Science - Animal Research Project – 3rd grade, 3rd quarter

Strand(s):	SOL objectives:
Science: Living Systems and Life Processes	Science Life Processes 3.4 a, b Science Living Systems 3.5 a, b, c, 3.6 a, b, c Technology 3.2.5, 3.2.9, 3.2.10, 3.3.2, 3.3.7, 3.4.2

1. DESIRED RESULTS

Enduring Understandings (BIG ideas)

Behavioral and physical adaptations allow animals to respond to life needs.
Environment and habitat affect an animal's survival.
The food chain must remain in balance.

Essential Questions	***Knowledge and Skills***
What are adaptations? How do they help animals? What is a habitat? How are habitats similar or different? What happens if a habitat is changed? Why must the food chain remain in balance? What happens when part of the food chain is missing?	Know: animal characteristics – description, habitat, food, life cycle/young, enemies, protection/defense, endangered status, food chain relationships Skill: research and produce an Animal Research Project using PowerPoint **Science Vocabulary** Producer, consumer, decomposer, scavenger, carnivore, herbivore, omnivore, camouflage, mimicry, migrate, hibernate, adaptation, shelter, food chain, instinct, behavior, predator, prey, environment, diversity

2. ASSESSMENT EVIDENCE

Prior knowledge	Ongoing throughout lesson	By the end of the lesson
Familiarity with a variety of animals and their characteristics	Research of a specific animal to locate specified characteristics of the animal	Completed research project

3. LEARNING ACTIVITIES/INSTRUCTION (35-45 min)

Introduction (hook)	What students are doing	Conclusion
Show a video clip on animal diversity (www.unitedstreaming.com search for animals, grade 3 – *Animals Around Us: Animal Adaptations: What are They?, Animal Faces, Animal Places, Concepts in Nature: Where Animals Live, Animal Profiles*)	1. Choose an animal to research 2. Use the Animal Research Project Guide to take notes and cite sources 3. Storyboard PowerPoint to present the animal research project	Students share their animal research projects with their peers and teachers

Accommodations	*Materials and Resources*
Extra support – Teacher facilitation, support using the Animal Research Project guide packet, tiered reference materials, pre-selected websites **Enrichment or early finishers** – hypothesize what would happen to student's animal if it were placed in another environment **Various learning styles –** linguistic, biological/natural scientist, visual/graphical **Limited English proficiency –** tiered materials and guide, support from teacher, partner/team help	Animal Research reference materials (books, videos, websites) Animal Research Project guide MS PowerPoint (Hyperstudio, Appleworks slide show)
Related Technology	***Literature Connections***
MS PowerPoint slide slow Internet Video streaming	Non-fiction animal books

4. WRAP-UP (5-10 min)

Assessment	*Homework*
Evidence of student learning/understanding Rubric on Animal Research Project work and final product	

5. TEACHER REFLECTION

- Were my students talking about the science, or was I doing all of the talking and students were just listening to me?
- Were my students engaged at the beginning of the lesson?
- How much time did I spend reviewing homework, and how much time did I spend on new material?
- Did the students respond to "How" and "Why" questions?
- Did my students have an opportunity to discuss and/or write about science?
- What changes would I make next time the lesson is taught?
- What steps do I need to take next in this topic?