

## Radical Reptiles

Reptiles belong to a class of animals called **Reptilia** which consists of about 6,500 different species. There are four major groupings:

- a) turtles
- b) tuataras
- c) lizards and snakes
- d) alligators and crocodiles

Lizards are the most numerous of the reptiles. Snakes are carnivorous and excel at hunting and eating prey. Many snakes have specialized adaptations for hunting such as heat-detecting organs, poison, flicking tongues, and loose jaws that allow them to swallow large prey items. Crocodiles and alligators are among the largest living reptiles. They spend most of their time in the water, but they keep their nostrils out to provide air to their lungs.

Reptiles were the first group of animals to have **amniotic** eggs. This type of egg has a shell that retains water and can be laid in a dry place. Because of this reproductive feature, reptiles are not tied to the water like their amphibian ancestors were. Many reptile eggs are flexible and leathery.

Other features that make reptiles suited to life on land are **waterproof skin** and a **rib cage** that helps to get air into the lungs. Reptile skin is waterproofed by scales which contain **keratin**. This is the same protein found in human hair and fingernails. This kind of skin does not allow for gas exchange, so reptiles obtain all of their oxygen by breathing air into their lungs.

Reptiles are cold-blooded animals and they fall under the category of **ectotherm**. Ectotherms do not generate much of their own heat but instead absorb it from their surroundings. Reptiles have behavioral adaptations to help them maintain body temperature like basking in the sun to warm up or seeking shade to cool down.

Hundreds of millions of years ago there were many more types of reptiles living on the earth than there are today. In **Triassic** times, **dinosaurs** and **pterosaurs** (flying reptiles) occupied the land and skies. Dinosaurs were part of a mass extinction that occurred about 65 million years ago. Scientists believe that this extinction may have been caused by the impact of a comet or asteroid with the Earth.

Name \_\_\_\_\_

Date \_\_\_\_\_

### Radical Reptiles Questions

1. The four major groups of reptiles are \_\_\_\_\_, tuataras, \_\_\_\_\_ and snakes, and \_\_\_\_\_ and alligators.
2. True or False. Reptiles are able to lay their amniotic eggs on land in dry conditions.
3. Reptiles are waterproofed by their scales which contain \_\_\_\_\_.
4. Reptiles are \_\_\_\_\_, which means they do not generate much of their own heat.
5. In Triassic times, \_\_\_\_\_ roamed the Earth and \_\_\_\_\_ were in the skies.
6. The extinction of the dinosaurs occurred around \_\_\_\_\_ million years ago.
  - a. 100
  - b. 2
  - c. 65
  - d. 85
7. What could have caused the extinction of the dinosaurs?
8. Which type of reptile is carnivorous and may have adaptations like heat-sensing organs or poison to catch prey with?
  - a. lizards
  - b. snakes
  - c. turtles
  - d. alligators
9. Loose jaws for swallowing large prey items are found in\_\_\_\_\_.
10. \_\_\_\_\_ and \_\_\_\_\_ are among the largest living reptiles.

## Radical Reptiles Answers

1. The four major groups of reptiles are **turtles**, tuataras, **lizards** and snakes, and **crocodiles** and alligators.
2. **True** or False. Reptiles are able to lay their amniotic eggs on land in dry conditions.
3. Reptiles are waterproofed by their scales which contain **keratin**.
4. Reptiles are **ectotherms**, which means they do not generate much of their own heat.
5. In Triassic times, **dinosaurs** roamed the Earth and **pterosaurs** were in the skies.
6. The extinction of the dinosaurs occurred around \_\_\_\_\_ million years ago.
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  - b. 2
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  - d. 85
7. What could have caused the extinction of the dinosaurs? **A comet or asteroid**
8. Which type of reptiles is carnivorous and may have adaptations like heat-sensing organs or poison to catch prey with?
  - a. lizards
  - b. snakes**
  - c. turtles
  - d. alligators
9. Loose jaws for swallowing large prey items are found in **snakes**.
10. **Crocodiles** and **alligators** are among the largest living reptiles.