

Parts of an Insect Body

By Jackie Carroll, eHow Contributor



All insects have three main body parts: the head, thorax and abdomen.

Insects are a diverse group of creatures that all have the same main body parts, which distinguish them as a member of the class Insecta. All insects have six legs and a body divided into three segments called the head, thorax and abdomen.



1. Head

An insect's head features his eyes, antennae and mouth parts. An insect's head contains the brain and mouth parts, antennae and eyes. An insect has either chewing or sucking mouth parts. Chewing mouth parts cut and grind food. Sucking mouth parts include a beak, or proboscis, that the insect uses to pierce plant or animal tissue and suck out fluid. A mosquito is a familiar example of an insect with sucking mouth parts. Butterflies and moths also have sucking mouth parts, but instead of piercing tissue they sip nectar. Bees have a combination of chewing and sucking mouth parts.

The eyes and antennae are the two major sensory organs on the head. The antennae are used for touch, smell and sometimes hearing. Insects have two large compound eyes, which have several individual lenses. Each lens produces a separate picture. Although an insect's vision is not as sharp and clear as ours, it is much better at judging distances and detecting even the slightest motion.

2. Thorax

The middle segment of the insect body is called the thorax. It is divided further into three smaller segments, each having a pair of legs. All insects have three pairs of legs, which can take many forms. The front legs may be designed for catching prey or digging. The back legs are sometimes modified for jumping or swimming. Some insects, such as grasshoppers, use their back legs to make sounds.

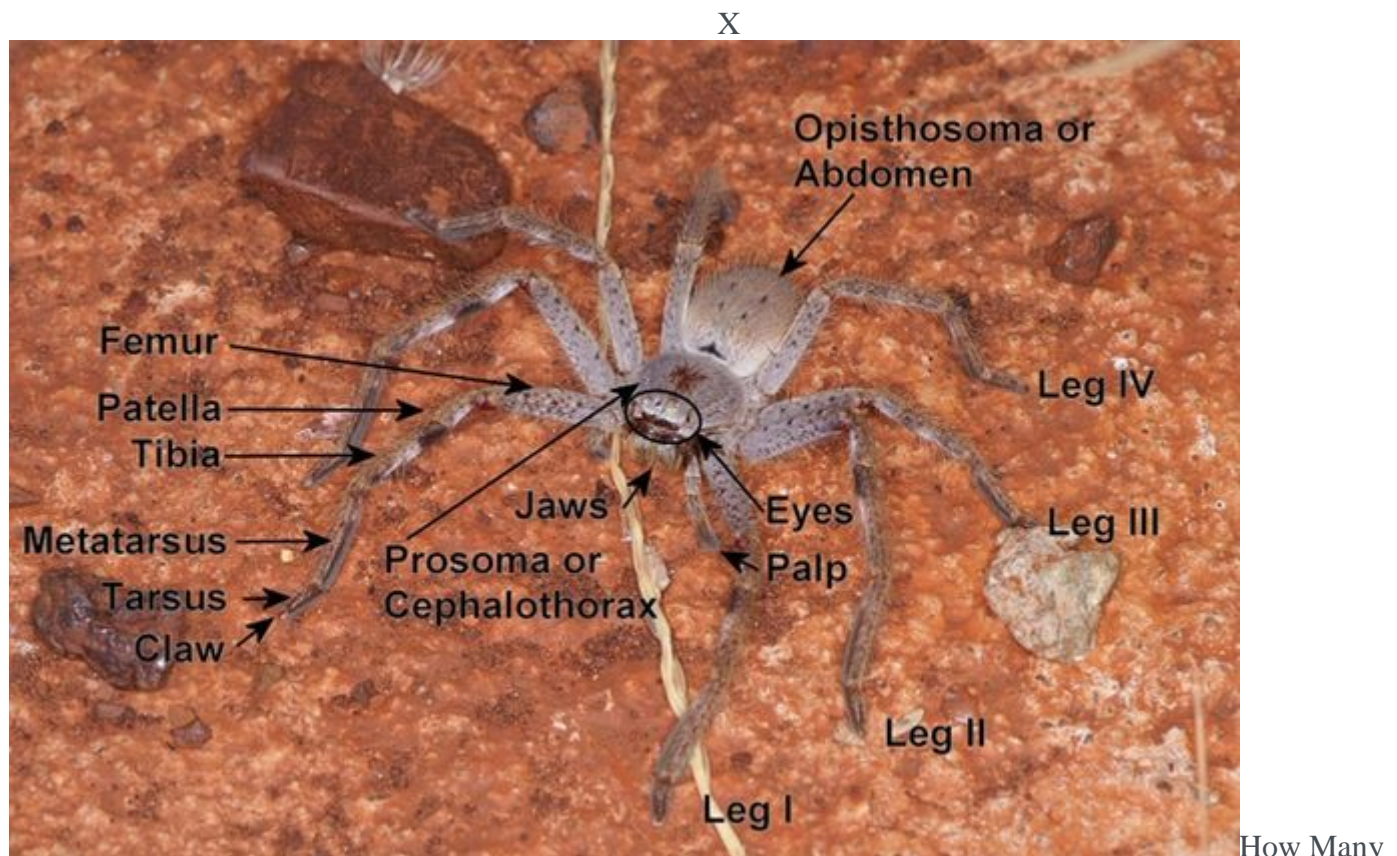
Most insects have two pairs of wings attached to the thorax, although some have only one pair and others have no wings at all. A beetle's front wings are modified into a shell that covers the body, and the back wings are used for flying.

3. Abdomen

The abdomen usually is the largest body part. It is divided into 10 or 12 segments, and each segment has a pair of spiracles that are used for taking in air. Aquatic insects breathe through gills or they come to the surface for an air bubble which they carry under their wings or abdomen. Organs for mating and laying eggs are near the end of the abdomen. Insect also have a pair of sensory appendages called cerci at the end of the abdomen. Earwigs have large cerci that look like pincers, while many other insects have cerci so tiny that they are hard to see. Some insects also have organs for hearing on their abdomen. A few insects, such as crickets, have hearing organs on their legs.

How Many Body Parts Do Spiders Have?

By Ryan Deto, eHow Contributor



Body Parts Do Spiders Have?

Many people confuse spiders with insects due to their small size and bug-like appearance. While spiders might have similarities with insects, they are actually arachnids, which most noticeably differ in their amount of legs, the arachnids' eight legs compared to insects' six. This is not the only difference however, as spiders have their own array of unique body parts.

1. **Significance**

To be as broad as possible a spider has two body parts: the front breast called the cephalothorax, the back abdomen called the opisthosoma. However, there are other parts located within the main parts that help to define a spider.

Cephalothorax

This front main part consists of the head fused with breast plate. The eyes (six or eight) are located on the top, front of the head with the jaws located underneath the eyes. Also, all of the legs and the feelers (palps) are attached to cephalothorax.

Abdomen

This back main part contains all the vital organs, including the lungs and the heart. The spinner is located at the bottom end of the abdomen, allowing the spider to spin its silk thread.

Legs

The defining features of the spider are the its legs. Each leg, starting from the body and in descending order, has a femur, patella, tibia, metatarsus, tarsus and claw.

Palps

The palps, also called feelers, are located besides the jaws and help the spider shuffle food into the mouth. On the males, the palps have bulbs on the end that are used during mating.

Jaws

The business end of the spider, venom-injecting spikes are located at the end of the two muscular jaws. Most spiders have venom, the most venomous being the black widow and funnel web, but not all spiders are venomous.