**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Test Date: \_\_\_\_12/12/17\_\_\_\_\_\_\_**

**Classification of Plants and Animals Study Guide**

**Section One: Complete the chart by defining each term.**

|  |  |
| --- | --- |
| Vertebrate | A group of animals with a backbone |
| Invertebrate | A group of animals without a backbone |
| Vascular | A plant with tissues that carry water and nutrients throughout the plant – true roots, stems, and leaves |
| Nonvascular | A plant that transports water and nutrients from cell to cell – no true roots, stems, and leaves |
| Kingdom | Largest classification group for classifying living organisms |
| Species | Smallest classification group for classifying living organisms |
| Classification | Process by which scientists classify living organisms |
| Biologist | A scientist who studies life or living organisms |

**2. Which type of animal kingdom is more complex vertebrate or invertebrate?** Invertebrate

**3. Label each of the following as vascular (V) or nonvascular (NV).**

a. A rose bush \_\_\_\_\_\_V\_\_\_\_\_\_\_ b. Fern \_\_\_\_\_\_NV\_\_\_\_\_\_\_

c. grass \_\_\_\_\_\_\_\_V\_\_\_\_\_\_\_\_ d. Spanish moss \_\_\_\_NV\_\_\_\_\_\_\_\_\_

**4. Label each of the following as a plant (P) or not a plant (NP).**

a. Fungi \_\_\_\_\_NP\_\_\_\_\_\_ b. mushroom \_\_\_\_\_\_\_NP\_\_\_\_\_\_\_\_\_

c. sunflower \_\_\_\_\_\_\_\_P\_\_\_\_ d. moss \_\_\_\_\_\_\_P\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5. Label each of the following as vertebrate (V) or invertebrate (IN).**

a. squid \_\_\_\_\_IN\_\_\_\_\_\_\_\_\_ b. eagle \_\_\_\_\_\_\_V\_\_\_\_\_\_\_\_\_ c. snake \_\_\_\_\_V\_\_\_\_\_\_\_\_

d. insect \_\_\_\_\_IN\_\_\_\_\_\_\_\_ e. clam \_\_\_\_\_\_NV\_\_\_\_\_\_\_\_\_\_ f. fish \_\_\_\_\_\_V\_\_\_\_\_\_\_\_\_\_

g. seal \_\_\_\_\_\_\_V\_\_\_\_\_\_\_\_\_ h. arachnid \_\_\_\_\_NV\_\_\_\_\_\_\_ i. whale \_\_\_\_\_V\_\_\_\_\_\_\_\_\_

**6. Classes of Vertebrates – You will need to be able to explain how different species are different from one another based on characteristics.**

|  |  |  |
| --- | --- | --- |
| **Type** | **Characteristics** | **Examples** |
| **Mammals** | -warm blooded  -breathe air with lungs  - produce milk for their young  - most have fur or hair | -wolves  -dogs  -elephant  -dolphins  -whales  -bears |
| **Fish** | -cold blooded  -use gills to breathe  -have fins or scales | -salmon  -catfish  -sharks  -tuna  -trout |
| **Birds** | -warm blooded  -breathe air with lungs  -feathers, wings, toothless | -parrots  -eagles  -penguins  -hawks  -turkeys |
| **Amphibians** | -cold blooded  -lives part of their lives in water  -smooth, moist skin | -frogs  -tadpoles  -toad  -salamander |
| **Reptiles** | -cold blooded  -breathes air with lungs  -body covered in dry scales | -snakes  -lizards  -turtles  -crocodiles  -alligators |