

Xyphosura

This Merostomata subclass includes horseshoe crabs. They are "living fossils" dating back nearly 400 million years.



Merostomata

These marine animals somewhat resemble the extinct trilobites. Most have remained relatively unchanged over 400 million years.



Pycnogonida

In "leggy" sea spiders, organs for digestion and reproduction that would normally be confined to the body extend into the legs.



Trilobita

Trilobites have been extinct for 240 million years. At one time, about 500 million years ago, they were among the most successful groups on earth.



Eurypterida

This entire subclass died out in the Great Permian Extinction, some 250 million years ago. The subclass included sea scorpions up to ten feet long.



Arachnida

Ticks, mites, spiders, and scorpions. Scorpions use their sting to defend themselves and to subdue large or otherwise challenging prey.



Crustacea

Crayfish and crabs have compound eyes and two pairs of antennae. They incorporate calcium carbonate into their exoskeletons, which stiffens their armor.



Insecta

About one million species of insects have been identified, but as many as 30 million may exist—more species than found in any other animal group.



Chilopoda

Centipedes have one pair of legs per segment and poor vision. These predators have a secret weapon up front—venom-injecting claws.



Symphyla

As adults, these centipede-like arthropods always have 12 pairs of legs. They are scavengers that live in soil and leaf mold and feed on decayed vegetation.



Diplopoda

Millipedes have two pairs of legs per body segment. They usually eat decaying leaves and wood and some emit toxins to discourage would-be predators.



Paupoda

These ancient, soft-bodied arthropods have no eyes, no heart, and no respiratory organs. They feed on the hyphae of fungi and the bodies of dead animals.