

**CURRICULUM GUIDE**  
**Sixth Grade Science**  
**First Six Weeks**

**Unit of Study— Objective 1 – Nature of Science: Scientific Investigation and Working in the Lab**

TEKS #	Knowledge and Skill TEK	Student Expectation	Vocabulary	Tools	Instructional/Assessment Resources
6.1AB	<b>(6.1) Scientific processes.</b> The student conducts field and lab investigations using safe, environmentally appropriate, and ethical practices.	(A) <b>demonstrate safe practices</b> during field and laboratory investigations; and (B) <b>make wise choices in the use and conservation</b> of resources and the disposal or recycling of materials.	Scientific inquiry Experiment Measurement Scientific model Theory Law	Beakers Petri dishes Meter sticks Graduated cylinders	
6.2ABCDE	<b>(6.2) Scientific processes.</b> The student uses scientific inquiry methods during field and laboratory investigations.	(A) <b>plan and implement investigative procedures</b> including asking questions, formulating testable hypotheses, and selecting and using equipment and technology;  (B) <b>collect data</b> by observing and measuring;  (C) <b>analyze and interpret information</b> to construct reasonable explanations from direct and indirect evidence;  (D) <b>communicate valid conclusions</b> ;  (E) <b>construct graphs, tables, maps, and charts</b> using tools including computers to organize, examine and evaluate information.	Prediction Hypothesis Variable Controls Data Trial Inference Lab report Safety goggles Toxic Waft Waste Beaker Test tube Microscope Eyepiece Nosepiece Stage Arm Base Diaphragm Light source Objective lens	Weather instruments Timing devices Hot plates Safety goggles Spring scales Magnets Compasses Balances Microscopes Telescopes Thermometers Calculators Field equipment Computer Computer probe	
6.3ABCDE	<b>(6.3) Scientific processes.</b> The student uses critical thinking and scientific problem solving to make informed decisions.	(A) <b>analyze, review, and critique scientific explanations</b> , including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information;  (B) <b>draw inferences</b> based on data related to promotional materials for products and services;  (C) <b>represent</b> the natural world using models and identify their limitations;  (D) <b>evaluate</b> the impact of research on	Magnification Estimate SI system Meter Meter stick Volume		

6.4AB	<p><b>(6.4) Scientific processes.</b> The student knows how to use a variety of tools and methods to conduct science inquiry.</p>	<p>scientific thought, society, and the environment;</p> <p>(E) <b>connect</b> Grade 6 science concepts with the history of science and contributions of scientists.</p> <p>(A) <b>collect, analyze, and record information</b> using tools including beakers, petri dishes, meter sticks, graduated cylinders, weather instruments, timing devices, hot plates, test tubes, safety goggles, spring scales, magnets, balances, microscopes, telescopes, thermometers, calculators, field equipment, compasses, computers, and computer probes; and</p> <p>(B) <b>identify patterns</b> in collected information using percent, average, range, and frequency.</p>	<p>Graduated cylinder Displaced Mass Triple-beam balance</p>		
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