

# Reptiles Wet and Dry

*Lesson Plan for Grade 3, Science*

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## OVERVIEW & PURPOSE

The student will investigate and understand that ecosystems support a diversity of animals that share limited resources. Key concepts include a) aquatic ecosystems b) terrestrial ecosystems c) reptiles

## EDUCATION STANDARDS

Primary SOL 3.6 The student will investigate and understand that ecosystems support a diversity of plants and animals that share limited resources. Key concepts include a) aquatic ecosystems; b) terrestrial ecosystems.

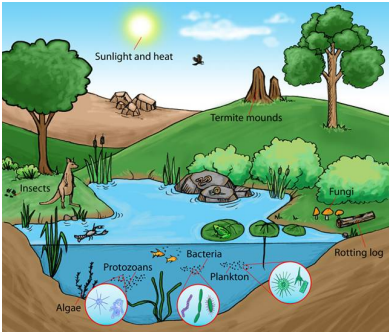
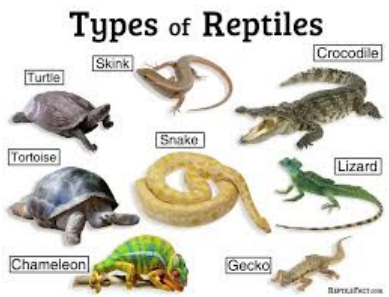


Related SOL 3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which k) data are communicated.

3.6 The student will investigate and understand that ecosystems support a diversity of plants and animals that share limited resources. Key concepts include d) the human role in conserving limited resources.

## OBJECTIVES

1. Students investigate aquatic ecosystems including ponds, marshes, swamps, streams, rivers, and oceans.
2. Students investigate whether animals have adaptations to help them survive in each distinct ecosystem.
3. Students investigate reptile needs, food, air, water, shelter, and space, are limited and they must compete in order to survive.

## MATERIALS NEEDED

<u>Terms</u>	<u>Definition</u>	<u>Picture</u>
<b>ecosystems</b>	a community of living organisms in conjunction with the nonliving components of their environment, interacting as a system	
<b>reptile</b>	a vertebrate animal of a class that includes snakes, lizards, crocodiles, turtles, and tortoises. They are distinguished by having a dry scaly skin and typically laying soft-shelled eggs on land	
<b>aquatic</b>	relating to water; living in or near water or taking place in water	
<b>terrestrial</b>	living on or in or growing from land	

## Virginia Reptiles

### 1. **Snake- Eastern Gartersnake**



- i. Average Length: 18 - 26 in. (45.7 - 66 cm)
- ii. Description: A moderate-sized snake reaching a maximum total length of 1,238 mm (48.7inches)
- iii. Biology: Eastern Garter Snakes are terrestrial and can be found in many types of habitats. These include hardwood and pine forests; lowland and upland grasslands and balds; abandoned fields in various stages of succession; along the margins of creeks, rivers, ponds, and lakes; agricultural and urban areas; and freshwater marshes. They are sometimes found in suburban gardens and around barns and houses.
- iv. Eastern Gartersnake are carnivores. They eat earthworms , millipedes, spiders, various insects, Salamanders, Toads, and small mammals.
- v. Predators of the Garter snake are raccoons, opossums, skunks, weasels, hawks, owls , and other snakes.
- vi. Eastern Garter Snakes can be found in every month of the year, but the majority of activity occurs March-November.
- vii. ORIGIN: Native

[https://www.virginiaherpetologicalsociety.com/reptiles/snakes/eastern-gartersnake/eastern\\_gartersnake.php](https://www.virginiaherpetologicalsociety.com/reptiles/snakes/eastern-gartersnake/eastern_gartersnake.php)

## 2. **Woodland Box Turtle**



- i. Average Length: 4.5 - 6 in. (11.5 - 15.2 cm)
- ii. Description: A moderate-sized terrestrial turtle reaching a maximum carapace length (CL) of 198 mm (7.8 inches)
- iii. Coloration and Pattern: Woodland Box Turtle color usually brown, sometimes black, with a highly variable pattern of orange to yellow lines, spots, or blotches; ventral surface of marginals brown to black, with variable amount of orange or yellow pigment in some individuals. Skin of head, neck, and legs brownish to nearly black with orange to yellow spots, streaks, or blotches.
- iv. The largest individuals in Virginia are from the southern Blue Ridge Mountains in Floyd County.
- v. The terrestrial Woodland Box Turtle is found in many types of wooded areas, including hardwood forests, mixed oak-pine forests, pine flatwoods, maritime oak forests, hardwood swamps, and agricultural areas.
- vi. Woodland Box Turtles are omnivores.
- vii. ORIGIN: Native

[https://www.virginiaherpetologicalsociety.com/reptiles/turtles/eastern-box-turtle/eastern\\_box\\_turtle.php](https://www.virginiaherpetologicalsociety.com/reptiles/turtles/eastern-box-turtle/eastern_box_turtle.php)



### 3. Eastern Painted Turtle



- i. Description: A moderate-sized freshwater turtle reaching a maximum carapace length (CL) of 182 mm (7.2 inches)
- ii. Pattern: Eastern Painted Turtle olive to dark olive brown in color. Their head is black with 2 round to oval bright-yellow spots behind eyes; narrow yellow stripes on head below eyes and on chin; neck with narrow red stripes; limbs and tail dark brown to black with narrow red stripes or dashes.
- iii. Geographic Variation: Considerable throughout Virginia
- iv. Painted Turtles occur in all manner of aquatic habitats that have permanent water. Found in ponds, lakes, ditches, swamps, rivers, creeks, and marshes.
- v. The activity season begins with warm weather in March and continues through October
- vi. Painted turtles are omnivores. They consume beetles, algae, and dead fish

[https://www.virginiaherpetologicalsociety.com/reptiles/turtles/eastern-painted-turtle/eastern\\_painted\\_turtle.php](https://www.virginiaherpetologicalsociety.com/reptiles/turtles/eastern-painted-turtle/eastern_painted_turtle.php)

#### 4. Common Five-lined Skink



- i. Average Length: 5 - 8.5 in. (12.5 - 21.5 cm)
- ii. Body scales smooth, overlapping, and glossy
- iii. Pattern: Five narrow, white to cream stripes on dark-brown to brownish-gray background; light stripes and dark fields between them extend about halfway onto unbroken tails.
- iv. Common Five-lined Skink inhabits a wide variety of habitats in forests. It has been found in forest, cypress swamp forest, and urban woodlots. It is occasionally seen on urban and suburban buildings. This skink is often found under surface objects. This species prefers more moist habitats than the other species. Five-Lined Skinks are often found in terrestrial microhabitats but commonly, in standing dead trees.
- v. The activity period starts in March or April, depending on the weather, and extends through October. Individuals can be found throughout the winter on exceptionally warm days. Juveniles emerge from hibernation earlier and enter it later than adults.
- vi. Hibernation is known to take place deep in cracks in walls and in the decaying centers of large logs and stumps.
- vii. Common Five-lined Skink is completely carnivorous. They prey on grasshoppers, crickets, cockroaches, leafhoppers, beetles, flies, butterfly adults and larvae, ants, dragonflies, spiders, sow-bugs, and snails.

[https://www.virginiaherpetologicalsociety.com/reptiles/lizards/common-five-lined-skink/five-lined\\_skink.php](https://www.virginiaherpetologicalsociety.com/reptiles/lizards/common-five-lined-skink/five-lined_skink.php)

## VERIFICATION

*Steps to check for student understanding*

1. Pretend you are a reptile in an ecosystem. Write about a day in your life
2. Have the students place animals in the correct ecosystem when given pictures or labels identifying parts of ecosystems.

## ACTIVITY

*Describe activity that will reinforce the lesson*

1. Have the students share with you at least three reptiles found in their ecosystem. Have your student then identify if the reptile is an (herbivore, carnivore, omnivore).
2. Have the student then identify two specific reptile adaptations which help them live in the ecosystem.

### **Turtle Races**

Make three to five turtles and let the children race them.

Cut turtle shapes out of green poster board, number or name each one. Punch a hole just above the center of each turtle and put a five to eight foot long piece of string through it. Get one chair for each turtle. Tie one end of each piece of string to one of the legs of a chair. Line up the chairs along the finish line. Have the children who are racing their turtles stand in a row at the starting line. Each child should hold the loose end of one of the strings.

Begin the race with the turtles near the children's hands. When you say "Go" the children who are racing should start jiggling their pieces of string so that the turtles are bound toward the finish line. The other children should pick a turtle and cheer for it.

Which turtle made it to the end first? Which one was last? Race again.

## Pattern Snake

Students can color and then cut out their own snake.

