

16.) Where are the sense organs located in a creature that shows cephalization? head region

17.) Which invertebrate phylum does each of the following belong to?

Creature	Phylum it belongs to	Creature	Phylum it belongs to
Starfish	Echinodermata	Jellyfish	Cnidaria
Sponge	Porifera	Mussel	Mollusca
Octopus	Mollusca	Lobster	Arthropoda
Earthworm	Annelida	Planaria	Platyhelminthes

18.) What type of protists are animals thought to have evolved from? Protozoa

19.) List four reasons why Arthropods are the most successful animal phylum? (See Textbook)

- ① Exoskeleton - protects body, attaches muscles, resists <sup>water loss</sup>
- ② Body segments and appendages adapted for a variety of tasks
- ③ Well developed nervous system - good coordination & responses
- ④ Variety of ways of obtaining nourishment (eg herbivorous, parasites, <sup>Carnivorous, etc.</sup>)

20.) List four reasons why insects are the most biologically successful class of organisms on the planet.

- ① Wide variety of adaptations for feeding (eg specialized mouth parts)
- ② Most small in size - can hide easily & occupy <sup>range of habitats</sup>
- ③ Movement - 6 legs and wings → allow insects to move well
- ④ Life cycle - 3 or 4 stages → less competition among young and <sup>adults</sup>

21.) What is the advantage of having both a mouth and an anus as opposed to only one digestive opening?

more efficient digestion - food enters one opening & waste leaves at the other.

22.) Name 1 invertebrate phylum that has one single digestive opening. Cnidaria, Platyhelminthes

23.) Name the phylum which the terms polyp and medusa are associated with. Cnidaria

24.) Name the phylum which uses nematocysts for catching food. Cnidaria

25.) What are the four features of all animals? multicellular heterotrophic

Sexual reproduction Motile at some stage of the life cycle.

Ingest & digest food in a central cavity (gut).