



Animals of the World: Amphibians



THE SALAMANDER

Salamanders are part of the amphibian group called caudates (urodeles), they are one of the few that exist that have a tail. They have them confused with reptiles because their appearance is like that of a lizard with thin bodies.

They are characterized by having a skin that is moist and soft to the touch. Salamanders vary in color; some more opaque and others brighter, they may even have stripes, spots, bars, or dots. They have no more than four toes on their front legs and five on their hind legs. Some do not have hind limbs.



These animals vary in size, most of them are between 10 and 20 cm in length, but there are also tiny ones that measure 2.7 cm, including the tail. The Chinese giant salamander reach lengths of 1.8m and weigh up to 65Kg.

There is a great diversity of salamanders. They are most abundant in the northern hemisphere, most of them inhabit forested areas. Some species are found in the tropical zone.

There are around 655 living species of salamanders. A third of the species are found in North America, with a higher concentration in the Appalachian Mountains region, where the Plethodontidae is believed to have originated. In this area, vegetation and proximity to water are of great importance for their survival. Only species that have adapted to a terrestrial way of life have been able to spread to other areas.



Some salamanders spend their whole lives in the water and others that live on land. There are even some species that have lungs and others that do not. Salamanders that live in the water breathe through gills and are agile and fast swimmers.



Since there are salamanders that live in water and others on land, their food depends largely on their environment. Those that live on earth are carnivorous and have long sticky tongues like frogs. To hunt, they crawl towards their prey until they are close enough to attack, then jump forward and use their tongues to catch them. Their diet mainly consists of food, such as spiders, worms, centipedes, dragonflies, slugs, other invertebrates, frogs, and insect eggs.



Aquatic salamanders feed primarily on tadpoles, fish, leeches, frogs, and mosquito eggs. To capture their prey, they shoot their tongues like a cannon; they also capture prey using their wide mouths.

Salamanders in the larval stage go through a process of metamorphosis like frogs. As they grow, the food they eat varies. However, they are never vegetarian. During the first week, they feed on their eggshells. When they are large enough to hunt and flee from predators, the larvae or tadpoles begin to capture small animals such as plankton and brine shrimp.

Reproduction is another area that is varied among salamanders. In 90% of the species, fertilization is internal. The male deposits his spermatophore in the water or the soil depending on the species, the female collects it, and after it is inside her body, she lays the eggs. In other species of salamanders, such as Asians and Giant Salamanders, external fertilization is used. The females deposit the eggs, and the males put their sperm on top of them.



Name _____

Date _____



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Answer the questions.



1. What group of amphibians are salamanders part of? What is different about this particular group?

2. Why are salamanders often confused with reptiles?

3. Describe the characteristics of salamanders from what the entire text says.

4. How many species of salamanders are there? What areas do most salamanders prefer to live?

5. What does the diet of salamanders depend upon?



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6. What do land salamanders eat?

7. What do aquatic salamanders eat?

8. What is the larval stage? What do salamanders feed on in that stage?

9. According to the text, what is internal fertilization and what is external fertilization?

10. Look at the two research proposals. Choose one or both to research.

- ◆ What animals belong to the group of urodeles. What is Plethodontidae?
- ◆ Investigate the salamander species and discuss at least three species.

