

**Year at a Glance – 2<sup>nd</sup> Grade**

Science Curriculum						Extensions
6 weeks	Science Topics	TEK Objective	Concepts to Learn/Objectives	Vocabulary	Lab/ Activities	
1 <sup>st</sup>	Earth materials Rocks, sand, and pebbles  Science Lab Safety	2A,C,D,E,F  7A 7B 7C	<i>The natural world includes earth materials. Conducting experiments in the science lab must be done in a safe way.</i>  The students will observe and describe rocks by size, texture, and color. They will also investigate, reason, demonstrate and collect data . Students will observe the similarities and differences in the materials in a river rock mixture.	Gravel and boulders Mantle, crust and core of the earth Basalt, collection, crystal, different, dull, dust, flat, geologist, rough, scoria, smooth, sort	Stone Soup (book) read to class Cook Stone soup FOSS Science Kit- Pebbles ,Sand and Silt Lab: 1) Safety Rules 2) Scientific Tools Scramble 3) Properties of Rocks	
2 <sup>nd</sup>	Matter: Solids, Liquids, and Gases	1A 1B 1C	<i>Matter has physical properties and those properties determine how it is described, classified, changed, and used.</i>  Students will observe and describe the properties of solids and liquids, sort materials according to their properties, combine and separate solids of different particle sizes, observe what happens when solids and other liquids are mixed with water.	Solid, Liquid, gas, space, weight, dissolve, melt, properties, water vapor, oxygen, carbon dioxide, helium, expand, matter, miscible, immiscible, viscosity	1)Solids in Containers- rice, cornmeal, beans 2) Separating Soup Mix 3) Liquids and Water- add water to bottles of liquids and observe results. 4) Conduct an investigation to determine if toothpaste is a solid (FOSS: Solids and Liquids)	
3 <sup>rd</sup>	Sound Energy  Light Energy	5 6A	Students will investigate the effects of an object by increasing or decreasing amounts of light, heat, and sound energy.	Predictions, vibration, parts of the ear, ear canal, ear drum, cochlea, Eustachian tube, nerves, instruments, pitch  Transparent, translucent, opaque, refraction, parts of the eye, mirrors, reflection	FOSS Science Kit 1)Musical Bottles (AIMS- Primarily Physics) 2) The Eyes (AIMS- Primarily Physics)	
4 <sup>th</sup>	Magnets  Simple Machines	4A 4B 4C	<i>Forces cause change and energy exists in many forms.</i> Students will observe and identify how magnets are used in everyday life	Electromagnet, battery, attraction, repel, hypothesis, compass, north and south pole  Gears, pulley, force, motion, movement, machine, incline plane, wheel, axle, screw, lever, compound machine, wedge	Investigating Science Booklet Penny Lever Internet: Edheads Interaction with tools of everyday life Foss Kit- Balance and Motion Investigation 3: Rollers	
5 <sup>th</sup>	Animal Habitats  Insects	2B 3A 3B 3C 9A 9B	<i>Living organisms have basic needs that must be met for them to survive within their environment.</i>  Students will identify the basic needs of animals, identify factors in the environment, including temperature and precipitation that affect growth and behavior such as migration and dormancy.	Mammals, reptiles, amphibians, birds, fish, crustaceans, jungle, forest, desert, and ocean life, food chain, head, thorax, abdomen, larval segments, metamorphosis, larva, cocoons	Habitat project: desert, ocean, forest or jungle (diorama) Foss Kit- Insects Investigation 4- Silkworms Investigation 5- Butterflies	
6 <sup>th</sup>	Space, Earth and Sky, Weather	8A 8B 8C	<i>There are recognizable patterns in the natural world and among objects in the sky.</i>  The student will measure, record, and graph weather information, explore the process of the water cycle including evaporation, condensation, and precipitation. Students will also observe, describe, and record patterns of objects in the sky.	Temperature, thermometer, precipitation, condensation, evaporation, cirrus, stratus, nimbus, cumulus, lunar, solar, star, planet, constellation	1)Weather Station- Record and chart weather patterns in science lab 2) Tracing the Stars (Quick but Great Science Projects)	