

Frogs and Other Amphibians

Biological Classification Series

Grade Levels:

Grades 5-10

Subject Areas:

Science

Life Sciences

Biology

Synopsis:

Introduces amphibians by comparing the habits and physical characteristics of frogs, tritons, toads and salamanders. Films the mating habits of common toads, green frogs and alpine newts and the metamorphosis from embryo to tadpole to adult. Explains that there are over 5,000 species of frogs and toads that live on our Earth and that new species are constantly being discovered.

Learning Objectives: Students will:

Define the physical characteristics and behavior patterns of amphibians.

Understand that these animals often participate in courting rituals.

Describe the process of metamorphosis.

Understand that the toad secretes a poison to keep predators away.

Understand that amphibians are disappearing all over the world because of the destruction of wetlands.

Vocabulary:

amphibians, tritons, salamanders, vertebrates, newts, courting, vegetation, coupled, embryo, membrane, incalculable, tadpoles, metamorphosis, secrete, predators, midwife, arid, voracious, axolotl, external, molecules, predators, naturalists

Pre-Viewing Discussion:

Have you ever held a frog or toad in your hands? What did you notice about the animal's skin, eyes, legs etc.

What are tadpoles? What is their relationship to the adult frog? What is metamorphosis?

Why are ponds such noisy places during the spring?

How many species of frogs are there in the world? Do frogs range in size?

What are salamanders? How do they differ from frogs?

Why are some people afraid of toads?

Post-Viewing Discussion:

How do frogs make use of their watery environment?

How does the midwife frog differ from other species?

Should you be afraid of toads? Why or why not?

What are the indications that a tadpole is becoming an adult?

How do salamanders differ from frogs and toads?

Further Activities:

Find out which of the five major classification groups frogs and other amphibians are in (i.e. Kingdom, Phylum, Class, Order, Family). Chart the relationships of animals in the largest to the smallest taxonomic groups around them. What characteristics make this group similar to and different from the other groups to which they are related? Then, pick one species from the program and determine its genus and species name, writing them in the proper scientific terminology. Find out why the genus and species name is written the way it is.

Discover specific details about how the skin of amphibians is used in medicines. What medicines use these molecules? What is the purpose of each medicine you discover? What properties do amphibians contribute to the medicinal product?

Investigate how disappearing wetlands are affecting amphibian populations. Provide specific details about which species are disappearing and why. Also suggest what could be done to save some of these endangered species.

Discover the species of frogs and toads that can be found in your neighborhood. What are their biological names? Where are they found?

Related New Dimension Media Titles:

Animal Babies Born Wild series

Habitats series

Biological Movement series

