Characteristics of the Animal Kingdom

What do do if there are MULTIPLE classes of critters on the tables, see examples below, you can do any example not limited to the ones listed.

(Adapted from BSCS Blue 2001/ Lab Investigation 18)

Objective: to observe the external characteristics of various phyla of the animal kingdom.

Directions: Carefully examine the Animal phyla survey bottles. The specimens are very fragile. Please handle very carefully; do not shake. Observe the animals, record the common names in the correct column, and record your observations in the tables below.

Invertebrates										
Characteristics										
Exoskeleton	present or absent									
Body Symmetry	radial or bilateral or part spiral part bilateral	Most of the time you need just one answer because it fits for all examples of the phylum or classes								
Jointed walking legs	3 pairs or 4 pairs or more than 4 pairs or absent						1.3 prs 2. 3. 4.		1. 2. 3.	
Body Segmentation	present or absent						5.			
Tentacles	More than 4 present or 4 or fewer or absent						1.none 2. 3. 4.		1. 2. 3.	
Antennae	2 or more present or 1 pair present or absent						1. 1 set 2. 3. 4.		1. 2. 3.	
	Phylum and Name of organisms	Porifera ONE EXAMPLE	Cnidaria	Ctenophora ONE EXAMPLE	Platy-helminthes	Nematoda ONE EX.	Arthropoda Class: 1. Insecta 2. Arachnida 3. Diplopida 4. Crustacea 5. chilipoda 1. grasshopper 2. spider 3.millipede 3. shrimp 5. centipede	Annelida	Mollusca Class: 1.bivalvia 2.gastropoda 3.cephalopoda 1. clam 2. snail 3. squid	Echino-dermata ONE EX.

Vertebrates		Name of organisms							
Skin Structures	hair present or feathers present or scales or none of the above								
Appendages	wings present or legs present or fins present or none of the above								
Skeleton	Bony or cartilaginous								
Teeth	present or absent								
Please note: Phylum Chordata is sometimes split into three phyla	Phylum/Class and name of organism (note you may have to look up information in your text book)	Phylum Uro-chordata	Phylum Cephalo-chordata	Phylum Craniata/ Class Chon-drichthyes	Phylum Craniata/ Class Osteichthyes	Phylum Craniata/ Class Amphibia	Phylum Craniata/ Class Reptilia	Phylum Craniata/ Class Aves (now a sub-class of Reptilia)	Phylum Craniata/ Class Mammalia

ONLY need one example of each of the vertebrates.

Post Laboratory Questions:

1. What features or characteristics were the most helpful in determining whether an animal was an invertebrate or vertebrate?

2. What are the advantageous and disadvantages of using preserved specimens versus observing animals in their natural environment?

3. Make a table listing the phyla and/or class of the organisms you observed and the most distinguishing characteristics of that phyla or class.