

Terrestrial Arthropods: The Conquerors Worksheet

Arthropoda means 'jointed foot' in Greek and refers to the jointed appendages of arthropods.

Arthropods, like all animals, first appeared in the sea, but they were the first animal group to invade land and even take to the skies. Once on land, arthropods adapted superbly to their environment and invaded every habitat.

Land arthropods include: spiders, scorpions, ticks, mite, centipedes, millipedes, and insects.

Features of the Phylum

- Hard exoskeleton made of chitin and protein
- Possess numerous jointed appendages and a segmented body
A key feature of the arthropod body plan lies in the development of myriad types of appendages (antennae, claws, wings, shields, mouthparts) that allow arthropods to exploit nearly every niche on Earth.
- Must molt to grow
Many arthropods molt their exoskeleton throughout their lives in order to keep growing. Immediately after molting, their new exoskeleton is soft, making them vulnerable to predation.

Key words and additional concepts

Detritus: Dead material broken down by bacteria and fungi.

Detritivores: Organisms that eat small particles of detritus.

Larva: A free-living, immature stage in the life cycle of many animals, often very different in appearance from the adult and living in a different environment.

Metamorphosis: The dramatic change in structure and lifestyle a larva undergoes when it becomes an adult. When an arthropod passes through specific developmental stages during molting, it is said to be metamorphosing. For example, an arthropod like a dragonfly can start life in a pond as a swimming larva and then metamorphose into a completely different looking, winged adult.

Pollination: Pollination is the process by which pollen (grains that contain male reproductive cells) is transferred to the female structure in plants, thereby enabling fertilization and sexual reproduction.