

**Grade 12 Biology**  
**Unit D – Classification**

Quiz

*PRACTICE Questions*

Name: _____
Date: <i>NOT HANDIN</i>

Each question is two marks

Use a two page reference notes if you have one.

1. Why do biologists use a classification system to study the diversity of life?
2. The science of classifying organisms and assigning them universally accepted names is known as:
3. Circle the letter of each sentence that is true about early efforts at naming organisms
  - a. names were usually English
  - b. names were often described detailed physical characteristics of a species
  - c. names could be very long
  - d. it was difficult to standardize the names

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4. Circle the letter of each sentence that is true about binomial nomenclature:

- a. the system is no longer in use today
- b. each species is assigned a two-part scientific name
- c. the scientific name is always written in italics (or at least underlined if unable italics)
- d. the second part of the scientific name is capitalized

5. List the eight categories of taxa, from most general to most specific organism

6. What two Kingdoms did Linnaeus name? :

7. A group of organisms at any particular level in a classification system is called a:

- A) species
- B) genus
- C) taxon
- D) phylum

8. As a practical definition of species, one can say that they are a group of organisms characterized by all of the following except they
- A) do not normally interbreed with other species in nature
  - B) can be distinguished from other species
  - C) are incapable of hybridization with other species
  - D) remain relatively constant
9. Viruses are (supposedly?) denied a kingdom of their own because
- A) they are too poorly understood
  - B) they are too small
  - C) their genetics cannot be determined
  - D) they are not organisms
10. In printed scientific names, only the \_\_\_\_\_ is capitalized.
- A) family
  - B) class
  - C) species
  - D) kingdom
  - E) genus
11. Characteristics that have arisen as a result of common evolutionary descent are said to be
- A) analogous
  - B) homogenous
  - C) heterogamous
  - D) homologous
  - E) contiguous
12. A taxon consisting of the most closely related species is called a(n) \_\_\_\_\_.
- A) family
  - B) order
  - C) genus
  - D) phylum

13. The binomial system of classification was developed by:
- A) Darwin
  - B) Wallace
  - C) Linnaeus
  - D) Malthus
  - E) none of the above
14. Which one of the following sequences shows the correct hierarchy of classification, going from the most inclusive to the least inclusive?
- A) Kingdom, Domain, Phylum, Order, Class, Family, Genus, Species
  - B) Domain, Kingdom, Phylum, Class, Order, Family, Genus, Species
  - C) Genus, Species, Kingdom, Phylum, Order, Class, Family
  - D) Species, Genus, Family, Class, Order, Phylum, Kingdom
  - E) Domain, Phylum, Kingdom, Genus, Species, Family, Order, Class
15. A cladogram conveys information about ancestors and descendants of an organism.
- A) True
  - B) False
16. What is taxonomy?
- a. the scientific study of how living things are classified
  - b. the name of Aristotle's classification system
  - c. the process used by geologists to classify rocks
  - d. the process of observing an organism's behavior
18. A cat's scientific name is *Felix domesticus*, which genus does it belong to ?
- a. Cat
  - b. Felix
  - c. binomial nomenclature
  - d. domesticus

19. Circle the letter of each sentence that is true about cladistics analysis:

- a. it considers only traits that are evolutionary innovations
- b. it considers all traits that can be measured
- c. It considers only similarities in body structure
- d. It is the method of evolutionary classification

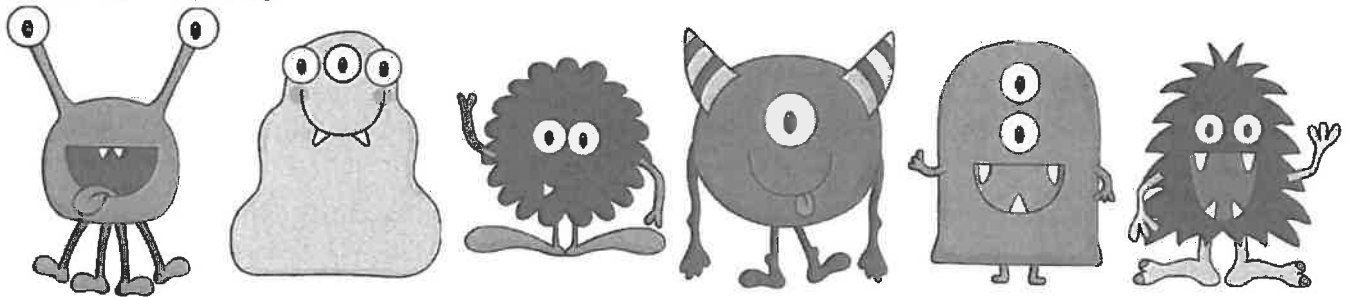
20. Characteristics that appear in recent parts of a lineage, but not in older parts are called \_\_\_\_\_

**Bonus:**

What is a heterotroph?

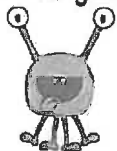
## Identifying Aliens with a Dichotomous Key

Look carefully at the aliens pictured below. Use the dichotomous key to find the scientific name for each one.



- 1
  - a. Mouth open . . . . . go to 2
  - b. Mouth not open . . . . . go to 4
  
- 2
  - a. Arms . . . . . go to 3
  - b. No Arms . . . . . *Alienus q uadlegicus*
  
- 3
  - a. Hairy . . . . . *Alienus hairicus*
  - b. Not hairy . . . . . *Alienus tritoothicus*
  
- 4
  - a. No horns . . . . . go to 5
  - b. Horns . . . . . *Alienus stripicus*
  
- 5
  - a. No legs . . . . . *Alienus blobicus*
  - b. Legs . . . . . *Alienus fuzzicus*

Write your answers below.



\_\_\_\_\_



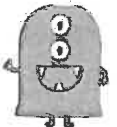
\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

Each of these aliens belongs to the same genus. What is their genus? \_\_\_\_\_

Look at the species name for each alien. How do you think these names were chosen?

\_\_\_\_\_

\_\_\_\_\_