

Leapfrog Program Week 1 Course Title: Leaping Lizards

Course Description

Did you know reptiles are found on every continent except Antarctica? Do you know why? While exploring unique characteristics of reptiles, students learn about their environments, needs and characteristics. Through simple experiments, research activities, and discussion, students come to understand why reptiles are important to the world's ecosystem and are key indicators of the health of our environment.

Essential Questions

- How are these creatures different from animals we see every day?
- What are the characteristics of reptiles and how do these characteristics help them adapt and survive?
- How are reptiles different from other kinds of animals, such as mammals?
- What does the study of reptiles tell us about the broader ecosystem?

Outcomes

Upon successful completion of this course, students will have:

- a. Defined *reptile* and *lizard*
- b. Researched and discussed the characteristics of reptiles and how these characteristics help them to adapt and survive
- c. Compared and contrasted reptiles with other groups of animals, such as mammals
- d. Conducted experiments and created models that demonstrate the characteristics of reptiles
- e. Researched and practiced techniques scientists use to study reptiles
- f. Recorded data, facts, and ideas about reptiles through writing, dictation, drawing, and creating charts and tables
- g. Evaluated and discussed what the study of reptiles can tell us about the broader ecosystem
- h. Created a final project about reptiles that demonstrates understanding about characteristics of reptiles

Instructional Strategies

Throughout the course students will explore the world of lizards through research, science labs, and online videos. They will have the opportunity to work collaboratively in small groups, share in whole group discussions and explore new information on their own if they choose. The content, process and the final project will be designed to meet the needs of the individual student.

Resources and Materials

- **Books**
 - a. Bishop, Nic. *Lizards*. 2010. ISBN: 9780545206341
 - b. Burns, Diane. *Snakes, Salamanders and Lizards*. 1998. ISBN: 0836820428
 - c. Mattern, Joanne. *Lizards*. 2002. ISBN: 076141259X
 - d. Parker, Nancy. *Frogs, Toads, Lizards, and Salamanders*. 1990. ISBN:0688086802
 - e. Schnieper, Claudia. *Chameleons*. 1989. ISBN: 0876143419

- **Web sites**
 - a. Fact Zoo <http://www.factzoo.com/reptiles/types-of-lizards.html> *Fact pages and pictures of curios creatures*
 - b. Arizona Partners in Reptile and Amphibian Conservation, AZ PARC <http://tolweb.org> *The Tree of Life Web Project (ToL) is a collaborative effort of biologists and nature enthusiasts from around the world.*
 - c. Zui Tube <http://video.kidzui.com/channels/Lizards> *Short video clips about amazing creatures.*
- **Materials**
 - a. Journal/Notebook

Student Assessment

- **Pre-Assessment**
Students will discuss ideas and topics related to lizards. The students' responses will be used to complete a chart demonstrating prior knowledge.
- **Documentation of Learning**
Students will research a wide variety of lizards and their habitats and record their findings in their journals. They will also compare and contrast lizards with mammals and amphibians using a variety of graphic organizers. Using this information the students will make a model of their favorite lizard and design its habitat. Further learning will be documented by their participation and construction of questions for the Lizard Jeopardy game.
- **Post-Assessment**
Students will demonstrate what they have learned by presenting their model lizards along with a diorama of its habitat along with a short fact sheet at the parent *Expo!* Students will receive a written evaluation at the end of the session based on general class performance, discussion, participation (small group and whole group) and written work.

Schedule

Date	Topic(s)	In-class Activities	How will you document learning for assessment?
July 11, 2011	What is a lizard? Is a salamander a lizard? What is the difference between a lizard and a mammal? What is the difference between a reptile and an amphibian?	Begin KWL Explore a variety of books on lizards. Students will work cooperatively to complete a classifying activity. Students will compare and contrast lizards with mammals and reptiles with amphibians in their discovery journals.	Comparing and contrasting in their discovery journals. Observation notes on student participation and discussions.
July 12, 2011	What are the characteristics of lizards that help them adapt and survive? Where can we find lizards in nature?	Students will research lizards in the computer lab. Students will record data in their discovery journals. Students will sketch a lizard of their choice and start planning their lizard model and diorama.	Participation and use of time in the computer lab. Observation notes on student participation and discussions. Discovery journal notations, sketches of a lizard, or the drawing, charting of information.

Date	Topic(s)	In-class Activities	How will you document learning for assessment?
July 13, 2011	What is an ecosystem? Why are reptiles important to our ecosystem?	Read alouds on our ecosystem and lizards. Students will help plan and organize the game Lizard Jeopardy. Students will continue to work on their models and dioramas.	Participation and discussions when preparing the game. Students will reflect on their learning by journaling. Students will be assessed on the accuracy of information included in the Life of a Lizard activity.
July 14, 2011	Do lizards make good pets? How do we care for them? How do lizards communicate?	Students will view short movies on lizard social behavior. Students will record data in their journals. Students will continue with their models and dioramas.	Observation notes on student participation and discussions. Students will reflect on their learning in their discovery journals.
July 15, 2011	Presentations and <i>Expo!</i>	Students will give presentations on their lizards and habitats.	Presentations and final product.

CTD Statement on Third-Party Web Sites

Instructors are required to thoroughly review any third-party web sites they intend to use in their courses for inappropriate content. However, because web content continuously changes, CTD disclaims any responsibility for any of the content contained on third-party web sites used in course materials. If you become aware of anything that may be inappropriate, please notify CTD staff immediately.