ELEMENTARY SCIENCE **GRADE: 3**	**UNIT TITLE: ANIMAL ADAPTATIONS**

SECTION	**LENGTH**	**CONTENT**	**SKILLS**	**METHODS OF ASSESSMENT**	**FRAMEWORK STRANDS & STANDARDS Grades 3-5**
Sorting and classifying vertebrates	4 lessons	• Animals are grouped by traits they have in common. • Vertebrate classes are fish, amphibians, reptiles, birds and mammals.	• Sort animals by observable features.	• Teacher observation checklist • Student worksheets • Performance checklist	LS 1 LS 3 LS 5 LS 6
Carnivores, herbivores omnivores	4 lessons	• Life is connected through the food chains. • Animal teeth are specialized tools, adapted for the type of food eaten.	• Describe a simple food chain. • Infer how a specific adaptive feature helps an animal survive in its environment	• Teacher observation checklist • Student worksheets	LS 1 LS 6 LS 11
Bird adaptations	4 lessons	• Birds' beaks are specialized tools adapted for the type of food eaten. • Owl pellets contain information about the food chain.	• Compare natural designs to engineered designs. • Extract and sort bones from an owl pellet.	• Student worksheets	LS 1 LS 6 LS 11 T/E 2.4
Animals in their habitats	8 lessons.	• Animals are adapted to live in certain habitats. • Most adaptations are inherited. • Some animal behaviors are inherited, some are learned.	• Infer how a specific adaptive feature helps an animal survive in its environment	• Research project rubric • End of unit assessment	LS 3, LS 5 LS 6, LS 7 LS 8, LS 9.

Massachusetts Science and Technology/Engineering Curriculum Framework, October 2006; **Grades 3-5**

Life Science (LS),

LS 1 Classify plants and animals according to the physical characteristics that they share.

LS 3. Recognize that plants and animals go through predictable life cycles that include birth, growth, development, reproduction, and death.

LS 5 Differentiate between observed characteristics of plants and animals that are fully inherited (e.g., color of flower, shape of leaves, color of eyes, number of appendages) and characteristics that are affected by the climate or environment (e.g., browning of leaves due to too much sun, language spoken).

LS 6 Give examples of how inherited characteristics may change over time as adaptations to changes in the environment that enable organisms to survive, e.g., shape of beak or feet, placement of eyes on head, length of neck, shape of teeth, color.

LS 7 Give examples of how changes in the environment (drought, cold) have caused some plants and animals to die or move to new locations (migration).

LS 8 Describe how organisms meet some of their needs in an environment by using behaviors (patterns of activities) in response to information (stimuli) received from the environment. Recognize that some animal behaviors are instinctive (e.g., turtles burying their eggs), and others are learned (e.g., humans building fires for warmth, chimpanzees learning how to use tools).

LS 9 Recognize that many plants and animals can survive harsh environments because of seasonal behaviors, e.g., in winter, some trees shed leaves, some animals hibernate, and other animals migrate.

LS 11 Describe how energy derived from the sun is used by plants to produce sugars (photosynthesis) and is transferred within a food chain from producers (plants) to consumers to decomposers.

Technology/Engineering (T/E)

T/E 2.4 Compare natural systems with mechanical systems that are designed to serve similar purposes, e.g., a bird's wings as compared to an airplane's wings.