

Biological Classification

Name _____

Date _____

Block _____

What is taxonomy?

- The science of _____ (i.e. plants, animals, protists, fungi and monerans) _____.
- Tends to be guided by _____ relationships.

TWO Important Features of Biological Classification

- Classification systems assign a _____ to each organism.
- Organisms are placed into groups that have _____.

Classification Groups

Arranged in order from LARGEST (or most diverse) to SMALLEST (or least diverse):

- _____
- _____
- _____
- _____
- _____
- _____
- _____

Memory Trick:

- The following is a mnemonic to remember the classification system (in order):

Information About Each Classification Group

<u>Classification Group</u>	<u>Definition</u>	<u>Example</u>
<u>Kingdom</u>	<ul style="list-style-type: none"> • <u>group of closely related phyla</u> • <u>6 kingdoms:</u> 	<u>Kingdom Animalia</u>
<u>Phylum</u>	<ul style="list-style-type: none"> • group of closely related _____ • include a large number of very different organisms that share _____ 	<u>Phylum Chordata</u>
<u>Class</u>	<ul style="list-style-type: none"> • group of closely related orders 	<u>Class Mammalia</u>

<u>Classification Group</u>	<u>Definition</u>	<u>Example</u>
<u>Order</u>	<ul style="list-style-type: none"> • group of _____ 	<u>Order Carnivora</u>
<u>Family</u>	<ul style="list-style-type: none"> • group of _____ 	<u>Family Felidae</u>
<u>Genus</u>	<ul style="list-style-type: none"> • group of _____ • have many _____ 	<u>Genus Felis</u>
<u>Species</u>	<ul style="list-style-type: none"> • population of organisms that share _____ and can _____ 	<u>Species domesticus</u> (common housecat)

The Naming System

- developed by _____ in the eighteenth century
- system is known as _____

Binomial Nomenclature

- each organism is given a two-part name:

- first part is the _____ name
- second part is the _____ name
- format of the two-part scientific name:
 - capitalize the _____ name
 - DO NOT capitalize the _____ name
 - BOTH names must be *italicized* (when typed) or _____ (when printed)

Questions for Discussion

- A group of individuals that interbreeds and passes on characteristics is called a(n) _____.
- 2. A species is sometimes referred to as a natural unit of classification. Why do you suppose it is called a natural unit of classification? Defend your answer.

Questions for Discussion

- 3. If two organisms are in the same family, what are the other levels of organization that they have in common?

Questions for Discussion

- 4. The scientific name for a daffodil is:

Plantae Anthophyta Monocotyledonae Liliales Amarlideceae *Narcissus pseudonarcissus*

- (a) What is the scientific binomial name for the daffodil?
- (b) What is the family name of the daffodil?
- (c) What is the phylum?