

## Herpetology Lesson Plan

### STARR

#### Science TEKS

**5.4 A:** collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organisms such as terrariums and aquariums;

**5.9 A:** Observe the way organisms live and survive in their ecosystem by interacting with the living and non-living elements;

**5.9 B:** describe how the flow of energy derived from the Sun, used by producers to create their own food, is transferred through a food chain and food web to consumers and decomposers;

**5.10 A:** compare the structures and functions of different species that help them live and survive such as hooves on prairie animals or webbed feet in aquatic animals;

**5.10 B:** differentiate between inherited traits of plants and animals such as spines on a cactus or shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle

#### Math TEKS:

**5.10 A:** perform simple conversions within the same measurement system (SI (metric) or customary)

**5.10 C:** select and use appropriate units and formulas to measure length, perimeter, area, and volume

### CONCEPTS:

Insect Identification, Understanding of Adaptations, Understanding of Morphology, Diversity of Species and their habitats, Importance of Entomology, Importance of insects in the food web, inherited traits vs. learned behaviors, metric measurements

GOALS:

By the end of this lesson, students should:

- 1.) Understand the differences in various species
- 2.) Know how to identify various species of insects and other Arthropods
- 3.) Have a basic understanding of life cycles and the difference between a complete and incomplete metamorphosis
- 4.) Be able to identify various niches and places in the food web in which we find arthropods
- 5.) Have basic understanding of why/ how adaptations occur
- 6.) Have practice using metric rulers

MATERIALS:

Field Guides, Butterfly Nets, Collection/Observation Boxes, Magnifying glasses

PROCEDURE:

Introduction:

What are insects used for or why are they important to us? (Why should we care?)

What are different habitats/niches we find insects in?

What ADAPTATIONS have made herptiles so successful?