

<b>1<sup>st</sup> Quarter (44 Days)</b>			
<b>Resources:</b> Glemco Science (2015) Stem Scopes			
<b>Week</b>	<b>Unit/Lesson</b>	<b>Learning Objectives</b>	<b>Reporting Categories ( TEKS SEs)</b>
Week 1	Scientific investigation and reasoning	TSW plan and implement comparative and descriptive investigations by making observations, asking well-defined questions, and using appropriate equipment and technology	8.1,8.2,8.3,8.4
Week 2	Matter and Energy	TSW describe the structure of atoms, including the masses, electrical charges, and locations, of protons and neutrons in the nucleus and electrons in the electron cloud	8.5(A)
Week 3	Matter and Energy	TSW identify that protons determine an element's identity and valence electrons determine its chemical properties, including reactivity	8.5 (B)
Week 4	Matter and Energy	TSW interpret the arrangement of the Periodic Table, including groups and periods, to explain how properties are used to classify elements	8.5(C)
Week 5	Matter and Energy	TSW recognize that chemical formulas are used to identify substances and determine the number of atoms of each element in chemical formulas containing subscripts	8.5(D)
Week 6	Matter and Energy	TSW investigate how evidence of chemical reactions indicate that new substances with different properties are formed	8.5(E)
Week 7	Matter and Energy	TSW recognize whether a chemical equation containing coefficients is balanced or not and how that relates to the law of conservation of mass	8.5 (F)
Week 8	Review and Assessment	<b>1<sup>st</sup> Benchmark</b>	All TEKS
Week 9	Force, Motion, and Energy	TSW demonstrate and calculate how unbalanced forces change the speed or direction of an object's motion	8.6(A)
Week 10	Force, Motion, and Energy	TSW differentiate between speed, velocity, and acceleration	8.6(B)

<b>2nd Quarter (43 Days)</b>			
<b>Resources:</b> Glemco Science (2015) Stem Scopes			
<b>Week</b>	<b>Unit/Lesson</b>	<b>Learning Objectives</b>	<b>Reporting Categories ( TEKS SEs)</b>
Week 1	Force, Motion, and Energy	TSW investigate and describe applications of Newton's law of inertia, law of force and acceleration, and law of action-reaction such as in vehicle restraints, sports activities, amusement park rides, Earth's tectonic activities, and rocket launches	8.6(C)

2nd Quarter (43 Days)			
Resources: Glemco Science (2015) Stem Scopes			
Week	Unit/Lesson	Learning Objectives	Reporting Categories ( TEKS SEs)
Week 2	Earth and Space	TSW model and illustrate how the tilted Earth rotates on its axis, causing day and night, and revolves around the Sun causing changes in seasons	8.7(A)
Week 3	Earth and Space	TSW demonstrate and predict the sequence of events in the lunar cycle	8.7 (B)
Week 4		<b>IOWA/ITBS Complete Battery Gr 3-8</b>	
Week 5	Earth and Space	TSW relate the position of the Moon and Sun to their effect on ocean tides	8.7 (C)
Week 6	Earth and Space	TSW describe components of the universe, including stars, nebulae, and galaxies, and use models such as the Hertzsprung-Russell diagram for classification	8.8 (A)
Week 7	Earth and Space	TSW recognize that the Sun is a medium-sized star near the edge of a disc-shaped galaxy of stars and that the Sun is many thousands of times closer to Earth than any other star	8.8(B)
Week 8	Review and Assessment	<b>2<sup>nd</sup> Benchmark</b>	All TEKS
Week 9	Earth and Space	TSW explore how different wavelengths of the electromagnetic spectrum such as light and radio waves are used to gain information about distances and properties of components in the universe	8.8 (C)

3rd Quarter (43 Days)			
Resources: Glemco Science (2015) Stem Scopes			
Week	Unit/Lesson	Learning Objectives	Reporting Categories ( TEKS SEs)
Week 1	Earth and Space	TSW model and describe how light years are used to measure distances and sizes in the universe	8.8(D)
Week 2	Earth and Space	TSW describe the historical development of evidence that supports plate tectonic theory	8.9(A)
Week 3	Earth and Space	TSW relate plate tectonics to the formation of crustal features	8.9(B)
Week 4	Earth and Space	TSW interpret topographic maps and satellite views to identify land and erosional features and predict how these features may be reshaped by weathering	8.9(C)
Week 5	Earth and Space	TSW model and describe how light years are used to measure distances and sizes in the universe	8.9(D)

<b>3rd Quarter (43 Days)</b>			
<b>Resources:</b> Glemco Science (2015) Stem Scopes			
<b>Week</b>	<b>Unit/Lesson</b>	<b>Learning Objectives</b>	<b>Reporting Categories ( TEKS SEs)</b>
Week 6	Earth and Space	TSW recognize that the Sun provides the energy that drives convection within the atmosphere and oceans, producing winds and ocean currents	8.10(A)
Week 7	Earth and Space	TSW identify how global patterns of atmospheric movement influence local weather using weather maps that show high and low pressures and fronts	8.10(B)
Week 8	Review and Assessment	<b>3<sup>rd</sup> Benchmark</b>	All TEKS
Week 9	Earth and Space	TSW identify the role of the oceans in the formation of weather systems such as hurricanes	8.10(C)

<b>4th Quarter (46 Days)</b>			
<b>Resources:</b> Glemco Science (2015) Stem Scopes			
<b>Week</b>	<b>Unit/Lesson</b>	<b>Learning Objectives</b>	<b>Reporting Categories ( TEKS SEs)</b>
Week 1	Organisms and Environments	TSW describe producer/consumer, predator/prey, and parasite/host relationships as they occur in food webs within marine, freshwater, and terrestrial ecosystems	8.11(A)
Week 2	Organisms and Environments	TSW investigate how organisms and populations in an ecosystem depend on and may compete for biotic and abiotic factors such as quantity of light, water, range of temperatures, or soil composition	8.11(B)
Week 3	Review and Assessment	<b>STAAR TBD</b>	All TEKS
Week 4	Organisms and Environments	TSW explore how short-and long-term environmental changes affect organisms and traits in subsequent populations	8.11(C)
Week 5	Organisms and Environments	TSW recognize human dependence on ocean systems and explain how human activities such as runoff, artificial reefs, or use of resources have modified these systems	8.11(D)
Week 6	Review	STAAR Review Stations	All TEKS
Week 7	Review and Assessment	<b>STAAR TBD</b>	All TEKS
Week 8	Review	STAAR Review Stations	All TEKS
Week 9	Review and Assessment	<b>Final Benchmark(optional)</b>	All TEKS
Week 10	Review and Assessment	Dissection & Review	All TEKS