

Choose the most correct answer:

1. In arthropods, _____ of the body plan and appendages allows natural selection to act on independent structures, contributing to their diversification.
 - a. cephalization
 - b. torsion
 - c. segmentation**
 - d. ecdysis
2. What Arthropoda lineage is now extinct?
 - a. Trilobita**
 - b. Chelicerata
 - c. Crustacea
 - d. Myriapoda
3. During each _____ period, inorganic salts (such as calcium carbonate) are withdrawn from the exoskeleton and stored in tissues as reserves.
 - a. postmolt
 - b. growth period
 - c. premolt**
 - d. larval
4. In arthropods, the exoskeleton's procuticle contains _____, which is bound with protein.
 - a. chitin**
 - b. elastin
 - c. dermatine
 - d. mucogine
5. The _____ and _____ are appendages characteristic of Chelicerata.
 - a. chelipeds, swimmerets
 - b. chelicerae, pedipalps**
 - c. chelicerae, telson
 - d. mandible, walking legs
6. The problem of growth despite a nonexpansible exoskeleton is solved by the process of _____.
 - a. cephalization
 - b. torsion
 - c. secretion
 - d. ecdysis**
7. In the Pycnogonida, the head lacks compound eyes and has an elongate suctorial _____ for feeding on soft-bodied organisms.
 - a. rostrum
 - b. proboscis**
 - c. telson
 - d. opisthosoma
8. The compound arthropod eye is composed of hexagonal units called _____.
 - a. ommatidia**
 - b. naupliuses
 - c. neural flashlights
 - d. neonomons
9. Ostracods and Clam Shrimp are morphologically _____ with Bivalvia.
 - a. anomalous
 - b. divergent
 - c. homologous
 - d. convergent**
10. Scorpion's pincers are modified _____.
 - a. pedipalps**
 - b. chelicerae
 - c. 1st pair of walking legs
 - d. chelipeds

11. Ecdysis occurs most frequently during the _____ of arthropods.
 - a. **larval stages**
 - b. adulthood
 - c. embryonic stages
 - d. aquatic stage

12. Which animal group is most closely related to the Horseshoe Crabs?
 - a. Crustacea
 - b. **Arachnida**
 - c. Maxillopoda
 - d. Decapoda

13. A large suctorial proboscis and a greatly reduced abdomen attached to an elongated cephalothorax is characteristic of the _____.
 - a. **sea spiders**
 - b. eurypterids
 - c. scorpions
 - d. horseshoe crabs

14. The Merostomata breathe by moving the opercula to aerate their _____.
 - a. lungs
 - b. book lungs
 - c. **book gills**
 - d. gills

15. Barnacles are highly modified, sessile, filter-feeding _____.
 - a. Molluscs
 - b. **Crustaceans**
 - c. Chelicerates
 - d. Insects

16. Crustaceans have two pair of _____.
 - a. eyes
 - b. walking legs
 - c. **antennae**
 - d. ears

17. _____ appendages have extensions known as the exopod and endopod.
 - a. Uniramous
 - b. **Biramous**
 - c. Tetraramous
 - d. Triramous

18. In Decapods, the 1st pair of walking legs are modified into _____.
 - a. poison fangs
 - b. the telson
 - c. **chelipeds**
 - d. swimmerets

19. The _____ have a pair of appendages extending from the first body segment modified to form poison claws, which they use to kill their prey.
 - a. Hymenoptera
 - b. Decapoda
 - c. **Chilopoda**
 - d. Onychophora

20. The heavier armor of _____ has likely evolved in a response to their slow moving, herbivorous lifestyle.
 - a. Chilopoda
 - b. Nematoda
 - c. Holothuroidea
 - d. **Diplopoda**