



MINNESOTA ZOO™
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Life Cycles Komodo Dragon Grades 4-6 Pre-visit Activity

MN Graduation

Standards supported:

Grade K Strand IV.B

The student will understand that there are living and non-loving things.

Grade 1 Strand IV.D

The student will understand that there is a variation among individuals of one kind within a population.

Grade 2. Strand IV.B

The student will recognize that plants and animals have life cycles.

Grade 3 Strand IV.B

The student will recognize that plants and animals have different structures that serve various functions.

Introduction:

As you study life cycles with your class, check out the Komodo Dragon life cycle. It is very unique. There are over 3,000 lizard species, but the Komodo dragon wins the prize for being the largest living lizard in the world.

The komodo dragon is a type of monitor lizard, an ancient species of reptile with ancestors that date back more than 100 million years ago. These large lizards have stubby, bowed legs, clay-colored, scaly skin for great camouflage, and a huge muscular tail. The yellow color of the Komodo's long, forked tongue reminds people of mythical dragon's that spit fire!

This lesson discusses the life cycle of the Komodo dragon. Life for a young dragon is not easy. As soon as the baby hatches, it scrambles out of the nest dug by its mother and scurries up the nearest tree so it won't be eaten by the adults. That's right- adult dragon's think of the hatchlings as easy meals. Fortunately for the babies, adult dragons are too heavy to climb trees. While still uncertain it is estimated that the dragons have a life span of about 35 years.

Objectives:

At the end of this lesson, the students will:

1. Learn that every life cycle is unique to each species.
2. Discover what makes the Komodo dragon life cycle so unique.

Procedure:

1. Before beginning your lesson, brainstorm with your class a bubble map about facts they already know, questions they have, and at the end discuss the important facts they discovered and learned.

Vocabulary:

Life Cycle: The successive stages through which an organism passes from a fertilized egg (or spore) of one generation to a fertilized egg (or spore) of the next generation. A continuous, descriptive account of a life cycle is called the life history of an organism.

Clutch: The complete set of eggs produced or incubated at one time.

Hatchling: A newly hatched bird, amphibian, fish, or reptile.

Predator: any animal that lives by preying on other animals

Carnivore: a meat eating animal

Procedure continued:

2. Read Komodo, the Living Dragon, by Richard Lutz. This book is a great introduction to the life of the Komodo dragon. There are also many sites on the web to help you in your lesson. Please see links in the side bar.
3. Following are important facts about the life cycle of the Komodo dragon. Use the attached worksheet for 4-6 grade students to prepare your students before coming to the Minnesota Zoo (don't forget to look at the Komodo habitat). Please see the side bar for other books/literature you may want to look into to help you further investigate the wonder of the Komodo dragon.
4. Have Fun!

Links:

Information on Komodos and other dragon issues.

www.draconian.com

www.Sandiegozoo.com

www.isdore-of-seville.com/komodo
(Great info)

www.zoo.org

www.honolulu zoo.org

www.nature.ca

Literature:

Komodo Dragon
(Welcome Books), by Edana Eckart

Your Safari Dragon: In Search of the Real Komodo Dragon, by Daniel White and Julia Flossie Truscott

Komodo: The Living Dragon, by Richard Lutz

Procedure Continued:

Baby dragons



In the wild, Komodo monitors will lay eggs during the dry months of July through September. Nests are dug in the ground, covered and left unguarded to incubate for 8 or 9 months. Little is known from the wild, however, four clutches of eggs produced at National and Cincinnati Zoos have ranged from 24 to 29 eggs. Eggs incubated artificially have been hatched at approximately 210 days, when kept at 29.5 degrees Celsius. The young monitors are born approximately 15 to 18 inches long and, in captivity, have reached lengths of more than 4 feet by two years of age. It is estimated that Komodos mature at about 5-6 years of age.

Little Komodos

Young monitors are well adapted to their arboreal life where their coloration is a useful camouflage and the slender body, long tail and sharp claws enable them to move through the trees. As they become older, the coloration changes as does the body confirmation and many of the daily habits. They eventually become terrestrial where they become more interactive with other Komodos and change feeding habits to larger prey and carrion.

Young monitors will feed on arboreal lizards and insects. As they grow and become more terrestrial, they will prey opportunistically on most anything available, from rodents and snakes to birds and their eggs. Large monitors feed on goats, deer, boar and even 1000 pound water buffalo. Large prey is often sick or older animals that may be weak. Komodos often ambush their prey by hiding along game trails. Some prey is injured by the hunting monitors, later dies and is then consumed as carrion. Komodos are cannibalistic, so smaller individuals are occasionally eaten by larger ones. There are cases of humans being consumed or killed by Komodo monitors.