Selected Review Questions Chapter 16

# 16.1

1. List the major characteristics that distinguish Arthropoda from the other phyla in kingdom Animalia.

2. List some advantages and disadvantages of an exoskeleton.

# 16.2

1. What characteristics distinguish crustaceans from other arthropods?

2. In the nine life processes of animals below, briefly list how a crayfish accomplishes each of these processes and include structure names.

* Movement
* Protection/Support exoskeleton of chitin, chelipeds; can regenerate limbs
* Eating/Digestion
* Respiration
* Circulation
* Excretion green glands act like kidneys, wastes excreted through a pore near the mouth
* Response Structures
* Reproduction

3. List three crustaceans other than the crayfish.

# 16.3

1. List several characteristics that distinguish the class Arachnida from the other classes in phylum Arthropoda.

4. List three arachnids other than the spider.

# 16.4

1. What characteristics separate the class Insecta from other classes of the phylum Arthropoda?

5. Describe the respiration of insects.

.

7. List the steps in incomplete metamorphosis and give several examples of insects that have incomplete metamorphosis. Do the same for complete metamorphosis.

8. What controls the molting process?

# 16.5

1. Give two examples of insects in each of the following insect orders:

* Coleoptera-
* Diptera-
* Hymenoptera-
* Lepidoptera-
* Odonata-
* Orthoptera-

2. What are the three castes seen in the social insect? What are their functions within the insect colony?

3. What characteristics separate insects into their various orders?.

# Vocabulary 16

Social insects

Complete v incomplete metamorphosis (stages)

Pheromones

Spiracles

Mandibles

Tracheae

Insects

Arachnids

Antennae

Spinnerets

Arthropod

Crustacean

Head, thorax, abdomen

Appendages

Molting

Compound eyes