

# Biological classification worksheet

## Five-Kingdom System

**Animal Kingdom** - Invertebrates (without backbones) and vertebrates (with backbones), multicellular, no cell walls, obtain energy through respiration

**Plant Kingdom** - multicellular, have cell walls, obtain energy through photosynthesis. Ex. mosses, ferns, flowering and seed plants

**Fungi Kingdom** - cells with cell walls but not green and do not carry out photosynthesis, break down other organic materials to obtain food. Ex. mushrooms, molds, and yeasts

**Protist Kingdom** - come in a wide variety of forms, some are animal-like, such as amoeba, paramecium and protozoan. Some are plant-like such as algae and others are fungi-like. Many are single-celled and others are multicellular.

**Monera Kingdom** - some photosynthesize while others respire. The nucleus of Moneran cells are not bounded by nuclear membranes like cells in the other kingdoms. Ex. bacteria and blue-green algae.

## The classification of humans - *Homo sapiens*

The two part naming system is called *Binomial nomenclature* (consists of genus and species.).

**Kingdom:** Animalia

**Phylum:** Chordata

**Class:** Mammalia

**Order:** Primata

**Family:** Hominadae

**Genus:** Homo

**Species:** sapiens (note: species is not capitalized.)

Using the information above, answer the following questions.

1. What is the next smallest classification group after Order? \_\_\_\_\_

2. What is the smallest classification group? \_\_\_\_\_

3. Every living organism has what classification groups as its name? \_\_\_\_\_ and \_\_\_\_\_

4. The first letter of every genus name is \_\_\_\_\_.
5. The first letter of every species name is \_\_\_\_\_.
6. What is binomial nomenclature? \_\_\_\_\_.
7. Give one example of how you classification is used at school.
  
8. Why is the understanding of classification an important life skill?

## *Classification Practice – Animals*

### **Part A**

In the exercises that follow, arrange the items listed into different groups. Give each group a title indicating what the members of that group have in common.

1. German Shepherd, Great Dane, parrot, Irish setter, canary, husky, robin, pigeon

|  |  |
|--|--|
| Title _____<br>_____<br>_____<br>_____ | Title _____<br>_____<br>_____<br>_____ |
|--|--|

2. Apples, peas, orange, banana, carrot, lettuce, turnip, pear, grape, potato

|  |  |
|--|--|
| Title _____<br>_____<br>_____<br>_____ | Title _____<br>_____<br>_____<br>_____ |
|--|--|

\_\_\_\_\_

3. Steak, football, sausage, chair, table, bacon, sofa, baseball bat, cleats, ham, bookcase

|             |             |             |
|-------------|-------------|-------------|
| Title _____ | Title _____ | Title _____ |
| _____       | _____       | _____       |
| _____       | _____       | _____       |
| _____       | _____       | _____       |
| _____       | _____       | _____       |

**Part B Study the following list of living things:**

Mare, trout, parrot, quarterhorse, woodpecker, spaniel, goldfish, Great Dane, eagle, bass, beagle, hawk, stallion, Dalmatian, shark

1. Classify them into two groups (give each group a name).

Group 1 \_\_\_\_\_ Group 2 \_\_\_\_\_

2. Using the same list of living things show how they could be classified into three groups.

Group 1 \_\_\_\_\_  
Group 2 \_\_\_\_\_  
Group 3 \_\_\_\_\_

3. Using the same list, show how they could be classified into four groups.

Group 1 \_\_\_\_\_  
Group 2 \_\_\_\_\_  
Group 3 \_\_\_\_\_  
Group 4 \_\_\_\_\_

Touch a scientist and you touch a child.

*-Ray Bradbury*