

Section 28–2 Groups of Arthropods

(pages 720–725)

Key Concepts

- How are arthropods classified?
- What are the distinguishing features of the three major groups of arthropods?

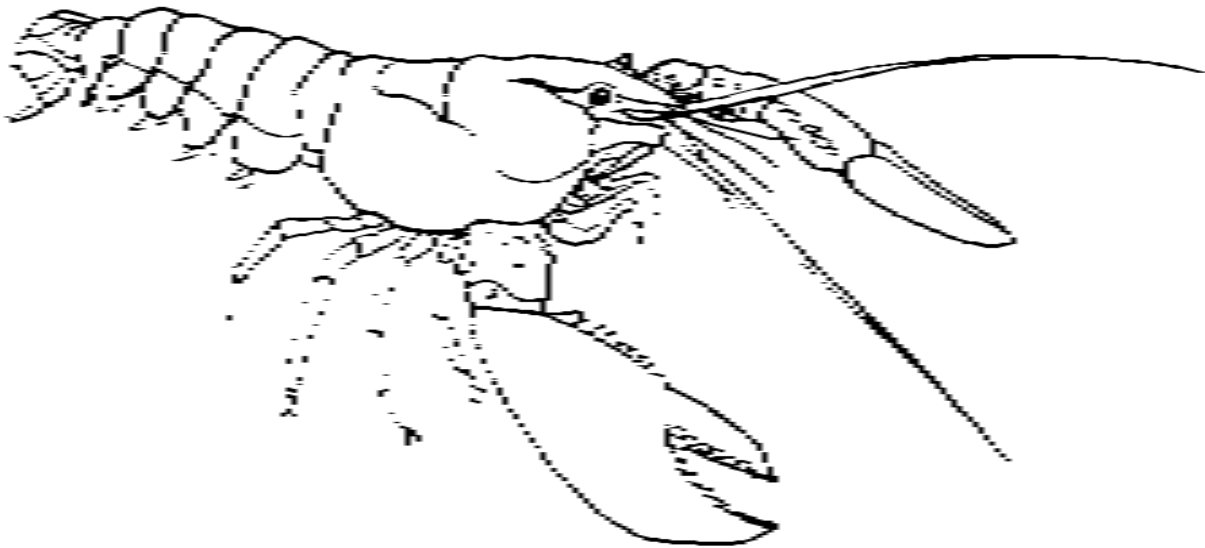
Introduction (page 720)

1. What characteristics do biologists use to classify arthropods? _____

2. What are the three major groups of arthropods?
 - a. _____
 - b. _____
 - c. _____

Crustaceans (pages 720–721)

3. Circle the letter of each description of structures that crustaceans typically have.
 - a. two pairs of branched antennae
 - b. four or five body sections
 - c. chewing mouthparts called mandibles
 - d. two or three body sections
4. Label the two body sections of a typical crustacean.



5. The largest group of crustaceans is the _____.
6. Complete the table about crustacean body parts.

CRUSTACEAN BODY PARTS

Body Part	Description
Thorax	
	Fusion of the head with the thorax
Abdomen	
	The part of the exoskeleton that covers the cephalothorax
Mandible	
	First pair of legs in decapods, which bear large claws
Swimmerets	

7. Circle the letter of each sentence that is true about barnacles.
 - a. They are sessile.
 - b. They have an outer, shell-like covering.
 - c. They move backward by snapping a tail.
 - d. They attach themselves to rocks and marine animals.

Spiders and Their Relatives (pages 722–724)

8. Horseshoe crabs, spiders, ticks, and scorpions are grouped as _____.
9. Circle the letter of each description of structures that chelicerates have.
 - a. four or five pairs of legs
 - b. three or four body sections
 - c. two pairs of branched antennae
 - d. mouthparts called chelicerae
10. What is the function of the chelicerae? _____

11. The appendages near the mouth that are usually modified to grab prey are called _____.
12. How do spiders respire? _____

13. What arthropods do arachnids include? _____

14. How are horseshoe crabs like and unlike crabs? _____

15. Why must spiders liquefy their food to swallow it? _____

16. Circle the letter of each sentence that is true about spiders and silk.
- a. Spiders spin silk into cocoons for eggs.
 - b. Spinning webs seems to be a programmed behavior.
 - c. Spinnerets are organs that contain silk glands.
 - d. Tarantulas cannot produce silk.
17. Is the following sentence true or false? Mites and ticks are often parasitic.

18. Scorpions have pedipalps that are enlarged into _____.
19. What do ticks transmit that cause Rocky Mountain spotted fever and Lyme disease?

Insects and Their Relatives (page 725)

20. Centipedes, millipedes, and insects are all grouped as _____.
21. Circle the letter of each description of structures that uniramians have.
- a. one pair of antennae
 - b. unbranched appendages
 - c. mouthparts called chelicerae
 - d. jaws
22. Why are centipedes restricted to moist or humid areas? _____

23. How many pairs of legs does each body segment of most centipedes have? _____

24. How many pairs per segment do millipedes have?

