28–1 SECTION REVIEW

1. What are three characteristics of arthropods? Name the four subphyla of arthropods.
2. Compare complete and incomplete metamorphosis.
3. Describe the different types of organs that are used in arthropod respiration.
4. **Critical Thinking—Making Inferences** Terrestrial arthropods often have valves that can open and close the spiracles. How are these valves an adaptation to life on land? *(Hint:* What is the function of the stomata on leaves?*)*

28–2 SECTION REVIEW

1. What are chelicerates? Name and give examples of the two main groups of chelicerates.
2. What is silk? How do spiders use silk?
3. **Critical Thinking—Summarizing Information** How are chelicerae modified for feeding in spiders? In ticks?

28–3 SECTION REVIEW

1. What is a cephalothorax?
2. Describe the types of appendages on crayfish and give their functions.
3. **Critical Thinking—Applying Concepts** Suppose you want to catch a crayfish with a net. Should you try to scoop it up head first or tail first? Explain.

28–4 SECTION REVIEW

1. Compare the body plans and feeding habits of millipedes and centipedes.
2. Describe the basic body plan of an insect.
3. Give three specific examples of why and how insects communicate.
4. Explain how the mouthparts of bees, mosquitoes, and butterflies are adapted to different food sources.
5. How does the waggle dance of honeybees convey information about the location of a food source?
6. **Critical Thinking—Relating Cause and Effect** If all worker bees are females, why is the queen the only egg-layer in the colony?

28–5 SECTION REVIEW

1. Why are certain insects essential to agriculture?
2. How are arthropods beneficial to other living things? Give specific examples.
3. **Critical Thinking—Relating Concepts** Name three dangerous or destructive arthropods and explain how they cause problems for humans.