

Test Prep Pretest

1. a
2. c
3. b
4. c
5. a
6. a
7. d
8. c
9. b
10. exoskeleton
11. Lyme disease
12. bilateral
13. complete metamorphosis
14. adult, egg
15. pupa, chrysalis
16. The exoskeleton protects and prevents the body from drying out; arthropods are small and show a wide range of dietary and habitat specializations.
17. Possible answers include a cephalothorax hardened into a carapace, an abdomen with appendages, mandibles, two pairs of antennae, gills, and a nauplius larva.
18. Millipedes have two pairs of legs attached to most body segments. Centipedes have one pair of legs attached to each body segment.
19. The endoskeleton is composed of calcium-rich ossicles that may be fused to provide protection. It also contains proteins that make it flexible. The ossicles provide sites for muscle attachment and may bear spines.
20. Mouthparts are adapted for biting and chewing, for piercing and sucking, and for sponging and lapping.

Quiz**SECTION: ARTHROPODS**

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|------|-------|
| 1. b | 6. e |
| 2. d | 7. d |
| 3. a | 8. b |
| 4. f | 9. a |
| 5. c | 10. c |

SECTION: ARACHNIDS AND CRUSTACEANS

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|------|------|
| 1. f | 6. c |
| 2. e | 7. a |
| 3. a | 8. d |

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|------|-------|
| 4. d | 9. a |
| 5. b | 10. a |

SECTION: INSECTS

- | | |
|------|-------|
| 1. c | 6. d |
| 2. f | 7. a |
| 3. e | 8. c |
| 4. b | 9. d |
| 5. a | 10. b |

SECTION: ECHINODERMS

- | | |
|------|-------|
| 1. f | 6. b |
| 2. e | 7. b |
| 3. a | 8. c |
| 4. d | 9. d |
| 5. c | 10. a |

Chapter Test (Basic)

- | | |
|------------------|----------------|
| 1. T | 18. book lungs |
| 2. T | 19. lobster |
| 3. F | 20. chelipeds |
| 4. F | 21. one |
| 5. T | 22. myriapods |
| 6. c | 23. uropods |
| 7. a | 24. molting |
| 8. c | 25. nymph |
| 9. a | 26. tracheae |
| 10. b | 27. spiracles |
| 11. 3 | 28. b |
| 12. 1 | 29. d |
| 13. 4 | 30. e |
| 14. 2 | 31. a |
| 15. 5 | 32. f |
| 16. pedipalps | 33. c |
| 17. poison gland | |

Chapter Test (General)

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|-------|-------|
| 1. c | 11. c |
| 2. i | 12. a |
| 3. f | 13. a |
| 4. g | 14. d |
| 5. a | 15. c |
| 6. b | 16. d |
| 7. d | 17. d |
| 8. j | 18. b |
| 9. e | 19. b |
| 10. h | 20. a |

Chapter Test (Advanced)

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|------|
| 1. c |
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TEACHER RESOURCE PAGE

2. e
3. a
4. h
5. g
6. b
7. d
8. f
9. a
10. b
11. b
12. d
13. d
14. head, thorax, abdomen (in any order)
15. sea urchins
16. bilaterally, radially
17. respiratory, circulatory (in either order)
18. pedipalp
19. poison gland
20. book lungs
21. Possible answers include jointed appendages; segmentation; a distinct head; compound eyes; an exoskeleton; respiration by gills, tracheae, or book lungs; an open circulatory system; excretion through Malpighian tubules; and wings.
22. The functions of the water-vascular system include movement (locomotion), feeding, gas exchange, and waste excretion.
23. Like all arthropods, a grasshopper cannot grow without molting. Therefore, the grasshopper would be unable to grow any larger than it was when it hatched out of the egg. It would not develop into an adult.
24. Possible answers include five pairs of legs, large pincers called chelipeds, swimmerets used in swimming and reproduction, paddlelike appendages called uropods.
25. The exoskeleton is thin and flexible where the joints of the appendages are located. Muscles attached to interior surfaces of the exoskeleton pull against it, causing the joints to bend.