


# Lesson 10.4 Classification

Name

Date

Period

 **Engage** Grocery stores organize items in a logical way so that shoppers can find what they are looking for without too much assistance. As a group organize your pictures in some way.

1) In the space below explain your pattern of organization.

2) Diagram your pattern, include the numbers of the organisms in each group.



**Explore I** As you watch 'The System of Classification' please answer the following questions.

3) What are the seven levels of classification used by scientists to group living organisms?

4) Why do we classify organisms?

5) What is the name of the scientist who developed the system of naming living things?

6) What is the naming system called and what does it mean?



**Explore II** As you watch 'The Five Kingdoms' fill out the table below.

Kingdom Name	Food Eat/Make/Absorb/Obtain	Movement Yes or No	# Cells Many/One	Nucleus Yes/No	Type of Cell Eukaryotic/Prokaryotic



**Explain I** Now go back to the organisms and try to put each in the proper kingdom based upon what you have learned.

Organism Number	Kingdom and why do you think it belongs here
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	



**Explore III** As you watch about the characteristics of different animal phyla and class. Answer the questions and fill in the charts

7) What is the major division between animals and what does each mean?

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Phylum	Major characteristics and an example
Annelids	Segmented worms ex: earthworm
Porifera	
Coelenterata	
Arthropoda	
Mollusks	
Class	Major characteristics and an example
Osteichthyes	
Chondrichthyes	
Amphipians	
Reptilia	
Aves	
Mammals	



**Explain II**

Matching.

- |                         |  |
|-------------------------|--|
| _____ 1. Amphibians     | a. typically have hair or fur and breathe through lungs.   |
| _____ 2. Mammals        | b. lay eggs and have beaks or bills.                       |
| _____ 3. Reptiles       | c. are often called 'cartilaginous fish'                   |
| _____ 4. Osteichthyes   | d. spend part of their lives under water and part on land. |
| _____ 5. Aves           | e. have scales and short legs or no legs.                  |
| _____ 6. Chondrichthyes | f. are often called 'bony fish'                            |

For each of the following, write a **W** if the animals are warm-blooded or a **C** if they are cold-blooded:

- \_\_\_\_\_ 1. Mammals  
 \_\_\_\_\_ 2. Osteichthyes  
 \_\_\_\_\_ 3. Reptiles  
 \_\_\_\_\_ 4. Aves  
 \_\_\_\_\_ 5. Amphibians  
 \_\_\_\_\_ 6. Chondrichthyes

8) Which group is in the correct order from most general to most specific?

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| a) kingdom, phylum, species, order | b) kingdom, phylum, class, genus  |
| c) kingdom, order, class, species  | d) kingdom, order, species, genus |

9) In which kingdom is an organism classified if it lacks a membrane separating most of its genetic material from its cytoplasm?

- a) monera      b) protist      c) plant      d) animal

10) Organisms that make their own food, are multicellular and do not move are

- a) animals      b) protists      c) monera      d) plants      e) fungi