

High School Science Virtual Learning

Biology **Taxonomy and Binomial** Nomenclature May 4, 2020



High School General Biology Lesson: May 4, 2020

Objective/Learning Target:

Students will be able to discuss the levels of taxonomy and identify scientific names



Let's Get Started:

- 1. What is this a picture of?
- 2. Is is a plant or an animal?
- 3. Is it a fish, amphibian, reptile, bird, or mammal?
- 4. What is its feeding type?





Let's Get Started: Answer Key

- 1. Bear
- 2. Animal
- 3. Mammal
- 4. Omnivore



Lesson Activity: Directions:

1. Watch this video and takes notes that you can use for the practice questions.





Practice

Complete the following questions using the information you learned during the lesson activity.



Questions:

- 1. What does taxonomy tell us?
- 2. Who created our taxonomic system?
- 3. List the taxa we use to organize organisms.
- 4. What do we use to give the name in binomial nomenclature?



Questions:

5. What is the classification for a cat?
Kingdom:
Phylum:
Class:
Order:

Order:

Family:

Genus:

Species:



Once you have completed the practice questions check with the answer key.

- 1. Tells us the story of all life on Earth by classifying organisms.
- 2. Carl Linnaeus
- 3. Domain, Kingdom, Phylum, Class, Order, Family, Genus, Species
- 4. Genus and Species
- 5. Kingdom: Eukarya Phylum: Chordata Class: Mammal Order: Carnivora Family: Felidae Genus: Felis Species: Felis catus



Additional Skills:

Dichotomous Keys:

Sometimes we just need to find the name of an organism that has already been discovered. This is what we use a dichotomous key for. Try using <u>this key</u>. Check your answers <u>here</u>.

Writing a scientific names:

If the genus and species are typed they need to be *italicised*; if they are hand written they need to be <u>underlined</u>.



Common Misconceptions

"The scientific name and common name are the same thing." -This is sometimes true. Common name: Lion Scientific name: *Panthera leo* Common name: Gorilla Scientific name: *Gorilla gorilla* Common name: Velociraptor Scientific name: *Velociraptor mongoliensis*

"All organisms already have a scientific name." -Only animals that have already been discovered have been classified. If somebody finds a new organism, it has to be classified and thus gets a new scientific name.

To learn about misconceptions associated with classification click this link.



More Practice:

- 1. Work through this <u>virtual lab</u> on classification.
- This activity covers dichotomous keys, taxonomic levels, and binomial nomenclature. You will need these <u>pictures</u>. Check your answers <u>here</u>.



Additional Practice:

Watch this <u>video</u> about classification from the Amoeba sisters and fill out this <u>worksheet</u>.

This <u>word search</u> focuses on the major vocabulary associated with the topic of taxonomy.