



Reptile and Amphibian Study

Merit Badge Workbook

This workbook can help you but you still need to read the merit badge pamphlet.

The work space provided for each requirement should be used by the Scout to make notes for discussing the item with his counselor, not for providing the full and complete answers. Each Scout must do each requirement.

No one may add or subtract from the official requirements found in **Boy Scout Requirements** (Pub. 33216 – SKU 34765).

The requirements were last issued or revised in 2006 • This workbook was updated in June 2012.

Scout's Name: _____ Unit: _____

Counselor's Name: _____ Counselor's Phone No.: _____

<http://www.USScouts.Org> • <http://www.MeritBadge.Org>

Please submit errors, omissions, comments or suggestions about this **workbook** to: Workbooks@USScouts.Org
Comments or suggestions for changes to the **requirements** for the **merit badge** should be sent to: Merit.Badge@Scouting.Org

1. Describe the identifying characteristics of six species of reptiles and four species of amphibians found in the United States. For any four of these, make sketches from your own observations or take photographs. Show markings, color patterns, or other characteristics that are important in the identification of each of the four species. Discuss the habits and habitats of all ten species.

Reptile Species 1 _____

Identifying Characteristics _____

Habits: _____

Habitat: _____

Reptile Species 2 _____

Identifying Characteristics _____

Habits: _____

Habitat: _____

Reptile Species 3 _____

Identifying Characteristics _____

Habits: _____

Habitat: _____

Reptile Species 4 _____

Identifying Characteristics _____

Habits: _____

Habitat: _____

Reptile Species 5 _____

Identifying Characteristics _____

Habits: _____

Habitat: _____

Reptile Species 6 _____

Identifying Characteristics _____

Habits: _____

Habitat: _____

Amphibian Species 1 _____

Identifying Characteristics _____

Habits: _____

Habitat: _____

Amphibian Species 2 _____

Identifying Characteristics _____

Habits: _____

Habitat: _____

Amphibian Species 3 _____

Identifying Characteristics _____

Habits: _____

Habitat: _____

Amphibian Species 4 _____

Identifying Characteristics _____

Habits: _____

Habitat: _____

<p>Sketch 1 _____</p>	<p>Sketch 2 _____</p>
<p>Sketch 3 _____</p>	<p>Sketch 4 _____</p>

2. Discuss with your merit badge counselor the approximate number of species and general geographic distribution of reptiles and amphibians in the United States.



Prepare a list of the most common species found in your local area or state.

Reptiles		Amphibians	
<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____

3. Describe the main differences between:

a. Amphibians and reptiles. _____

b. Alligators and crocodiles. _____

c. Toads and frogs. _____

d. Salamanders and lizards. _____

e. Snakes and lizards. _____

4. Explain how reptiles and amphibians are an important component of the natural environment. _____

List four species that are officially protected by the federal government or state you live in, and tell why each is protected. List three species of reptiles and three species of amphibians found in your local area that are not protected. Discuss the food habits of all ten species.

Protected Species 1 _____
Why protected? _____
Food habits: _____

Protected Species 2 _____
Why protected? _____
Food habits: _____

Protected Species 3 _____
Why protected? _____
Food habits: _____

Protected Species 4 _____
Why protected? _____
Food habits: _____

Unprotected Reptile 1: _____
Food habits: _____

Unprotected Reptile 2: _____
Food habits: _____

Unprotected Reptile 3: _____
Food habits: _____

Unprotected Amphibian 1: _____
Food habits: _____

Unprotected Amphibian 2: _____
Food habits: _____

Unprotected Amphibian 3: _____
Food habits: _____

5. Describe how reptiles and amphibians reproduce. _____

6. From observation, describe how snakes move forward. _____

Describe the functions of the muscles, ribs, and belly plates. _____

7. Describe in detail six venomous snakes and the one venomous lizard found in the United States. Describe their habits and geographic range.

Venomous Snake 1 _____
Description: _____
Habits: _____
Range: _____

Venomous Snake 2 _____
Description: _____
Habits: _____
Range: _____

Venomous Snake 3 _____
Description: _____
Habits: _____
Range: _____

Venomous Snake 4 _____
Description: _____
Habits: _____
Range: _____

Venomous Snake 5 _____
Description: _____
Habits: _____
Range: _____

Venomous Snake 6 _____

Description: _____

Habits: _____

Range: _____

Venomous Lizard _____

Description: _____

Habits: _____

Range: _____

Tell what you should do in case of a bite by a venomous species. _____

8. Do ONE of the following:

- a. Maintain one or more reptiles or amphibians for at least a month. Record the food accepted, eating methods, changes in coloration, shedding of skins, and general habits; or keep the eggs of a reptile from the time of laying until hatching; or keep the eggs of an amphibian from the time of laying until their transformation into tadpoles (frogs) or larvae (salamanders).

Reptile or Amphibians Maintained: _____

Dates: _____

Day	Food Accepted	Eating Methods	Color Changes	Skin Shedding	General Habits
1	_____	_____	_____	_____	_____
2	_____	_____	_____	_____	_____
3	_____	_____	_____	_____	_____
4	_____	_____	_____	_____	_____
5	_____	_____	_____	_____	_____
6	_____	_____	_____	_____	_____
7	_____	_____	_____	_____	_____
8	_____	_____	_____	_____	_____
9	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____

Day	Food Accepted	Eating Methods	Color Changes	Skin Shedding	General Habits
22	_____	_____	_____	_____	_____
23	_____	_____	_____	_____	_____
24	_____	_____	_____	_____	_____
25	_____	_____	_____	_____	_____
26	_____	_____	_____	_____	_____
27	_____	_____	_____	_____	_____
28	_____	_____	_____	_____	_____
29	_____	_____	_____	_____	_____
30	_____	_____	_____	_____	_____
31	_____	_____	_____	_____	_____

- b. Choose a reptile or amphibian that you can observe at a local zoo, aquarium, nature center, or other such exhibit (such as your classroom or school). Study the specimen weekly for a period of three months. At each visit, sketch the specimen in its captive habitat and note any changes in its coloration, shedding of skins, and general habits and behavior. Find out, either from information you locate on your own or by talking to the caretaker, what this species eats and what are its native habitat and home range, preferred climate, average life expectancy, and natural predators. Also identify any human caused threats to its population and any laws that protect the species and its habitat. After the observation period, share what you have learned with your counselor. _____

9. Do TWO of the following:

- a. Identify at night three kinds of toads or frogs by their voices. Imitate the song of each for your counselor. Stalk each with a flashlight and discover how each sings and from where.
- b. Identify by sight eight species of reptiles or amphibians.
- c. Using visual aids, give a brief talk to a small group on three different reptiles and amphibians. _____

10. Give five superstitions about reptiles and amphibians and a correct explanation for each.

Superstition 1 _____

Explanation: _____

Superstition 2 _____

Explanation: _____

Superstition 3 _____

Explanation: _____

Superstition 4 _____

Explanation: _____

Superstition 5 _____

Explanation: _____

Give seven examples of unusual behavior or other true facts about reptiles and amphibians.

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

NOTE: Scouts must not use venomous reptiles in fulfilling requirement 8a. Species listed by federal or state law as endangered, protected, or threatened must not be used as live specimens in completing requirement 8a unless official permission has been given. In most cases, all specimens should be returned to the wild at the location of capture after the requirement has been met. Check with your merit badge counselor for those instances where the return of these specimens would not be appropriate.

Under the Endangered Species Act of 1973, some plants and animals are, or may be, protected by federal law. The same ones and/or others may be protected by state law. Be sure that you do not collect protected species.

Your state may require that you purchase and carry a license to collect certain species. Check with the wildlife and fish and game officials in your state regarding species regulations before you begin to collect.

Requirement resources can be found here:

[http://www.meritbadge.org/wiki/index.php/Reptile and Amphibian Study#Requirement resources](http://www.meritbadge.org/wiki/index.php/Reptile_and_Amphibian_Study#Requirement_resources)

Important excerpts from the [‘Guide To Advancement’](#), No. 33088:

Effective January 1, 2012, the ‘Guide to Advancement’ (which replaced the publication ‘Advancement Committee Policies and Procedures’) is now the official Boy Scouts of America source on advancement policies and procedures.

- **[Inside front cover, and 5.0.1.4] — Unauthorized Changes to Advancement Program**
No council, committee, district, unit, or individual has the authority to add to, or subtract from, advancement requirements.
(There are limited exceptions relating only to youth members with disabilities. For details see section 10, “Advancement for Members With Special Needs”.)
- **[Inside front cover, and 7.0.1.1] — The [‘Guide to Safe Scouting’](#) Applies**
Policies and procedures outlined in the ‘Guide to Safe Scouting’, No. 34416, apply to all BSA activities, including those related to advancement and Eagle Scout service projects. [Note: Always reference the online version, which is updated quarterly.]
- **[7.0.3.1] — The Buddy System and Certifying Completion**
Youth members must not meet one-on-one with adults. Sessions with counselors must take place where others can view the interaction, or the Scout must have a buddy: a friend, parent, guardian, brother, sister, or other relative —or better yet, another Scout working on the same badge— along with him attending the session. When the Scout meets with the counselor, he should bring any required projects. If these cannot be transported, he should present evidence, such as photographs or adult certification. His unit leader, for example, might state that a satisfactory bridge or tower has been built for the Pioneering merit badge, or that meals were prepared for Cooking. If there are questions that requirements were met, a counselor may confirm with adults involved. Once satisfied, the counselor signs the blue card using the date upon which the Scout completed the requirements, or in the case of partials, initials the individual requirements passed.
- **[7.0.3.2] — Group Instruction**
It is acceptable—and sometimes desirable—for merit badges to be taught in group settings. This often occurs at camp and merit badge midways or similar events. Interactive group discussions can support learning. The method can also be attractive to “guest experts” assisting registered and approved counselors. Slide shows, skits, demonstrations, panels, and various other techniques can also be employed, but as any teacher can attest, not everyone will learn all the material.

There must be attention to each individual’s projects and his fulfillment of *all* requirements. We must know that every Scout — actually and *personally*— completed them. If, for example, a requirement uses words like “show,” “demonstrate,” or “discuss,” then every Scout must do that. It is unacceptable to award badges on the basis of sitting in classrooms *watching* demonstrations, or remaining silent during discussions. Because of the importance of individual attention in the merit badge plan, group instruction should be limited to those scenarios where the benefits are compelling.
- **[7.0.3.3] — Partial Completions**
Scouts need not pass all requirements with one counselor. The Application for Merit Badge has a place to record what has been finished — a “partial.” In the center section on the reverse of the blue card, the counselor initials for each requirement passed. In the case of a partial completion, he or she does not retain the counselor’s portion of the card. A subsequent counselor may choose not to accept partial work, but this should be rare. A Scout, if he believes he is being treated unfairly, may work with his Scoutmaster to find another counselor. An example for the use of a signed partial would be to take it to camp as proof of prerequisites. Partials have no expiration except the 18th birthday.