Crayfish Dissection

Please answer the following questions **in complete sentences**.

EXTERNAL ANATOMY:

1. How many segments does the crayfish have in its abdomen?(don't count the telson and uropod)

2. What is the structural difference between a compound eye and your eye?

3. What is the difference in structure of the antennae and antennules?

4. How many antennae does the crayfish have?

5. What is the difference between the function of the antennae and antennules?

6. Describe the structure of the mandibles.

7. In which direction do the mandibles move?

8. How is this different from the way your jaws move?

9. How does the shape of the maxillipeds differ from the walking legs?

10. How is the cheliped shaped to fit its function?

11. How do the walking legs differ in shape as you move from front to back?

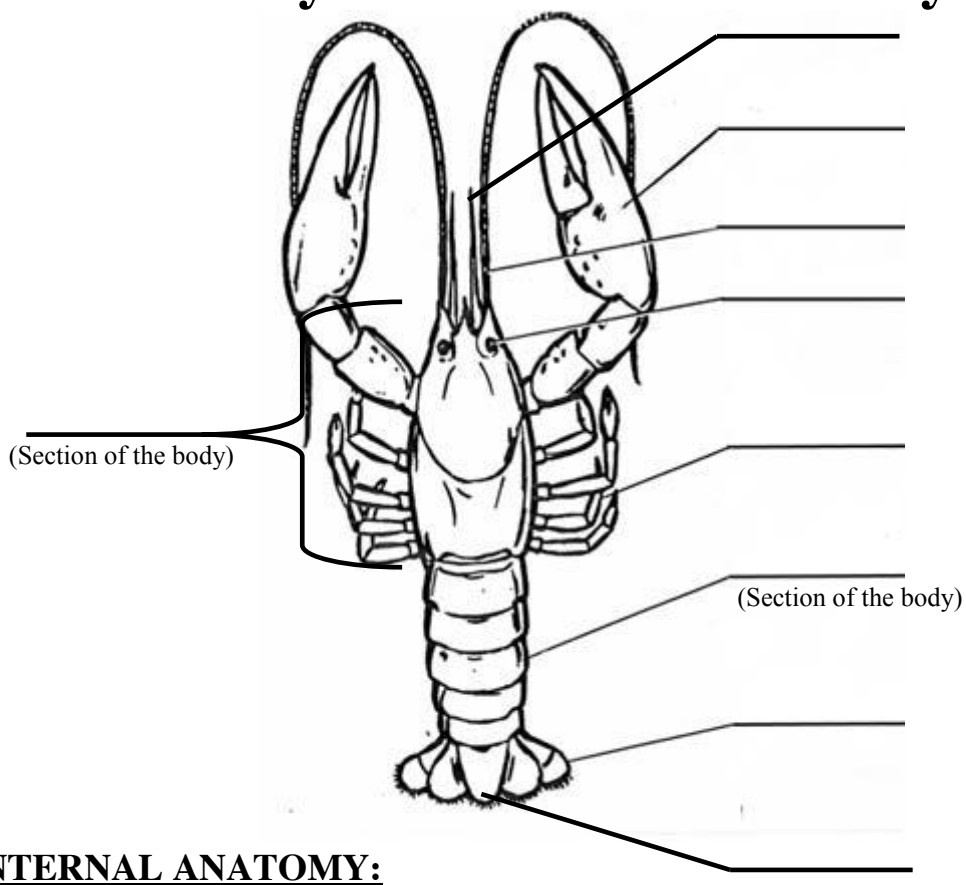
12. What are the functions of the appendages that are found on the cephalothorax? (all of the ones you have already observed; use a sentence or 2 to describe these)

13. What is the sex of your crayfish? (male or female; NOT boy or girl!)

14. How did you determine the sex of your crayfish (what structures did it possess)?

15. **How** did you see that **form fits function** in the crayfish appendages? (2 PTS)

Crayfish External Anatomy



INTERNAL ANATOMY:

16. Why are the gills branched (think about their function)? (2 PTS)

17. To which structures are the gills attached?

18. What is the advantage of the gills being attached to the walking legs? (2 PTS)

19. How do the digestive glands help with digestion?

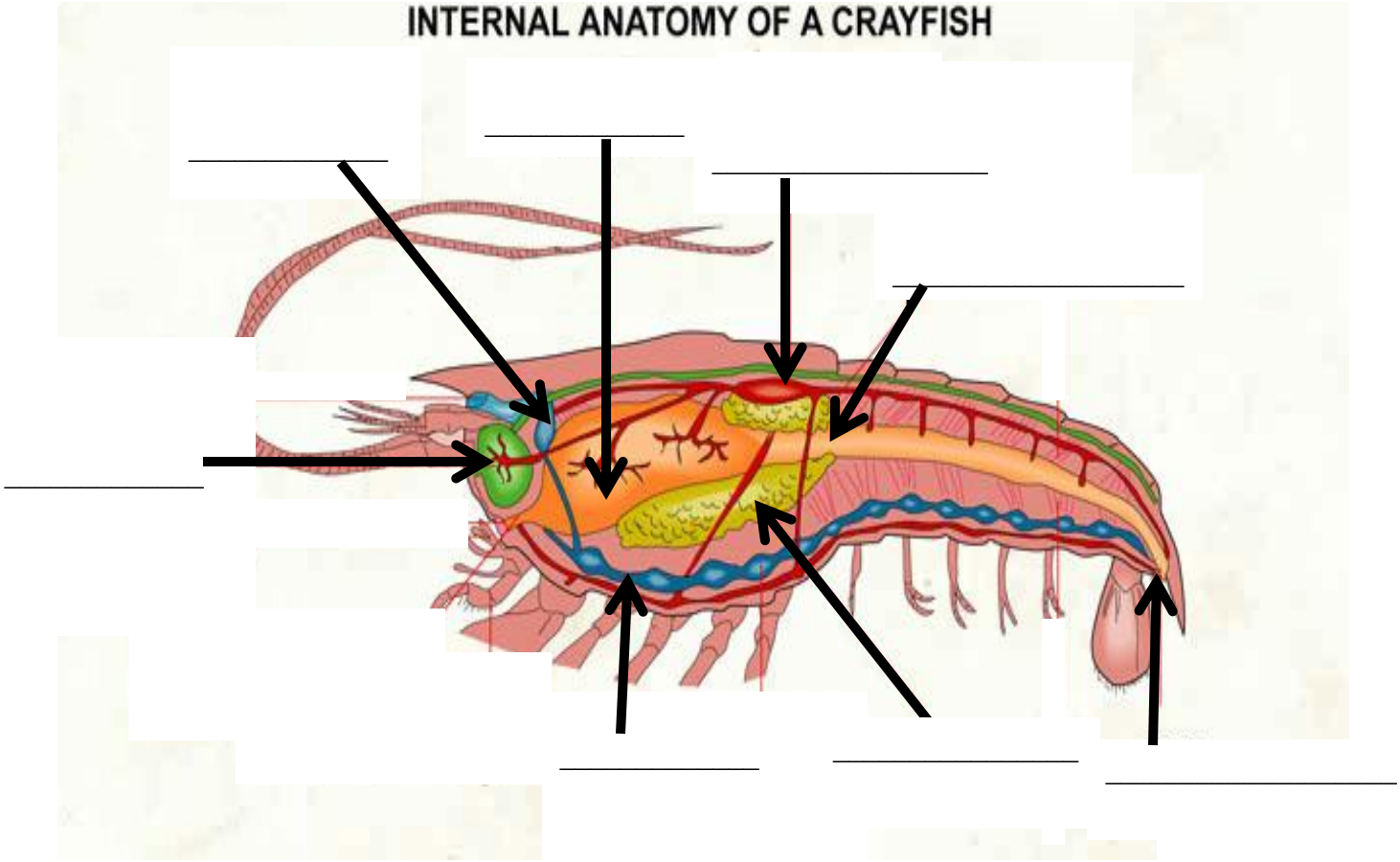
20. Why is it good to have the digestive glands attached to the intestine? (2 PTS)

21. How do the hard, tooth-like structures aid the stomach in digestion? (2 PTS)

22. What color are the green glands? (They are NOT green.)

23. What is the function of the green glands?

24. Why is the nerve cord on the bottom of its body? (2 PTS)



CRAYFISH CONCLUSION: (10 PTS)

You have just finished examining the internal and external crayfish anatomy. Looking back on this dissection and observation, please write a 3-paragraph conclusion on a separate sheet of paper using the following outline:

- **Paragraph 1:**
  - **What is an invertebrate**
  - **What is an arthropod**
  - **Thesis/topic sentence that tells why we are dissection crayfish (think about the first 2 parts of his paragraph)**
- **Paragraph 2:**
  - **Symmetry**
  - **Organs**
  - **Digestion**
  - **Movement**
- **Paragraph 3:**
  - **How does "Form fit function" in the crayfish?**
  - **Why is the arthropod considered advanced?**