



## Mesquite ISD Curriculum Sequence Second Semester 8<sup>th</sup> Grade Science

4th Six Weeks	5th Six Weeks	6th Six Weeks
<p><b>Unit 4: Astronomy (32 days)</b> The Astronomy Unit is made up of two subunits: Earth/Moon and The Universe. While studying about the Earth and moon, students will learn about the seasons, moon phases, and tides. When studying the universe, students will explore various components that make up our universe as well as the origin of the universe and distances in space.</p> <p>This unit will include some of, but is not limited to, the following lessons:</p> <ul style="list-style-type: none"> <li>• Seasons Lab</li> <li>• Seasons Manipulative</li> <li>• Moon Phases Simulations</li> <li>• Lunar Lollipops</li> <li>• Moon Phases Oreo Cookie Lab</li> <li>• Our Place in Our Galaxy</li> <li>• Life Cycle of a Star Manipulative</li> <li>• A Star is Born</li> <li>• Red Hot</li> <li>• Components of the Universe Activity</li> <li>• Comic Life Research and Product</li> <li>• Journey to the Edge of the Universe</li> <li>• Measuring a Kid a Minute</li> <li>• A Universe of Galaxies</li> <li>• Do You See What I Hear?</li> <li>• Our Expanding Universe</li> </ul>	<p><b>Unit 5: Ecology (15 days)</b> In the Ecology Unit, students will learn about relationships in ecosystems, environmental changes and human activity, and will review heredity.</p> <p>This unit will include some of, but is not limited to, the following lessons:</p> <ul style="list-style-type: none"> <li>• Nature Squares</li> <li>• Competition Jigsaw</li> <li>• Energy Pyramid/ Food Webs Stations</li> <li>• What's For Dinner?</li> <li>• Everyone Plays a Part</li> <li>• Oil &amp; Water...What a Mess! Lab</li> <li>• Peppered Moth Lab</li> </ul> <p><b>Unit 6: Twenty Days to STAAR (9 days)</b> Twenty days to STAAR is a comprehensive review of STAAR tested concepts taught in 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade Science. It begins mid-way through the 5<sup>th</sup> Six Weeks and ends the week before the STAAR test.</p> <p>Topics include:</p> <ul style="list-style-type: none"> <li>• Nature of Science Review</li> <li>• Measuring and Graphing Changes in Motion</li> <li>• Potential and Kinetic Energy; Energy Transformation</li> <li>• Newton's Laws of Motion</li> <li>• Simple Machines and Work</li> <li>• Cell Structure and Function</li> <li>• Photosynthesis and Energy Conversion</li> <li>• Interactions in Ecosystems</li> <li>• Heredity</li> </ul>	<p><b>Unit 6 (Continued): Twenty Days to STAAR (11 days)</b> Twenty days to STAAR is a comprehensive review of STAAR tested concepts taught in 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade Science.</p> <p>Topics include:</p> <ul style="list-style-type: none"> <li>• Feedback and the Human Body</li> <li>• Physical/Chemical Properties and Changes in Matter</li> <li>• Structure and Properties of Atoms</li> <li>• Periodic Table</li> <li>• Compounds and Chemical Reactions</li> <li>• Sun, Earth, &amp; Moon</li> <li>• Characteristics of the Universe</li> <li>• Weathering, Erosion, and Deposition</li> <li>• Plate Tectonics and The Rock Cycle</li> <li>• Catastrophic Events</li> <li>• Topographic Maps</li> </ul> <p><b>Unit 7: Culminating Unit (21 days)</b> <b>Choosing the Best; End of Year Project</b> Choosing the Best is an abstinence education program that takes place over the course of 8 days. After students complete Choosing the Best, they will participate in Biology Prep.</p> <p>This unit will include some of, but is not limited to, the following lessons:</p> <ul style="list-style-type: none"> <li>• Microscope Basics</li> <li>• Microscope Lab</li> <li>• Cells Model</li> <li>• Construction Zone</li> <li>• Culminating Unit Project</li> </ul> <p>The end of year project will evaluate students' knowledge gained in 8<sup>th</sup> grade Science. Students will create an interactive Jeopardy game. Groups of students will develop questions to demonstrate an understanding of concepts covered in 8<sup>th</sup> grade Science including Physics, Chemistry, Earth Systems, Astronomy, and Ecology. Students will compete in teams using the Jeopardy game that is chosen by the teacher that demonstrates the most comprehensive review of the year's content.</p>