

**Unit of Study—Objective 4 – Earth Science – Earth vs. Moon; Sun and other stars**  
**Life Science – Plant processes**

TEKS #	Knowledge and Skill TEK	Student Expectation	Vocabulary	Tools	Instructional/Assessment Resources
5.12C	The student knows that the natural world includes earth materials and objects in the sky.	Identify the physical characteristics of the Earth and compare them to the physical characteristics of the moon.	Revolve Orbit Rotate Axis Eclipse Telescope Satellite Space probe		Brain Pop – Moon Brain Pop – Eclipse Venn Diagram – Moon vs. Earth
5.12D	The student knows that the natural world includes earth materials and objects in the sky.	Identify gravity as the force that keeps planets in orbit around the Sun and the moon in orbit around the Earth	Photosphere Corona Sunspot Solar flare Solar wind Magnitude Main sequence Universe Galaxy Light-year		Cycles of Change Solar System Cycles, Structures & Processes Kamico Games
5.6C	The student knows that some change occurs in cycles.	Describe and compare life cycles of plants and animals.	Life cycle Direct development Metamorphosis Inherited trait Dominant trait Recessive trait Gene		Life Cycle Concentration Game: Cheryl Cox Inherited Characteristics Lab: Harcourt Book BrainPop: Metamorphosis Inherited/Not Inherited Game: Kamico

5.10A,B	The student knows that likenesses between offspring and parents can be inherited or learned.	<p>A. Identify traits that are inherited from parent to offspring in plants and animals</p> <p>B. Give examples of learned characteristics that result from the influence of the environment.</p>	<p>Epidermis Palisade layer Cellular respiration Tropism Gravitropism Fertilization Stamens Pistil Photosynthesis Phototropism Vegetative propagation Ovary Embryo Cotyledons Germinate Seedling Grafting Tissue culture</p>		<p>BrainPop: Photosynthesis BrainPop: Pollination</p>
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		

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		
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	

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>		Hands on in the Lab with all pieces of equipment
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>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>	
5.6A	The student know that some change occurs in cycles	identify events and describe changes that occur on a regular basis such as in daily, weekly, lunar, and seasonal cycles	<p>Phases of moon</p> <p>Seasons</p> <p>Rotation</p> <p>Axis</p>		BrainPop: Seasons

5.3E	The student uses critical thinking and scientific problem solving to make informed decisions.	connect Grade 5 science concepts with the history of science and contributions of scientists	Gregor Mendal Sir Isaac Newton Galileo Neil Armstrong		
5.3D	The student uses critical thinking and scientific problem solving to make informed decisions	evaluate the impact of research on scientific thought, society, and the environment	Theory		
5.3C	The student uses critical thinking and scientific problem solving to make informed decisions	represent the natural world using models and identify their limitations.	models	Model of the layers of the Sun	TAKS coach Book

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