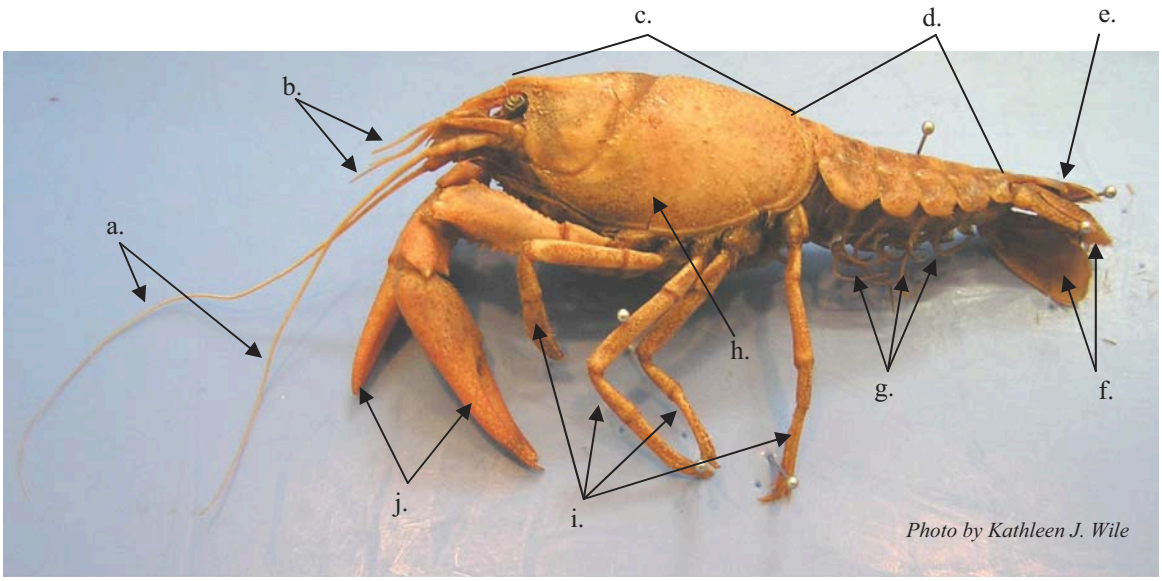
STUDY GUIDE TO MODULE #12

1. Define the following terms:

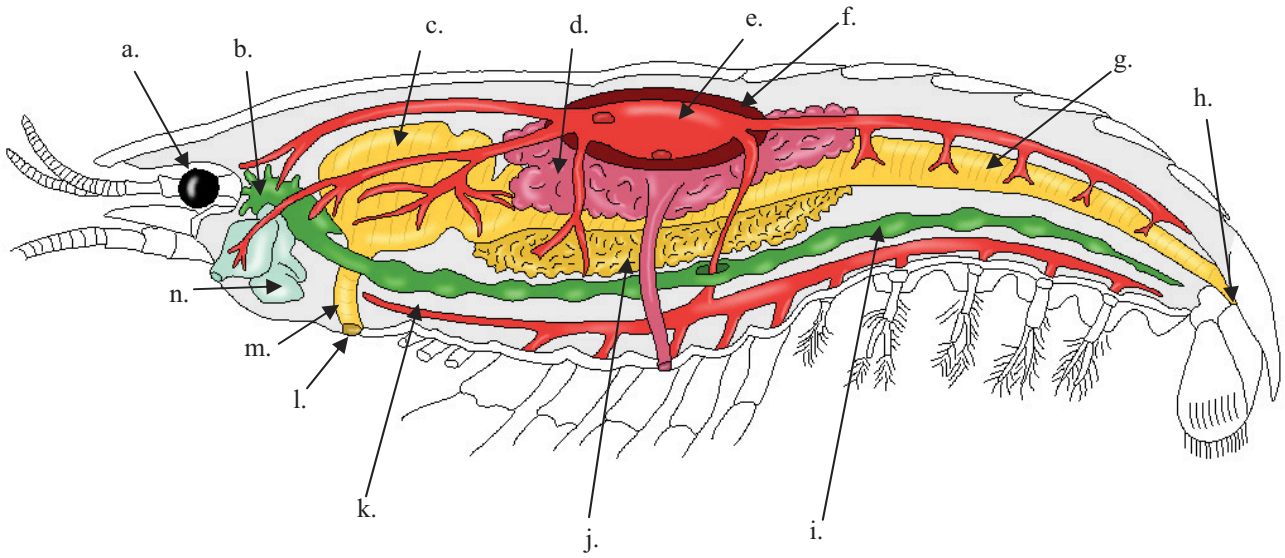
a. Exoskeleton
b. Molt
c. Thorax
d. Abdomen
e. Cephalothorax
f. Compound eye
g. Simple eye
h. Open circulatory system
i. Statocyst
j. Gonad
k. Complete metamorphosis
l. Incomplete metamorphosis

2. Name the five common characteristics among the arthropods.

3. Identify the structures in the following diagram:



4. Identify the organs in the following diagram:



5. Explain the flow of blood in a crayfish, starting from the pericardial sinus.

6. What purpose does the green gland serve?

7. What structures (besides the gills and gill chamber) are vitally important for respiration in a crayfish?

8. What happens when a crayfish loses a limb?

9. Where do the fertilized eggs of a crayfish go?

10. Why do arthropods molt?

11. What two appendages are responsible for taste and touch in a crayfish?

12. What five characteristics set arachnids apart from the other arthropods?

13. What are the three basic types of webs that spiders spin?

14. Do all spiders use their silk to spin webs?

15. Why are the spider's lungs called book lungs?

16. What four characteristics set insects apart from the other arthropods?

17. Why don't insects have respiratory systems?

18. If an insect goes through a pupa stage, does it perform complete metamorphosis or incomplete metamorphosis?

19. What four types of wings exist among insects?

20. For each letter below, indicate the order of insects being described:

a. Insects with two leather-like wings and two membranous wings
b. Social insects with membranous wings
c. Insects with two membranous wings and two membranous balancers
d. Insects with two horny wings and two membranous wings
e. Insects with scaled wings