

## Activity 2.2.2 Creature Classification

### Purpose

Scientific classification of living organisms provides a standard nomenclature across the world in a single language. The following is an example of classification. Have you noticed the names used in the scientific classification system are not common terms? Where do these terms come from and how would you know what animal the list below represents?

|                   |               |
|-------------------|---------------|
| <b>Kingdom:</b>   | Animalia      |
| <b>Phylum:</b>    | Chordata      |
| <b>Subphylum:</b> | Vertebrata    |
| <b>Class:</b>     | Mammalia      |
| <b>Order:</b>     | Primate       |
| <b>Family:</b>    | Hominidae     |
| <b>Genus:</b>     | <i>Homo</i>   |
| <b>Species:</b>   | <i>sapien</i> |

All living things, humans included, are classified scientifically. You might be wondering how the animal you are raising in your *Producer's Management Guide* is classified. Are you raising an *Anser anser*, a *Llama glama*, or a *Capra hircus*? Is it a vertebrate or a mammal? To answer these questions, you must research the hierarchical classification of the animal.

### Materials

#### Per group of four students:

- 11"x17" paper
- Markers

#### Per student:

- Index card
- Pencil
- Computer with Internet access
- *Modern Livestock and Poultry Production* textbook
- Agriscience Library
- *Agriscience Notebook*

### Procedure

In this activity, you will classify the animal you have selected to study for your *Producer's Management Guide* and compare the classification to animals that your classmates are studying.

#### Part One – Classify Your Animal

1. Using your *Modern Livestock and Poultry Production* textbook, the Agriscience Library, and the Internet, classify your animal.
2. Record your findings on *Activity 2.2.2 Student Worksheet* and include in your management guide.

3. Use the index card provided to create a simple schematic of the classification of your animal. Include all categories of the classification system on your index card.

## Part Two – Comparing Animals

When you have completed *Activity 2.2.2 Student Worksheet* and your index card, your teacher will assign you to a group.

1. Work with your assigned group to demonstrate relationships among the different species chosen by your group members for their *Producer's Management Guide*.
2. Develop a diagram showing the relationships among the different species, using markers and a sheet of 11"x17" paper. You can use a Venn diagram or any other mapping diagram to show the relationships.
3. Display your group's diagram as instructed by your teacher.

## Conclusion

1. What is the purpose of a scientific classification system?

To clearly show what kind of animal or anything is.

2. At what point in the classification system, provided on Page 1 in the Purpose, does your animal branch away from humans?

At the Order

3. How does the animal you researched differ from other animals in your group?

After phylum everything after that on the taxonomy chart for a silky chicken is different from Red Angus Cattle

4. What characteristics place your animal into its Order and Family?

Even toed, hooved, and hollow horns.

Name: \_\_\_\_\_



## Activity 2.2.2 Student Worksheet

**Directions:** Complete the classification chart for the animal you are studying for your *Producer's Management Guide*. Define the characteristics of each division used in identifying that group. Example: Kingdom – plant, Characteristics – multicellular, make their own food, eukaryotic.

Animal Red Angus Cattle

| Scientific Classification Category | Classification of Animal | Characteristics                            |
|------------------------------------|--------------------------|--------------------------------------------|
| Kingdom                            | Animalia                 | Multicellular                              |
| Phylum                             | Chordata                 | Has a backbone                             |
| Subphylum                          | Vertebrata               | vertebrates                                |
| Class                              | Mammalia                 | Milk giving                                |
| Order                              | Artiodactyla             | Even toed, hooved                          |
| Family                             | Bovidae                  | Hollow horn                                |
| Genus                              | <i>Bos</i>               | Ruminant queadrupeds                       |
| Species                            | <i>taurus</i>            | Most domestic breeds                       |
| Breed (if applicable)              | Red Angus                | Red coat, naturally polled, used for beef. |