Biology Review Sheet

Taxonomy and Overview of the 6 Kingdoms

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| **Questions** | **Answer** |
| Use Table 17-2 to answer the following question.  Which two animals listed in the chart are the most closely related? Explain. |  |
| Use Table 17-2 to answer the following question.  Which two animals listed in the table are the least closely related. Explain. |  |
| Use Table 17-2 to answer the following question.  Which kind of animal would a *Felis domesticus* be? |  |
| Use Table 17-2 to answer the following question.  Who developed the type of classification shown in Table 17-2? |  |
| Use Table 17-2 to answer the following question.  Which of the classifications shown in Table 17-2 is the most specific? |  |
| What is the name given to the diagram that is used to show evolutionary relationships between two organisms called?  http://357163546355864778.weebly.com/uploads/9/7/5/7/9757668/471990786_orig.jpg   * Which characteristic do ALL of the organisms shown have in common? * Which animal shown in the diagram above does NOT have a vertebrae? * According to the diagram above, which organism is most closely related to humans? * What does the diagram above illustrate? |  |
| How many “groups” did Aristotle use in his classification system? What were they? |  |
| What was the basis of classification of each of Aristotle’s groups? |  |
| http://images.yourdictionary.com/images/155.20.cladogram.jpg  This diagram is called a \_\_\_\_\_\_\_. It is used to illustrate…… |  |
| What information do scientists use to construct a diagram that depicts the evolutionary history of organisms? |  |
| When looking at the scientific name of an organism such as *Musca domestica,*  what does the word *Musca* indicate? |  |
| When looking at the scientific name of an organism such as *Musca domestica,*  what does the word *domestica* indicate? |  |
| Give an example of a scientific name and the common name for a particular organism. You can choose one from Table 17-2. |  |
| Is/Does a scientific name….   * Indicate the same information in different parts of the world? * Consist of two words? * Have the first word capitalized? * Have the second word capitalized? * Written in Latin? * Have a second word that is in Latin that describes a characterisitic of that organism? |  |
| List the seven taxa used by Linnaeus in his classification system from largest to smallest. |  |
| Are/do prokaryotic organisms…..   * Mulitcellular or unicellular? * Contain a nucleus or organelles? * contain ribosomes? |  |
| Describe the organization of the genetic material of a prokaryotic cell. |  |
| Describe the organization of the genetic material of a eukaryotic cell. |  |
| Describe the cell size of a typical prokaryotic cell. In your description, compare it to a eukaryotic cell. |  |
| Describe the cell size of the typical eukaryotic cell. In your description, compare it to a prokaryotic cell. |  |
| Are/do eukaryotic organisms…..   * Mulitcellular or unicellular? * Contain a nucleus or organelles? * Contain ribosomes? |  |
| Describe what binomial nomenclature is. |  |
| What is taxonomy? |  |
| Who developed the first classification system? |  |
| Who developed the classification system that we use today? |  |
| What is classification? |  |

**Table 17-2**

**Organism House cat Red fox Dog Wolf Gopher Fly**

**Kingdom** Animalia Animalia Animalia Animalia Animalia Animalia

**Phylum** Chordata Chordata Chordata Chordata Chordata Arthropoda

**Class** Mammalia Mammalia Mammalia Mammalia Mammalia Insecta

**Order** Carnivora Carnivora Carnivora Carnivora Rodentia Diptera

**Family** Felidae Canidae Canidae Canidae Geomyidae Muscidae

**Genus** *Felis* *Vulpes Canis Canis Thomomys Musca*

**Species** *F. domesticus* *V. fulva C. familiaris C. lupus T. bottae M. domestica*

**Cell Type Cell Wall Body Form Nutritution**

Eukaryotic Yes Unicellular Autotroph

Prokaryotic No Multicellular Heterotroph

Both Both

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| --- | --- | --- | --- | --- | --- | --- |
| **Kingdom** | **Eubacteria** | **Archaebacteria** | **Protista** | **Fungi** | **Plantae** | **Animalia** |
| **Cell Type** |  |  |  |  |  |  |
| **Cell Wall** |  |  |  |  |  |  |
| **Body Form** |  |  |  |  |  |  |
| **Nutrition** |  |  |  |  |  |  |
| **Reproduction** |  |  |  |  |  |  |
| **Locomotion** |  |  |  |  |  |  |