

Sec: \_\_\_\_\_ Name: \_\_\_\_\_

Experiment: Crayfish -An Example of Arthropods  
(B. Science 10-I-62)

Purpose: To learn the parts of the crayfish and to know their function.

Materials: crayfish      dissecting tray  
dissecting kit

Methods:

1. Take the quiz on identification and/or function of the listed terms.
2. Examine a crayfish, identify and label the following on the diagram. Write the function of each beside each word:

antenna	maxilla
rostrum	antennule
maxilliped	compound eye
	cephalothorax
	carapace
	uropod

mouth  
mandible  
cheliped  
flipper

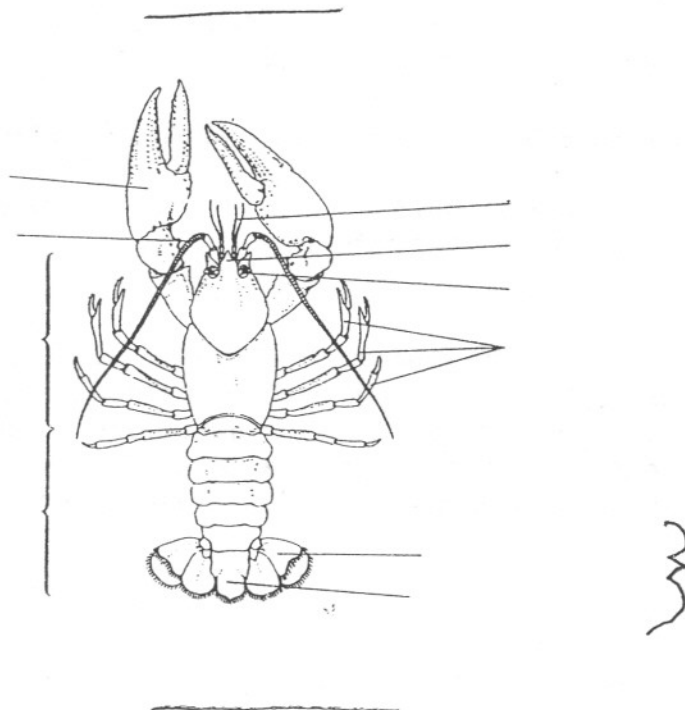
walking legs  
swimmerets  
telson  
abdomen

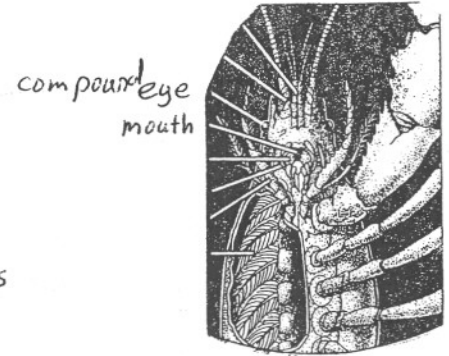
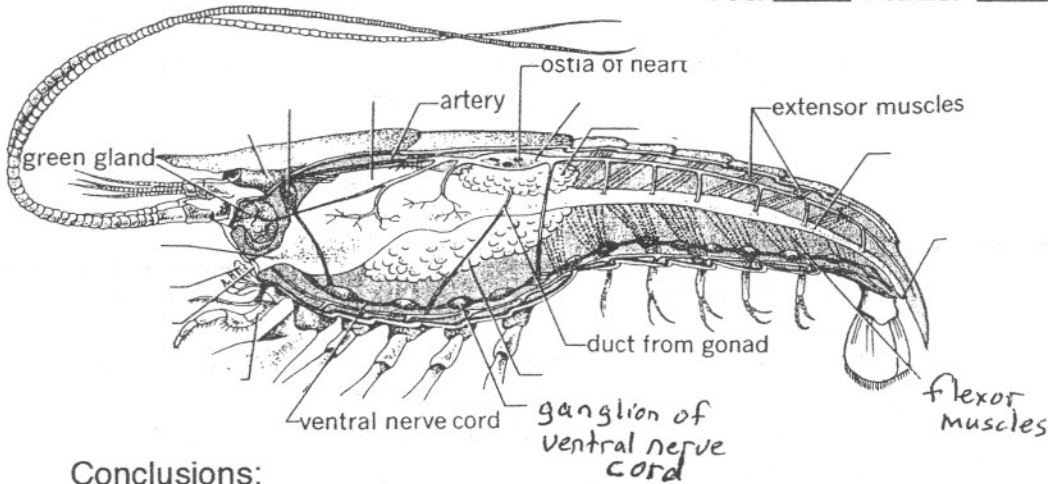
3. Carefully remove the carapace (shell) and study the internal organs. Identify and label the following on the diagram. Write the function of each:

gills	intestine	brain
stomach	gonads	esophagus
heart	digestive gland	green gland
anus		

4. Label anterior and posterior ends.

Results:





Conclusions:

1. What phylum do crayfish belong?
2. Describe how crayfish capture their food.
3. Describe the circulation in crayfish.
4. Describe respiration in the crayfish.
5. Describe the nervous system and sense organs.
6. Describe how crayfish reproduce.

Discussion:

1. List the external characteristics of an arthropod that make it different from other animals.
2. Name the three classes of Uniramia and give examples of each.
3. What are some advantages and disadvantages of an exoskeleton?  
 adv. \_\_\_\_\_ disadv. \_\_\_\_\_
4. How do the gills in the crayfish carry on respiration?
5. To what stimuli is the crayfish sensitive, and what structures help in the sensitivity?
6. We have discussed various animals and how blood circulates within them. Distinguish between open and closed circulation.  
 open \_\_\_\_\_  
 closed \_\_\_\_\_
7. A couple of days ago we addressed the symbolism of jewelry (pearls being part of jewelry) and then inferred how we as Christians should dress. Paul in the midst of stating how Christians ought to live godly lives in the face of heretical teachings and a bad pagan environment gives direct advice on what our dress should be like. What is this advice in not only reference to dress but also our behavior (1 Tim 2: 9-10)?