1. All living organisms are classified in the Linnaean hierarchy. For one of the organisms we studied in lab (select your favorite), research its classification on the Internet (include the web citation used). Provide the common name (if known) and then the Linnaean classification, domain through genus. (0.5 pt)

2. What is a dichotomous key and how is it used? Name the phylum and class of one of the unknowns (include the number) that you identified. (1 pt)

3. In lab we studied representatives from five invertebrate phyla and seven vertebrate classes. For each of these groups answer the questions.

   PORIFERA: (0.5 pt)
   a) Why are sponges considered the most primitive animal phylum?

   b) What is the difference between soft sponges and hard sponges?

   CNIDARIA: (0.5 pt)
   a) What unique feature is used by members of this phylum to capture prey?

   b) Name the two body plans seen in this phylum and give an example (organism) of each.
MOLLUSCA:  
(a) Name the three classes of mollusks we studied, and give an example of each.

(b) Of the seven evolutionary trends, which ones do members of this group possess?

ARTHROPODA:  
(a) Of the seven evolutionary trends, which two do members of this group possess that are absent in more primitive groups?

(b) What type of body support do arthropods have, and what is it composed of?

ECHINODERMATA:  
(a) The body symmetry of the adults and larval young in this group are different. What type of symmetry is seen in each form?

(b) Explain why echinoderms are considered to be the closest group (evolutionarily) to the vertebrates.

CHORDATA (vertebrates):  
(a) Of the classes of vertebrates that we studied, which are exclusively aquatic?

(b) Which vertebrate classes develop from an amniotic egg?

4. What does it mean if an animal is ‘endothermic’. List all of the animal classes you saw in lab that are endothermic.