### **SPIDER FACTS**



Spiders belong to the Arachnid family, which also includes scorpions, mites and ticks. Arachnids are creatures with two body segments, eight legs, no wings or antennae and are not able to chew. There are more than 30,000 known species of spider and scientists have found spider fossils dating as far back as 2 million years.

- The word spider is from an Old English verb spinnan, meaning "to spin."
- Spiders are invertebrates that do not have a backbone. Spiders have an
  exoskeleton, meaning that their skeleton is on the outside. They are not
  insects. Most spiders have either six or eight eyes. Most spiders are very
  near-sighted. To make up for this, they use the hair on their body to feel
  their way around and to sense when other creatures are near.

- Scientists have found spiders in amber that dates back to about 2 million years. Because spider skeletons are small and fragile it is difficult to find whole fossilized spiders.
- The existence of spiders is vital to the Earth. Spiders eat many types of harmful insects, helping to keep gardens and crops free of pests. Not only do they help pollinate plants, they also help recycle dead animals and plants back into the soil. Spiders are also a food source for many small mammals, birds and fish.
- Spiders cannot chew or swallow, so they must digest their food outside
  their bodies and then drink the liquid. Spiders inject venom through their
  fangs and paralyze their victims. The poison turns the insides of its prey to
  liquid and the spider sucks it up. Because insects have exoskeletons too, it
  will look normal except that the body is empty.
- Web-spinning spiders wrap their prey in a web and then crush its body with their fangs. They then pour digestive juice over the body and liquefy it. All spiders are predators and many are cannibalistic. Spiders also have these tiny little things on their legs called 'pedipalps' that are next to the mouth fangs. They help to hold prey while the spider bites it. Almost all spiders have venom.
- Most spider poison will not harm humans because it is quite weak. Some
  have poison that can cause pain, nerve and tissue damage. There are a few,
  however that can be deadly, including the Black Widow, the Brown Recluse
  and the Yellow Sac spider.
- Many people are afraid of the tarantula because its size makes it scary, but it isn't poisonous. A tarantula's bite can be painful, but it isn't any more dangerous than a bee sting.
- A fear of spiders is called arachnophobia. It is one of the most common fears among people.

- Spiders have silk spinning glands, called spinnerets, at the tip of their abdomen. All spiders spin silk, but not all spiders spin webs. The spider's body has an oil on it to keep the spider from sticking to it's own web. Silk is used for climbing, to create webs, to build smooth walls in burrows, build egg sacs, and wrap prey.
- Many spiders use their silk for something called 'draglines'. This is a rope-like web that helps the spider climb back home if they fall or let themselves drop. Different spiders produce different types of silk. Silk can be sticky, dry or stretchy. Surprisingly, silk is so strong that some spiders use it for traveling. With one end attached to a surface such as a tree branch, the spider will hang onto the end and let the wind carry it away. This is called 'ballooning' and can carry the spider many miles.
- Spiders will recycle their silk. They eat up what isn't needed anymore and start over with fresh silk. Spider silk is possibly the strongest material in the world - it's five times stronger than steel cable. Spider silk turned into fabric can even stop bullets.
- Male spiders are usually smaller than female spiders. Spiders are serious predators so mating can be dangerous, especially for the male. Male spiders have to be careful when meeting the female. Using his claws he will send gentle, even vibrations through the web, unlike the quick, jerky movements of trapped insects. This announces his arrival, but he still has to convince the female that she shouldn't eat. Some female spiders will eat the male after mating.

- The largest spider in the world is the Giant Bird-eating spider. One that was found had a leg span of 11 inches (28 cm). The smallest spider is the Patu Marplesi. You could fit 10 of them on the end of a pencil.
- Spiders are oviparous, which means their babies come from eggs. Spiders will lay between 2 and 1,000 eggs, depending on the species. Almost all female spiders protect their eggs by making a silk 'bed' and then covering them with a silk 'blanket'. She then wraps them in more silk to make the egg sac. She hangs the sac somewhere safe and guards it until the babies hatch. When the babies hatch, they often stay inside the sac to finish developing. Some mothers stay until the spiderlings leave the sac, others will either leave or die before seeing their babies.
- Many spiders will go off on their own after their eggs hatch, leaving the babies to fend for themselves.
- All spider webs are designed to catch food. Since spiders do not have great
  eyesight, they usually use the vibrations of the web strands to locate their
  prey. When they do, they rush on over and wrap their victim in silk, turning it
  around and around until it looks like a cocoon.
- Because they are small, spiders are victim to many predators. Toads, birds, lizards and monkeys eat them. Spiders are also used as food by many smaller creatures. Ticks will attach themselves to a spider drink its blood.

• One of the spider's worst enemies is the spider-wasp. The female wasp paralyzes the spider by stinging it. She then drags it to a burrow where she lays an egg on it. When the egg hatches, the baby wasp will eat away at the paralyzed spider. Humans are also enemies of spiders. Besides stepping on them, the pesticides we use to control other insects can kill spiders.

# **Spider Fact Or Fiction**

Can you tell which of the following statements are factual or fictional? Connect it to the web if it's a fact and cross it out if it's fiction.

The Earth has no use for spiders.

Spiders can chew.

Spider silk is possibly the strongest material in the world.

All spiders spin webs.

Scientists know that spider silk is much stronger than steel.

Spiders are not insects.

Spiders lay between 2 and 1000 eggs.

Spider webs are designed to catch other spiders.

Most spiders are very far-sighted.

Spiders tend to go off on their own after their eggs hatch, leaving the babies to fend for themselves.

Name:	
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