

Year at a Glance – Kindergarten

Science Curriculum						Extensions
6 weeks	Science Topics	TEK Objective	Concepts/Objectives	Vocabulary		Lab/Activities
1 st	Human Body Five Senses Science Lab Safety	K.9 (a) K.4 (a, b) K.1 (a, b) K.2 (a,b,c,d,e)	1) <i>A system is a collection of cycles, structures, and processes that interact.</i> The students will conduct simple classroom and laboratory investigations while using their senses to make observations. They will also make observations using hand lenses, balances and bowls.	Alike/different, skeleton, bones, heart, lungs, intestines, stomach, smell, sight, hearing, touch, taste		1) Make Mine Porridge- Using our sense of taste (AIMS- Sense-able Science) 2) Human Body puzzles and constructing skeleton using x-rays of bones. 3) Importance of Calcium-vinegar and chicken bone experiment
2 nd	Weather Seasons Nocturnal animals and spiders	K.5 b, c K.7	1) <i>Organisms, objects, and events have properties and patterns.</i> 2) <i>Change and constancy occur in systems and can be observed and measured as patterns.</i> Students will observe and identify patterns including seasons, growth, day to night , and predict what happens next. Students will also recognize and copy patterns seen in charts and graphs.	Temperature Thermometer Stratus Cirrus Cumulus Summer Spring	Winter Fall	1) Measuring outside and inside temperature with a thermometer 2) Observe a cloud in a bottle. 3) Owl pellets- Students use hand lenses to observe the different bones in a rodent.
3 rd	Water	K.9 K.10 K.3 K.8 a, b K.5 (b)	1. <i>Water is a basic need of living organisms.</i> 2. <i>Many types of changes occur in matter.</i> Students will observe, describe, and record changes in size, mass, color, position, quantity, time, temperature, sound, and movement. Students will also identify that heat causes change, such as ice melting.	Lake Pond River Ocean Rain Stream	Evaporation Sink Expansion Float Water Cycle	1) Melt an Ice Cube - Use different materials such as paper, foil, and Styrofoam. (AIMS- Primarily Physics) 2) Water Expansion- Students predict how much the water will expand after it has been in the freezer for several hours. 3) The weight of a dry sponge vs. wet sponge. Use pan balances.
4 th	Rocks, Minerals, Soil (Earth's Resources)	K.7 (a, c) K.5 (a) K.2 (a, c, d)	<i>The natural world includes rocks, soil, and water.</i> Students will observe, describe, compare, and sort rocks by size, shape and texture. They will also give examples of how soil and rocks are useful.	Color Hardness Shape Size Sort	Basalt Scoria Geologist Crystal Dull Smooth Hand lens	1) Observe soil samples and describe color and texture. 2) FOSS: Pebbles, Sand, and Silt- Investigation 1- First Rocks 3) Balloon rock- Create "mock" rocks and observe changes in rocks after freezing
5 th	Living Organisms/Nonliving objects	K.8 K.9 K.6	1. <i>All organisms have basic needs.</i> 2. <i>Animals have different structures that serve different functions in growth and survival.</i> 3. <i>Animals closely resemble their parents.</i> Students will observe similarities in animals and differences in structure and behavior.	Living/non-living Land Snails and Water Snails Red Worms and Night Crawlers Goldfish and Guppies Isopods- pill bugs and sow bugs		Animals Two by Two (FOSS) 1) Observe different organisms' behavior and structures. Organisms include: red worms, night crawlers, goldfish, guppies, pill bugs and sow bugs. 2) Construct habitats for organisms.
6 th	Plants Trees	K.2 K.6 K.9 K.10	<i>Trees are growing, living organisms that are resources</i> Students will compare the similarities and differences of the trees and leaves and help plant and care for a tree.	Trunk, leaves, roots, branches, seeds, fruit		Trees (FOSS) 1) Looking at Schoolyard Trees 2) Tree Puzzles 3) A Tree Comes to Class