FOSS K–8 LIFE SCIENCE STRAND MATRIX

	MODULE	SCIENCE CONCEPTS	THINKING PROCESSES	MODULE OVERVIEW
Grades 6–8	**Diversity of Life Course**	Cell Tissue Organism Structure Function Behavior Adaptation System Interaction	**Inferring** Relating Organizing Comparing Communicating Observing	Students observe and maintain protists, plants and animals and study their characteristics. They make macroscopic to microscopic observations to discover the cell. They investigate subsystems, behaviors, adaptations and survival strategies.
	Populations and Ecosystems Course	Species Population Ecosystem, Food chain Genetics Trait Natural selection		Students raise populations of organisms to discover population dynamics and interactions over a range of conditions. They explore reproduction, heredity, and natural selection as ways to understand variation within and between organisms.
	Human Brain and Senses Course	Structure/Function Perception, Stimulus/Response Receptor Neuron, Learning		Students investigate how the brain and senses acquire, interpret and respond to information. Vision and touch are emphasized in investigations of the structure and function of sensory organs, receptors and the brain.
Grades 5–6	**Environments Module**	Environment Organism Optimum Environmental factor Tolerance Preferred environment Range	**Relating** Organizing Comparing Communicating Observing	Students gain experience with the major environmental factors in terrestrial and aquatic systems. They organize and analyze data and relate laboratory studies to natural systems.
	Food and Nutrition Module	Acid Nutrient Nutrition Carbohydrate Indicator Fat Calorie Metabolism Chemical reaction		Students investigate properties of foods. They investigate the amounts of somenutritional chemicals in foods and think about relationships between the foods they eat and personal health.
Grades 3–4	**Structures of Life Module**	Fruit Seed Change Property Growth Organism Crayfish Structure Behavior Habitat Territory	**Advanced Organizing** Comparing Communicating Observing	Students observe, compare, and describe the properties of seeds and fruits and the structures and behavior of crayfish. They organize their observations though writing, drawing, and graphing.
	Human Body Module	Human skeleton Joint Bone Contraction Articulation Movement Muscle structure/function Coordination Reaction time Stimulus Response		Students investigate the human skeletal and muscle systems. They observe and compare bones and muscles in their bodies, compare them to photographs, and build models.
Grades 1–2	**Insects Module**	Adult Change Insect Larva Pupa Stage Habitat Nymph Egg Growth Caterpillar Metamorphosis Chrysalis Butterfly	**Beginning Organizing** Comparing Communicating Observing	Students study some of the diversity of forms in insectsand observe and compare the differences in the life cycles and behaviors of insects.
	New Plants Module	Life Cycle Germination Grow Life cycle Living Plant structures Node Stem Bulb Root Seed		Students study some of the diversity of forms in the plant kingdom. They observe and describe the changes that occur as plants grow and develop.
Kindergarten	**Trees Module**	Tree Living Shape Branch Leaf Root s pTrunk	**Comparing** Communicating Observing	Students observe, compare, and describe the properties of trees and parts of trees.
	Animals Two By Two Module	Animal Behavior Fish Living Preference Habitat Aquarium Terrarium Structure Hatch Incubate		Students observe, compare and describe the structures of a variety of animals, including fish, isopods, worms, and snails.