

Sample Questions

1. In arthropods, the exoskeleton's procuticle contains the polysaccharide \_\_\_\_\_.
  - a. chitin
  - b. elastin
  - c. dermatine
  - d. mucogine
2. Spiders have their \_\_\_\_\_ modified into fangs.
  - a. pedipalps
  - b. chelicerae
  - c. 1<sup>st</sup> pair of walking legs
  - d. cheliped
3. 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
4. \_\_\_\_\_ are the only arthropods with two pairs of antennae.
  - a. Protostomes
  - b. Crustacea
  - c. Chelicerata
  - d. Arthropoda
5. In Arthropods, \_\_\_\_\_ are lost in the ancestor of millipedes and centipedes.
  - a. paired appendages
  - b. tracheal spiracles
  - c. compound eyes
  - d. antennae
6. In the Diptera, the flight muscles have \_\_\_\_\_.
  - a. indirect attachment
  - b. direct attachment to the wings
  - c. both indirect and direct attachments
  - d. been lost
7. Among the insects with wings, the \_\_\_\_\_ does not bear wings.
  - a. metathorax
  - b. mesothorax
  - c. prothorax
  - d. none of the above
8. Nematode worms use \_\_\_\_\_ within the pseudocoel to help move through their environment.
  - a. hydrostatic pressure
  - b. calcareous ossicles
  - c. spicules
  - d. rigid endoskeleton
9. The common ancestor of Osteichthyes evolved an \_\_\_\_\_ to cover the gills.
  - a. atrium
  - b. pharyngeal slits
  - c. claspers
  - d. operculum
10. What characteristic is a synapomorphy that links Hemichordata & Chordata?
  - a. post-anal tail
  - b. notochord
  - c. endostyle
  - d. dorsal hollow nerve cord