

Grade Level(s): Kindergarten – 2nd

Subject(s): Life Science, Literacy

Lesson Title: Learning to Adapt

Materials: *Give Up, Gecko!* By Margaret Read MacDonald & Deborah Melmon, National Geographic for Kids – Slideshow “Geckos”, craft materials, paper, pencil, crayons, markers, chart paper, informational texts about reptiles

Standards: **K-LS1-1:** Use observations to describe patterns of what plants and animals need to survive., **K-ESS2-2:** Construct an argument supported by evidence for how plants and animal can change the environment to meet their needs, **K-ESS3-1:** Use a model to represent the relationship between the needs of different plants or animals and the places they live.

Objectives:

TLW classify animals into groups (mammals, birds, fish, reptiles, etc.)

TLW describe ways that animals (geckos) can adapt to survive in their natural habitats.

Activate Prior Knowledge: Living/non-living, needs of living things, proper care and handling of animals

Vocabulary: nocturnal, camouflage, scales, sheds, endangered, predator, prey

I Do: Show students their class pet (leopard gecko). (Model proper animal handling skills/safety.) Ask the students to describe the gecko’s appearance (bumpy bodies, fat tail, patterns of color/spots, claws, short legs, large eyes, etc.). Ask students to generate hypotheses about why the gecko needs these features to survive in the wild. Record students’ responses on chart paper.

We Do: Explore National Geographic Slideshow about Geckos. Read informational text on slides (or from other supporting informational texts) describing how geckos can adapt to their environments. (Shedding tails to escape from predators, large eyes for better vision, great sense of hearing, scales to help them retain water, fat tails to store excess fat, varied coloring for camouflaging purposes, etc.). Discuss each adaptation (spending time discussing any new vocabulary) and compare students’ hypotheses to the information learned from the Slideshow. Confirm students’ hypotheses and/or provide feedback about any inaccurate hypotheses.

*TLW (The learner will...)

You Do: Create a creature from your imagination. Describe your creature and identify its habitat, diet, natural predators, etc. Explain at least 1 adaptation your creature would need to survive in its habitat.

Rigor/Extensions/Project Based Learning Ideas:

-Create a Creature – Students may identify additional adaptations for his/her imaginary creature and provide scenarios when these adaptations would be necessary.

-Character Building: Read Give Up, Gecko! And teach social-emotional lessons about perseverance, team work, and honesty:

- Gecko demonstrated perseverance when he refused to give up on finding water for himself and the other animals.

- The animals worked together to find water because it was scarce.

- Elephant was dishonest when he said he found the water, but the other animals were honest and spoke up about what really happened.

-Animal Adaptations Expo:

- Students will construct their creatures using a variety of materials (clay, feathers, sequins, pipe cleaners, etc.) and demonstrate how their creature can "adapt" to its environment.

Possible Misconceptions: errors in animal classification (reptiles vs. amphibians), types of geckos (claws vs. suction cups on feet)

Assessment(s): Students will use a combination of dictation, drawing, and writing to identify 3 adaptations geckos use to survive.