

Name: _____ Date: _____

Invertebrates: *What Is an Arthropod?*

Kingdom: *Animalia*

Phylum: *Arthropoda* [AHR thruh pahd uh], means "jointed foot."

Arthropods make up the largest **phylum** (group) of animals. Arthropods are adapted to live in almost every environment. Scientists believe there are over one million species.

Arthropod Features

Arthropods are animals that have **jointed appendages**. Appendages are structures that grow from the body. Your arms and legs are appendages. The appendages of arthropods include jointed legs, claws, pincers, and antennae. All arthropods have **segmented bodies** with a hard covering called an **exoskeleton**. The segments of some arthropods are fused together to form two or three body regions. The three body regions are the **head**, **thorax**, and **abdomen**. The exoskeleton is an external skeleton that covers and protects the body. It is made of a tough material called **chitin**. The chitin is coated with a waxy substance that makes the exoskeleton waterproof and prevents dehydration by keeping moisture in the animal's body. The exoskeleton doesn't grow with the animal as a human's skeleton does. It must be shed as the arthropod becomes too large. The old skeleton is replaced with a new one in a process called **molting**. The new exoskeleton is soft and takes some time to harden. The arthropod is not well-protected from predators during this time. Most arthropods undergo four to seven molts before reaching adult size.

Arthropods are divided into several classes, the largest of which is **insecta**. There are more insects than any other group of invertebrates. Insects include flies, moths, grasshoppers, mosquitoes, ants, bees, and many others. In addition to insects, the arthropods also include arachnids [uh RAK nids], crustaceans [krus TAY shuns], and myriapods [MIR ee uh pahds]. **Arachnids** include spiders, mites, ticks, and scorpions. **Crustaceans** include lobsters, shrimp, crabs, and crayfish. **Myriapods** include centipedes and millipedes.

