

Animals of the World: Arachnids



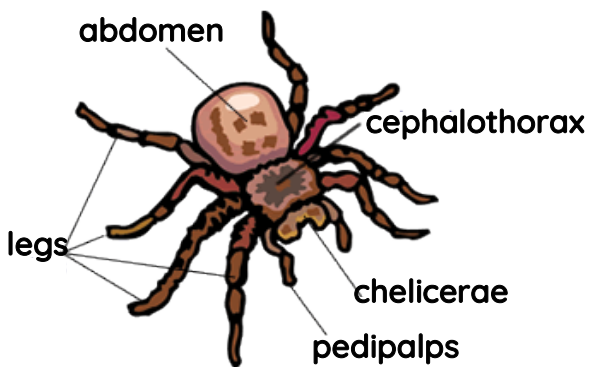
THE ARACHNIDS



Arachnids are in the class of animals called arthropods, of which over a hundred thousand species have been discovered. An arthropod is an invertebrate animal that has an exoskeleton, a segmented body, and paired articulated appendages. More than 11 orders of arachnids are found, including spiders, mites, and scorpions.

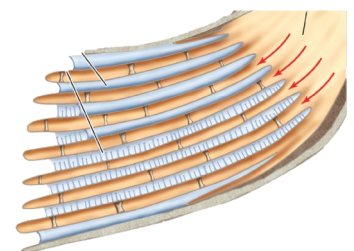
Arachnids are invertebrates like insects, but there are differences between these kinds of animals. Arachnids, unlike insects, do not have wings, antennae, or jaws. They also have eight legs, while insects have six.

In addition to having four pairs of legs, they have two pairs of appendages. The first pair of appendages are known as chelicerae; their function is feeding and defense against predators. The second pair of appendages are called pedipalps, which have adapted to reproduction, feeding, and locomotion.



The body of the arachnids is divided into two parts: the cephalothorax and the abdomen. The cephalothorax includes the head and the thorax, which are united in a single segment. The abdomen can be segmented or not. In some species, the front legs have been modified to acquire sensory functions. In other species, the appendages have developed so much that they are often confused with legs.

The respiration of the arachnids is done through tracheas. In some cases, it can also be done through laminar lungs, also known as book lungs.



book lungs

Because the tracheal system of these animals has evolved a lot thanks to its laminar lungs, they cannot be considered similar to other arthropods.



Most arachnids are carnivores, feeding on insects, other arachnids, and sometimes small mammals and reptiles. Something curious about this class of animals is that they cannot chew, so what they do to eat their prey is to suck them, or in other words, absorb the softer parts. Many groups of arachnids secrete venom to kill their prey, other species are parasites, and others are disease carriers.

Scorpions are the largest arachnids. The largest can measure up to 20 centimeters. On their heads, they have large claw-shaped front pedipalps that they use to catch their prey and inject venom with the stinger in their tail.



Spiders are the most widely known and most feared arachnids. Well, many are usually poisonous, but there are very few that can be dangerous for humans. The truth is that spiders are amazing animals; in addition to producing their spider web, they can hunt their prey in different ways.



Mites are the least known arachnids because they are microscopic; they are very tiny and cannot be seen with the naked eye. But they are everywhere, even in houses where there are thousands and thousands. There is a great diversity of mites, among these many species, are parasites such as ticks. Furthermore, they can be carriers of diseases in humans.

In most species, fertilization occurs through the transfer of spermatophores that pass from the male to the female. Most are oviparous except scorpions that are ovoviviparous or viviparous, depending on their species.



Name _____

Date _____

THE ARACHNIDS



Answer the questions.

1. What class do arachnids belong to?

2. What are arthropods?

3. What are the three types of arachnids that were mentioned in the text?

4. What characteristics do all arachnids share?

5. What differentiates arachnids from insects?



Name _____

Date _____

6. What do arachnids feed on?



7. What is the species of arachnid that they fear the most? Why?

8. Which of the mentioned species has a stinger in its tail? What is the stinger used for?

9. What are chelicerae and pedipalps? What role do they serve?

10. Of the species mentioned, which are the largest arachnids? Which are the smallest? Draw a picture of your favorite arachnid.

