

General characters of the phylum Arthropoda

Important points:

- ✓ Arthropoda: Gr. *Arthros*-jointed, *podos*-foot.
- ✓ Largest group of animal kingdom.
- ✓ Most dominant invertebrate animals in earth.
- ✓ Constitute nearly 80% of the total animals known.
- ✓ More than 9, 00,000 species of arthropods in the world.
- ✓ Most of the members have undergone little change during their evolutionary history.

General characters:

1. The body is bilaterally symmetrical, triploblastic and metamerically segment.
2. Appendages jointed with varied functions as jaws, gills, legs etc.
3. Exoskeleton of dead chitinous cuticle shed at intervals called ecdysis or moulting.
4. Body divisible in to head, thorax and abdomen. Head and thorax often fused to form cephalothorax.
5. True coelom reduced and largely replaced by blood filled haemocoel.
6. Muscle mostly striated, usually capable of rapid contraction.
7. Digestive system complete with mouth and anus. Mouth parts adopted for various modes of feeding.
8. Circulatory system open with heart, arteries and blood sinuses or haemocoel.
9. Respiration by general body surface, gills, tracheae or book lungs.
10. Excretory organs are green glands or Malpighian tubules.
11. Nervous system with a dorsal brain connected with a nerve ring to a double ventral nerve cord.
12. Sensory organs comprises of eyes (simple and compound), chemo and tactile receptors, balancing and auditory organs.
13. Sexes usually separate. Fertilization usually internal. Oviparous or ovoviparous.
14. Development direct or indirect with one to many larval stages. Parthenogenesis in some.
15. Parental care often well-marked.