

## Grade 4

# Science TEKS Available at Space Center Houston

<b>Texas Essential Knowledge and Skills</b>	<b>Related Exhibit at Space Center Houston</b>
Demonstrate safe practices during field and laboratory investigations (4.1A).	<b>Kids Space Place (all)</b>
Plan and implement descriptive investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology (4.2A).	<b>Kids Space Place (all)</b> <b>Shuttle Computer Simulators</b>
Collect information by observing and measuring (4.2B).	<b>Kids Space Place (all)</b>
Analyze and interpret information to construct reasonable explanations from direct and indirect evidence (4.2C).	<b>Kids Space Place (all)</b> <b>Shuttle Computer Simulators</b>
Communicate valid conclusions (4.2D).	<b>Kids Space Place</b> – Build A Rocket, Mission Kidtrol, Launch A Rocket, Gravity Wells, Build An International Space Station
Analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information (4.3A).	<b>Kids Space Place (all)</b> <b>Time Tunnel Exhibits</b> <b>Starship Gallery</b> – Space Exploration Timeline, Rocket Development Timeline, Lunar Lab Samples Vault, Lunar Agriculture Test Chamber
Evaluate the impact of research on scientific thought, society, and the environment (4.3D).	<b>Manned Spaceflight Database</b> <b>Time Tunnel Exhibits</b> <b>Internet Blast-Off Stations</b> <b>Starship Gallery</b> – Space Exploration Timeline, Rocket Timeline, Lunar Lab Samples Vault, Lunar Agriculture Test Chamber, Skylab Exhibit, “On Human Destiny” film <b>Mission Status Center Show</b>

<p>Connect Grade 4 science concepts with the history of science and contributions of scientists (4.3E).</p>	<p><b>Spacesuit Exhibit</b></p> <p><b>Manned Spaceflight Database</b></p> <p><b>Time Tunnel Exhibits</b></p> <p><b>Starship Gallery</b> – Space Exploration Timeline, Rocket Timeline, Lunar Lab Samples Vault, Lunar Agriculture Test Chamber, Skylab Exhibit, “On Human Destiny” film</p> <p><b>Mission Status Center Show</b></p>
<p>Collect and analyze information using tools including calculators, safety goggles, microscopes, cameras, sound recorders, <b>computers</b>, hand lenses, rulers, thermometers, meter sticks, timing devices, balances, and compasses (4.4A).</p>	<p><b>Kids Space Place (all)</b></p> <p><b>Shuttle Computer Simulators</b></p>
<p>Demonstrate that repeated investigations may increase the reliability of results (4.4B).</p>	<p><b>Kids Space Place (all)</b></p> <p><b>Shuttle Computer Simulators</b></p> <p><b>Starship Gallery</b> – Space Exploration Timeline, Rocket Timeline, Lunar Lab Samples Vault, Lunar Agriculture Test Chamber</p>
<p>Identify and describe the roles of some organisms in living systems such as plants in a schoolyard, and parts in nonliving systems such as a light bulb in a circuit (4.5A).</p>	<p><b>Kids Space Place</b> – Build A Rocket, Mars Rover, Mission Kidtrol</p> <p><b>Spacesuit Exhibit</b></p> <p><b>Shuttle Computer Simulators</b></p>
<p>Predict and draw conclusions about what happens when part of a system is removed (4.5B).</p>	<p><b>Kids Space Place</b> – Build A Rocket, Launch A Rocket, Mars Rover, Mission Kidtrol</p> <p><b>Space Shuttle Orbiter Mock-Up</b></p> <p><b>Spacesuit Exhibit</b></p>
<p>Illustrate that certain characteristics of an object can remain constant even when the object is rotated like a spinning top, translated like a skater moving in a straight line, or reflected on a smooth surface (4.6B).</p>	<p><b>Kids Space Place</b> – Flying In Space, Build A Rocket, Launch A Rocket, Mars Rover, Mission Kidtrol, Gravity Wells</p> <p><b>Shuttle Computer Simulators</b></p> <p><b>Manned Maneuvering Unit Simulator</b></p>

Identify and observe effects of events that require time for changes to be noticeable including growth, erosion, dissolving, weathering, and flow (4.10A)	<b>Starship Gallery</b> – Lunar Lab Samples Vault, Lunar Agriculture Test Chamber
Identify the Sun as the major source of energy for the Earth and understand its role in the growth of plants, in the creation of winds, and in the water cycle (4.11C).	<b>Starship Gallery</b> – Sun/Moon/Mars Energy Resources Mural