**Reading from handouts:**

“Phylum Echinodermata”  p. 489-490

"Phylum Mollusca" p. 482-485

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|  | “The Pinnacle of Adaptation and Diversity:  Phylum Arthropoda p. 485 |

**Questions to complete from handouts:**

Page 480 questions 2-8

Page 480 questions 9-15

**Other questions to complete:**

1. Why are clams only found in bodies of water containing fish?
2. Describe two defense mechanisms of squids.
3. Explain how the skeleton of an echinoderm is different than that of the mollusk.
4. In an attempt to reduce starfish populations, fisherman used to cut up the ones that they caught and throw them back into the water.  Was this an effective method?  Why or why not?

You may have to do some thinking and exploring to find the answers to some of these questions.

1. Based on a single structural characteristic, what is the easiest way to distinguish:

a) an arachnid from an insect

b) a crustacean from any other arthropod

c) a centipede from a millipede

1. Arthropods are well known for some of their structural adaptations which help them to survive in a particular niche.  Describe one structural adaptation for each of the following insects that help it survive in its particular niche.

a) grasshopper

b) mosquito

c) butterfly

d) wasp

1. A hard exoskeleton is one of the general characteristics of all arthropods.

a) What would be some advantagees of having an exoskeleton?

b) What would be some disadvantages of having an exoskeleton?

1. Their large numbers and high diversity prove the success of insects.  Explain at least four general adaptations of insects that have made them so successful.
2. Some arthropods can be beneficial or useful to their ecosystems or to humans and some could be harmful.  Give two examples of each.  (Try to use Saskatchewan or your own area as the source of your examples.)

***This Friday (June 4) you will have a quiz. Quiz will be based on these questions and these Phyla!***