very different. The bat and the whale are examples. Although they differ in size and habitat, they are both classified as mammals because they both possess mammary glands that produce milk to feed their young, and fur at some point in their life.

The science of Taxonomy has a long history. *Aristotle* was the first known scientist to classify living things. However, he only grouped organisms into plants and animals. Scientists later found out that many organisms could not be classified into any of these two groups. This led to the development of other classification systems.

Carolus Linnaeus is considered the “*Father of Taxonomy*”. He came up with a system of classification that later scientists have modified as they learned more about living things. This system of naming organisms is commonly used today.

In this activity, students will group organisms using different types of classification systems.

MATERIALS:

1. List of animals
2. Templates of classification charts

PROCEDURE:

- A. Browse through the list of animals below. Think of characteristics that you know about each animal.
- B. Use the different chart templates under “*History of Classification*” to put the animals into groups. *Write* the names of the animals into their appropriate columns.
- C. If an animal can be placed in more than one column, choose the column where it fits best. The name of an animal should appear in one column only.

ANACONDA
ANT
APE
BLUE WHALE
BUTTERFLY
COW

EARTHWORM
GREAT WHITE SHARK
HYENA
JELLYFISH
LOBSTER
MILLIPEDE

MOSQUITO
OCTOPUS
RAT
SEA OTTER
TIGER
VULTURE

DATA:

HISTORY OF CLASSIFICATION

Aristotle's Classification Chart.

Animals that Walk	Animals that Fly	Animals that Swim

16th Century Classification Chart

Helpful Animals	Harmful Animals

QUESTIONS:

1. What is the criterion or basis of classifying some animals listed above in the *same* group?

2. What is the criterion or basis of classifying some animals listed above into *another* group?

3. What characteristic would you use, other than the ones used above, to put the *Great White Shark* and the *Whale Shark* in the *same* group?

4. What characteristic would you use, other than the ones used above, to put the *Great White Shark* and the *Whale Shark* into *separate* groups?
