

**Unit of Study— Objective 1 – Nature of Science – lab safety;equipment
Objective 4 – Physical Science - Matter**

TEKS #	Knowledge and Skill TEK	Student Expectation	Vocabulary	Tools	Instructional/Assessment Resources
5.1A TAKS	The student conducts field and lab investigations following home and school safety procedures and environmentally appropriate and ethical practices.	Demonstrate safe practices during field and lab investigations	Plant, eye, heating, clothing, poison, animal, fire, glassware, electrical, sharp objects		Laboratory Safety Worksheet
5.2 A TAKS	The student uses scientific methods during field and lab investigations.	Plan and implement descriptive and simple experimental investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology	Identify problem Gather information Hypothesis Test Experiment Conclusion		Colored Candy Lab Scientific Method Worksheets
5.2B TAKS	The student uses scientific methods during field and lab investigations.	Collect information by observing and measuring	Triple beam balance Beaker Flask Graduated cylinder Thermometer Test tube Test tube rack Eyedropper/pipette Tweezers/forceps Goggles Ruler/meter stick	Triple beam balance Beaker Flask Graduated cylinder Thermometer Test tube Test tube rack Eyedropper/pipette Tweezers/forceps Goggles Ruler/meter stick.	Hands on in the Lab with all pieces of equipment

5.2C, D, E TAKS	The student uses scientific methods during field and lab investigations	<p>C. Analyze and interpret information to construct reasonable explanations from direct and indirect evidence</p> <p>D. Communicate valid conclusions</p> <p>E. Construct simple graphs, tables, maps, and charts using tools including computers to organize, examine, and evaluate information</p>	<p>Identify problem</p> <p>Gather information</p> <p>Hypothesis</p> <p>Test Experiment</p> <p>Conclusion</p>		Designing all types of graphs to show the results of various experiments.
5.4 A,B TAKS	The student knows how to use a variety of tools and methods to conduct science inquiry.	<p>A. collect and analyze information using tools including calculators, microscopes, cameras, sound recorders, computer, hand lenses, rulers, thermometers, compasses, balances, hot plates, meter sticks, timing devices, magnets, collecting nets, and safety goggles</p> <p>B. demonstrate that repeated investigations may increase the reliability of results</p>	<p>Triple beam balance</p> <p>Beaker</p> <p>Flask</p> <p>Graduated cylinder</p> <p>Thermometer</p> <p>Test tube</p> <p>Test tube rack</p> <p>Eyedropper/pipette</p> <p>Tweezers/forceps</p> <p>Goggles</p> <p>Ruler/meter stick</p>	<p>Triple beam balance</p> <p>Beaker</p> <p>Flask</p> <p>Graduated cylinder</p> <p>Thermometer</p> <p>Test tube</p> <p>Test tube rack</p> <p>Eyedropper/pipette</p> <p>Tweezers/forceps</p> <p>Goggles</p> <p>Ruler/meter stick</p>	Each class using the proper lab equipment compares their results with each other in order to see how multiple trials gets a better and more reliable conclusion.

5.7A	The student knows that matter has physical properties.	classify matter based on its physical properties including magnetism, physical state, and the ability to conduct or insulate heat, electricity and sound	Matter Solid Liquid Gas Physical properties Mass Weight Volume Density Physical changes	Beakers Triple Beam Balance Bathroom scale Hot plate	Find Mass in Grams using triple beam balance Find Volume of solids and liquids. Lava Lamp demo. Find density of 3 different liquids. These come from Bridging to TAKS through Region 12.
5.7B	The student knows that matter has physical properties.	Demonstrate that some mixtures maintain the physical properties of their ingredients	Mixture		Mixture Separation Challenge
5.7C	The student knows that matter has physical properties.	Identify changes that can occur in the physical properties of the ingredients of solutions such as dissolving sugar in water	Solution Solubility Evaporation Condensation Sublimation		FOSS mixture/solution Game – internet site
5.7D	The student knows that matter has physical properties.	Observe and measure characteristic properties of substances that remain constant such as boiling point and melting point	Boiling point Freezing point		

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Fifth Grade Science
First Six Weeks