



Reptile and Amphibian Study

Scouts BSA · Nature

Name

Started

Completed

Reptiles and amphibians include snakes, lizards, turtles, frogs, and salamanders. You'll learn how they live, why they matter, and how to observe them safely. It's a chance to see these often-misunderstood animals in a new light.

Requirements

Every official requirement, in plain language. Check the official wording when you sign off (scouting.org/merit-badges/reptile-and-amphibian-study/). Tips and examples are ideas, not extra requirements.

- ☐ **1** Describe how to identify six reptile species and four amphibian species found in the U.S. Sketch from your own observation or photograph four of them, showing key markings, colors, or features. Talk about where all 10 live and how they behave

Tip: Choose species found near you if you can, and use a field guide to describe each one.

Example: Choose species you might meet locally, such as an eastern box turtle, garter snake, fence lizard, rat snake, snapping turtle, and five-lined skink, plus a bullfrog, spring peeper, American toad, and red-backed salamander. Describe each one's look, habitat, and food.

- ☐ **2** Discuss with your counselor roughly how many reptile and amphibian species live in the U.S. and where they're found, and make a list of the most common species in your area or state

Tip: Look up roughly how many reptile and amphibian species live in the U.S., then list the most common ones in your state.

3 Telling groups apart

Tips for this section: Make a side-by-side list for each pair, like frogs and toads or alligators and crocodiles, and note what sets them apart.

Example for this section: Compare frogs and toads: frogs have smooth, moist skin and long legs for jumping; toads have dry, bumpy skin and shorter legs for hopping. Then do the same for amphibians and reptiles, alligators and crocodiles, and snakes and lizards.

- ☐ **3a** Describe the main differences between amphibians and reptiles

- ☐ **3b** Describe the main differences between alligators and crocodiles

- ☐ **3c** Describe the main differences between toads and frogs

- ☐ **3d** Describe the main differences between snakes and lizards

- ☐ **4** Explain why reptiles and amphibians matter in nature. List four species protected by federal or your state's law and why, plus three reptiles and three amphibians near you that aren't protected, and discuss what all 10 eat

Tip: Find out what role they play in nature and which ones are protected in your state.

- ☐ **5** Compare how reptiles and amphibians reproduce

Tip: Make a simple chart comparing how reptiles and amphibians lay eggs and grow.

- ☐ **6** Based on watching them, describe how snakes move forward and what their muscles, ribs, and belly plates do

Tip: Watch videos of snakes moving and describe the different ways they travel.

Example: Describe four ways snakes move: serpentine (side-to-side waves), concertina (bunching and stretching in tight spaces), rectilinear (straight crawling like a caterpillar), and sidewinding on loose sand. Sketch each.

- ☐ **7** Describe in detail the six venomous snakes and one venomous lizard found in the U.S., including their habits and range, and tell what to do if bitten by a venomous species

Tip: Learn to recognize venomous species from a distance. Never touch or handle wild snakes.

8 Care for or observe an animal: Choose 1 of 2

Tips for this section: Care for a reptile or amphibian at home in a way your counselor approves, or visit one every week at a zoo, nature center, or classroom.

Example for this section: If you choose 8b, visit the same turtle or snake at a nature center or classroom each week for three months. Keep a notebook: the date, what it was doing, any shedding or color changes, and a sketch of it in its enclosure. Ask the staff about its diet, range, and care.

- ☐ **8a** In a counselor-approved way, care for a reptile or amphibian for 1+ month, logging food taken, how it eats, color changes, shedding, and habits; or keep reptile eggs until they hatch, or amphibian eggs until they become tadpoles (frogs) or larvae (salamanders). Report your care (light, habitat, heat, humidity, vet needs). Unless it's yours long-term, pass it on to a counselor-approved keeper

- ☐ **8b** Observe or foster a reptile or amphibian at a zoo, aquarium, nature center, rescue, or classroom weekly for three months, sketching it in its enclosure and noting changes in color, shedding, habits, and behavior. Discuss its care (housing, lighting, heat, humidity, vet) and learn its diet, native range, climate, life span, predators, human threats, and legal protections; share with your counselor

9 Identification and sharing: Choose 2 of 3

Tips for this section: Pick activities you enjoy, like identifying frog calls at night or giving a short talk to your troop.

- ☐ **9a** At night, identify three kinds of frogs or toads by their calls, imitate each call for your counselor, and use a flashlight to find each one and see how and where it calls

- ☐ **9b** Identify eight species of reptiles or amphibians by sight

- ☐ **9c** Give a short talk with visual aids to a small group about three different reptiles and amphibians

- ☐ **10** Share five myths or mistaken ideas about reptiles and amphibians and explain the truth behind each. Give seven examples of unusual behaviors or other true facts about them

Tip: Write down common myths you've heard and research the truth behind them.

Example: Correct myths like "toads give you warts" (they don't), "snakes are slimy" (their scales are dry), and "all snakes are dangerous" (most in the U.S. are harmless). Then explain how snakes control mice and frogs eat insects.