

Port Isabel Junior High  
Science/ 8<sup>th</sup> Grade

2016/2017 **Science Curriculum Map** (Tentative)

Week	Dates	TEKS	Scientific Investigations and Reasoning Skills	Vocabulary	Resources/ Materials
1/2	<p>8/22-9/2 1- 8/22-8/26 2- 8/29-9/2</p> <p>Test should be on 9/2 over scientific method, lab safety, MSDS, and Hazardous Material Sheets</p> <p>Please note: Diagnostic readiness exam will be given during the first two weeks. Journal set up cannot be done until all students have journals.</p>	<p><b>8.1 A, B</b> Scientific investigation and reasoning. The student, for at least 40% of instructional time, conducts laboratory and field investigations following safety procedures and environmentally appropriate and ethical practices</p> <p><b>8.4 A, B</b> The student know how to use a variety of tools and safety equipment to conduct science inquiry</p>	<p><b>8.1 A, B</b> Scientific investigation and reasoning. The student, for at least 40% of instructional time, conducts laboratory and field investigations following safety procedures and environmentally appropriate and ethical practices</p> <p><b>8.2 A, B, C, D, E</b> The student uses scientific inquiry methods during laboratory and field investigations</p> <p><b>8.3 A, B, C, D</b> The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists</p> <p><b>8.4 A, B</b> The student know how to use a variety of tools and safety equipment to conduct science inquiry</p>	<p><b>KEY VOCABULARY: Flammability Hazard, health Hazard, stability hazard, special information volatile, oxidizing agent, organic compound, toxic, carcinogen, flammable.</b></p> <p><b>And various safety terms such as fire blanket, eyewash, fume hood, and lab procedural terms regarding safety in the lab.</b></p> <p><b>Key vocabulary: independent variable, dependent variable, control, variable, problem, hypothesis, predict, analyze, scientific method, observation, SI (International System of Units), solution, mixture, soluble, solvent.</b></p>	<p><b>TEXT: Fusion Pgs 33-45</b></p> <p><b>MSDS sheets</b> from either Boreal or Flinn scientific</p> <p><b>Hazardous material sheets</b></p> <p><b>Samples</b> of chemical to compare labels</p> <p><b>Journals</b></p> <p><b>Crayons/ map pencils</b></p> <p><b>scientific method chart.</b> □</p> <p><b>Safety and Conservation</b></p>

<p>3</p>	<p>9/5-9/9 Introduce the vocabulary for Matter and Energy</p> <p>Holiday 9/5</p> <p>This must be taught in combination with week 4 because the periodic table is necessary to interpret valence electrons</p>	<p><b>Matter and Energy</b></p> <p>The student knows that matter is composed of atoms and has chemical and physical properties</p> <p><b>Readiness 8.5A</b> describe the structure of atoms including the masses, electrical charges, and locations of protons and neutrons in the nucleus and electrons in electron cloud</p> <p><b>Readiness 8.5B</b> identify that protons determine an element's identity and valence electrons determine its chemical properties, including reactivity</p> <p>Please note that this must overlap with the Readiness standard 8.5C because the periodic table is necessary for interpreting electron placement</p>	<p><b>Embedded Processing skills 8.3A, 8.3B, 8.3C, 8.1A</b></p> <p>8.3B use models to represent aspects of the natural world such as an atom, a molecule, space, or a geologic feature</p> <p>8.2C collect and record data using the SI units and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>8.3B use models to represent aspects of the natural world such as an atom, a molecule, space, or a geologic feature</p>	<p><b>Vocabulary:</b></p> <p>Atom Element Protons electrons neutrons charges positive negative neutral energy levels/orbits/shells/ rings groups families valence electrons Dalton Thompson Rutherford Bohr models, elements Ion Isotope Mass atomic number chemical symbol APES</p>	<p><b>Textbook Resources</b> Pgs. 112-123 <b>Assessment review and practice (ARP)</b></p> <p><b>Pgs 27-29 Lab Manual</b></p> <p><b>Unit 3 Chemistry</b></p> <p><b>Possible RESOURCES</b> Mentoring Minds Measure-up Saddleback Stemscopes Power Point You-tube videos</p>
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4	9/12-9/16	<p><b>Readiness 8.5C</b> interpret the arrange of the Periodic Table, including groups and periods, to explain how properties are used to classify elements</p>	8.3D relate the impact of research on scientific thought and society, including the history of science and contributions of scientists as related to the content	<p><b>Vocabulary:</b>  Group  Family  Alkali metal  Alkali Earth metals  Transition metals,  Carbon  Nitrogen  Oxygen  Halogens  Noble Gases  valence electrons</p>	<p><b>Textbook Resources</b>  Pgs. 124-135</p> <p><b>(ARP)</b></p> <p><b>Pgs 31-32</b></p> <p><b>Lab Manual</b>  Unit 3 Chemistry</p> <p><b>Possible RESOURCES</b>  Mentoring Minds  Measure-up  Saddleback  Stemscopes  Power Point  You-tube videos</p>
5	9/19-9/23	<p>Continued from week 4</p> <p><b>Readiness 8.5C</b> interpret the arrange of the Periodic Table, including groups and periods, to explain how properties are used to classify elements</p> <p><b><u>Embedded Supporting Standards</u></b></p> <p><b>6.6A</b> compare metals, non-metals, and metalloids using physical properties such as luster, conductivity, or malleability</p>	8.2C collect and record data using the SI units and qualitative means such as labeled drawings, writing, and graphic organizers	valence electrons luster metalloids metals physical properties chemical properties conductivity malleability brittle ductile	<p><b>Textbook Resources</b>  Pgs. 136-145</p> <p><b>(ARP)</b></p> <p><b>Pgs 31-32</b>  <b>117-118 (6.5A)</b></p> <p><b>Lab Manual</b>  Unit 3 Chemistry</p> <p><b>Possible RESOURCES</b>  Mentoring Minds  Measure-up  Saddleback  Power Point</p>

					<p>You-tube videos Journals, periodic tables, document camera, power point, colored map pencils</p>
6	9/26-9/30	<p><b>Matter and Energy</b></p> <p>The student knows that matter is composed of atoms and has chemical and physical properties.</p> <p><b>Readiness 8.5 D</b> recognize that chemical formulas are used to identify substances and determine the number of atoms of each element in chemical formulas containing subscripts</p> <p><b><u>Embedded Supporting standards</u></b></p> <p><u>Supporting 6.5A</u> know that an element is a pure substance represented by chemical symbols <u>Supporting 6.5C</u> differentiate between elements and compounds on the most basic level <u>Supporting 7.6A</u> identify that organic compounds contain carbon and other elements such as hydrogen, oxygen, phosphorus, nitrogen, or sulfur</p>		<p>Vocabulary Chemical change, chemical formula, chemical equation chemical subscript, coefficient, product, reactant, yield, law of conservation of mass, precipitate,</p>	<p><b>Textbook Resources</b> <b>Pgs. 148-161</b></p> <p><b>(ARP)</b></p> <p><b>Pgs 31-32</b> <b>115-116 (6.5C)</b> <b>88-89 (7.6A)</b> <b>90-91 (7.6B)</b></p> <p><b>Lab Manual</b> <b>Unit 3 Chemistry</b></p> <p><b>Possible RESOURCES</b> Mentoring Minds Measure-up Saddleback Stemscopes Power Point You-tube videos Journals, periodic tables, document camera, power point, colored map pencils</p>

7	10/3-10/7	<p><b>Readiness 8.5 E</b> investigate how evidence of chemical reactions indicate that new substance with different properties are formed</p>	<p><b>Embedded Processing Skills</b> 8.2A, 8.2C, 8.3B, 8.1A</p>	<p>VOCABULARY Physical properties, chemical properties, physical change, chemical change, Catalysts, phase change, exothermic reaction, endothermic reaction, precipitate, acid, bases, litmus paper, corrosion, flammable, products, reactants, conservation of mass, melting point, boiling point, combustion, odor, solubility, solution, mixture, solute, solvent, rust, oxidation</p>	<p><b>Textbook Resources</b> Pgs. 148-161 <b>Unit 3 Review</b> Pgs. 165-168</p> <p><b>(ARP)</b></p> <p><b>Pgs 35-36</b></p> <p><b>Lab Manual</b> <b>Unit 3 Chemistry</b></p> <p><b>Possible RESOURCES</b> Mentoring Minds Measure-up Saddleback Stemscopes Power Point You-tube videos Journals, Power point, measuring up,</p>
8	10/10-10/14  10/10 Staff development	<p><b>Readiness 8.5 E</b> investigate how evidence of chemical reactions indicate that new substance with different properties are formed</p>		<p>VOCABULARY Physical properties, chemical properties, physical change, chemical change, Catalysts, phase change,</p>	<p><b>Textbook Resources</b> Pgs. 148-161</p> <p><b>(ARP)</b></p> <p><b>Pgs 37-38</b> <b>119-120 (6.6B)</b></p>

9	10/17-10/21	<p><b>Supporting 8.5F</b> recognize whether a chemical equation containing coefficients is balanced or not and how that relates to the law of conservation of mass</p>		<p>exothermic reaction, endothermic reaction, precipitate, acid, bases, litmus paper, corrosion, flammable, products, reactants, conservation of mass, melting point, boiling point, combustion, odor, solubility, solution, mixture, solute, solvent, rust, oxidation</p>	<p><b>Lab Manual</b> <b>Unit 3 Chemistry</b></p> <p><b>Possible RESOURCES</b> Mentoring Minds Measure-up Saddleback Stemscopes Power Point You-tube videos Journals,</p> <p><b>Materials</b> lab set up to include, Calcium chloride (damp rid), pH litmus paper, big 6 volt batteries, magnets, petri dishes, thermometers, bleach, vinegar, cups, pipets, test tubes, steel wool (fine), balloons, Erlenmeyer flasks, beakers, matches, spints (pop sickle sticks) MnO<sub>2</sub> for catalyst wire, matches, baking soda, indicator</p>
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10	10/24-10/28	<p>6.6B calculate density to identify an unknown substance Practice gridding</p> <p><b>Embedded Supporting Standards</b></p> <p>6.6B calculate density to identify an unknown substance 6.5D identify the formation of a new substance by using the evidence of a possible chemical change such as production of gas, change in temperature, production of precipitate, or color change</p>	<p><b>Embedded Processing Skills</b></p> <p><b>8.1A,B</b> Scientific investigation and reasoning. The student, for at least 40% of instructional time, conducts laboratory and field investigations following safety procedures and environmentally appropriate and ethical practices</p> <p><b>8.2 A, B, C, D, E</b> The student uses scientific inquiry methods during laboratory and field investigations</p> <p><b>8.3 A, B, C, D</b> The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists</p> <p><b>8.4 A, B</b> The student know how to use a variety of tools and safety equipment to conduct science inquiry</p>	<p><math>D=m/v</math></p> <p>Density Mass Volume graduated cylinders, triple beam balance weight (students need to know the difference between weight and mass)</p>	<p><b>Textbook Resources Supplemental practice sheets and lab stations to practice density</b></p> <p>Graduated cylinders, water, triple beam Balance Marbles, density rods, Griddables questions, power points</p>
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11	10/31-11/4	<p><b>Readiness 8.6 C</b> investigate and describe applications of Newton’s law of inertia, law of force and acceleration, and law of action-reaction such as vehicle restraints, sports activities, amusement park rides, Earth’s tectonic activities, and rocket launches.</p> <p><u>Supporting standards 6.8 A</u> compare and contrast potential and kinetic energy</p> <p>NOTE: use roller coaster, pendulum, object falling or rising as in amusement park ride, object falling, convection current in Earth’s interior</p> <p><u>Supporting standard 6.9 C</u> demonstrate energy transformations such as energy in a flashlight battery changes from chemical energy to electrical energy to light energy</p>	<p><b>Embedded Processing Skills</b></p> <p><b>8.1A,B</b> Scientific investigation and reasoning. The student, for at least 40% of instructional time, conducts laboratory and field investigations following safety procedures and environmentally appropriate and ethical practices</p> <p><b>8.2 A, B, C, D, E</b> The student uses scientific inquiry methods during laboratory and field investigations</p> <p><b>8.3 A, B, C, D</b> The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists</p> <p><b>8.4 A, B</b> The student know how to use a variety of tools and safety equipment to conduct science inquiry</p>	<p>potential energy, kinetic energy, chemical energy, mechanical energy, Law of conservation of energy, thermal energy, radiation, convection, conduction</p> <p>Newton’s law of inertia</p> <p>Newton’s law of force and acceleration</p> <p>Newton’s law of action-reaction</p>	<p><b>Textbook Resources</b> Pgs. 200-214</p> <p><b>(ARP)</b></p> <p>Pgs 43-44 121-122 (6.8A) 127-128 (6.9C)</p> <p><b>Lab Manual</b> Unit 4 Forces/Motion</p> <p><b>Possible RESOURCES</b> Mentoring Minds Measure-up Saddleback Stemscopes Power Point You-tube videos Journals, Power point, measuring up, Inclined planes, inertia cars, cups, boards, flashlights, meterstick, rope, boards, fish tank, hot water, flasks, batteries, wire, wind up toys, pull back cars. Radiometer Heat lamps Thermometers,</p>
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					<p>nails, rubber bands,</p> <p>Power Point You-tube videos Measure-up Flashcards for quiz quiz trade</p>
12	11/7-11/11	<p><b>Readiness 8.6A</b> demonstrate and <b>calculate</b> how unbalanced forces change the speed or direction of an object's motion</p> <p><u>Supporting Standard 7.7A</u> contrast situations where work is done with different amounts of force to situations where not work is done such as moving a box with a ramp, without a ramp, or standing still</p>			<p><b>Textbook Resources</b> <b>Pgs. 187-197</b> <b>184-186</b> <b>Weeks 12-15 can be taught in any order depending on individual teacher</b></p> <p><b>(ARP)</b></p> <p><b>39-40 (8.6A)</b> <b>41-42 (8.6B)</b> <b>123-124 (6.8C)</b> <b>125-126 (6.8D)</b> <b>92-93 (7.7A)</b></p> <p><b>Lab Manual</b> <b>Unit 4</b> <b>Forces/Motion</b></p> <p>Inertia cars, inclined planes, timers, graph paper, formula charts, spring scale, weights,</p>

					triple beam balance, Power Point Vocabulary cards Journals, Measuring-Up You-tube videos
13	11/14-11/18	<p><b>Supporting 8.6 B</b> differentiate between speed, velocity, and acceleration also embed the following:</p> <p><u>Supporting standard 6.8</u></p> <p>calculate average speed using distance and time measurements</p> <p><u>Supporting standard 6.8D</u></p> <p>measure and graph changes in motion ( <b>students need to be able to differentiate between distant/time graphs and speed/time graphs</b>)</p>		<p><math>S=D/t</math></p> <p>All vocabulary from the 3 previous weeks will be reviewed using calculations and labs</p> <p><b>Formulas:</b>  <math>W=F \times D</math>  <math>F=ma</math>  <math>S=D/T</math></p> <p><b>Graphs:</b>  Speed, distance, acceleration, time</p>	<p>Same equipment as previous week.</p> <p><b>Textbook See pages for weeks 11-13</b></p> <p><b>Lab Manual Unit 4 Forces/Motion</b></p> <p>Journals  Measure-up  Saddleback  Stemscopes  Power Point  You-tube videos</p>
14	11/21-11/25	HOLIDAY Thanksgiving			

15	11/28-12/2	<p><b>Readiness 8.6A</b> demonstrate and calculate how unbalanced forces change the speed or direction of an object's motion</p> <p><u>Supporting Standard 7.7A</u> contrast situations where work is done with different amounts of force to situations where not work is done such as moving a box with a ramp, without a ramp, or standing still</p> <p><b>Supporting 8.6 B</b> differentiate between speed, velocity, and acceleration also embed the following:</p> <p><u>Supporting standard 6.8C</u> calculate average using distance and time measurements</p> <p><u>Supporting standard 6.8D</u> measure and graph changes in motion</p>	<p><b>8.2 A, B, C, D, E</b> The student uses scientific inquiry methods during laboratory and field investigations</p> <p><b>8.3 A, B, C, D</b> The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists</p> <p><b>8.4 A, B</b> The student know how to use a variety of tools and safety equipment to conduct science inquiry</p>	<p>Please note that all of the formulas will be used to do inquiry based labs.</p> <p><b>Formulas:</b>  <math>W=F \times D</math>  <math>F=ma</math>  <math>S=D/T</math></p> <p><b>Graphs:</b>  Speed, distance, acceleration, time</p>	<p>Same equipment as previous week.</p> <p><b>Textbook See pages for weeks 11-13</b></p> <p><b>Lab Manual Unit 4 Forces/Motion</b></p> <p>Journals  Measure-up  Saddleback  Stemscopes  Power Point  You-tube videos</p>
16	12/5-12/9	<p>Continue with 8.6 A and practice math calculations for speed, velocity, and acceleration using situations involving 8.6C and real life application using sports and amusement park rides etc. Practice gridding</p>			<p>Supplemental worksheets from various sources and practice calculations</p>

	12/7-12/8	Semester Exam over reporting category 1 and 2			
17	12/12-12/16	All classes will go over semester exam and will have up to 3 days of the draw the line respect the line curriculum		Main vocabulary are communicable diseases STD's HIV	
18	12/19-1/2	HOLIDAY begins on December 21 students attend school 19 <sup>th</sup> and 20 <sup>th</sup>			
19	1/3-1/6	1/4 teacher workday 1/4-1/6 Staff development			
20 21	1/9-1/13  1/09-1/13	<b>Readiness 8.9B</b> relate plate tectonics to the formation of crustal features  <b>Supporting 8.9A</b> describe the historical development of evidence that supports plate-tectonic theory	8.2C collect and record data using the SI units and qualitative means such as labeled drawings, writing, and graphic organizers  8.3D relate the impact of research on scientific thought and society, including the history of science and contributions of scientists as related to the content	weathering, erosion, deposition, magma, lava, igneous rock, sedimentary rock, pressure, heat, metamorphic rock, convection currents, layers of the earth, lithosphere, asthenosphere, crust, mantle, outer core, inner core.  Pangaea  theory of plate tectonics	<b>Textbook Resources</b> <b>Pgs. 344-355</b> <b>356-367</b>  <b>(ARP)</b>  <b>64-65 (8.9A)</b> <b>66-68 (8.9B)</b>  <b>Lab Manual</b> <b>Unit 7</b> <b>Processes that shape Earth</b>

				continental drift sea floor spreading convection currents subsidence boundary convergent boundary divergent boundary transform boundary rift ridge trench fault theory subduction zone	
22	1/16-1/20	<b>Readiness 8.9C</b> interpret topographic maps and satellite view to identify land and erosional features and predict how these features may be reshaped by weathering	8.2C collect and record data using the SI units and qualitative means such as labeled drawings, writing, and graphic organizers  8.3B use models to represent aspects of the	topography topographic map elevation contour line contour line interval satellite map	<b>Textbook Resources</b> <b>Pgs. 368-383</b> <b>386-397</b> <b>398-418</b>  <b>(ARP)</b>

		<p><u>7.8C</u> model the effects of human activity on groundwater and surface water in a watershed  <b>Note: Also reviewed in week 29</b></p>	<p>natural world such as an atom, a molecule, space, or a geologic feature</p>	<p>relief</p> <p>ground water  surface water  aquifer  watershed  pollutants</p>	<p><b>68-69 (8.9C)</b>  <b>94-95 (7.8C)</b></p> <p><b>Lab Manual</b>  <b>Unit 7</b>  <b>Processes that shape Earth</b></p>
23	1/23-1/27	<p><b>Readiness 8.8A</b> describe components of the universe, including stars, nebulae, and galaxies, and use models such as the Hertzsprung-Russell</p> <p><b>Supporting Standards</b>  <b>8.8B</b> recognize that the Sun is a medium-size 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  <u>Supporting 6.11B</u> understand that gravity is the force that governs the motion of our solar system</p> <p>Embedded Processing skills 8.2C, 8.3B, 8.3C</p>		<p>Universe  stars  nebulae  galaxies  Hertzsprung-Russell diagram  sun  light year  gravity  Milky Way Galaxy  Solar system  Absolute magnitude  Apparent magnitude  Main sequence  Giants  Super giants  White dwarfs  Black dwarfs  Life cycle of star</p>	<p><b>Textbook Resources</b>  <b>Pgs.268-279</b>  <b>282-291</b>  <b>292-303</b></p> <p><b>(ARP)</b></p> <p><b>52-54 (8.8A)</b>  <b>55-56 (8.8B)</b></p> <p><b>Lab Manual</b>  <b>Unit 6</b>  <b>The Universe</b></p>
24	1/30-2/3	<p><b>8.8C</b> explore how different wavelengths of the electromagnetic spectrum such as light and Radio waves are used to gain information about distance and properties of components of</p>		<p>Electromagnetic spectrum  Radio waves  Microwaves  Visible light  Gamma rays</p>	<p><b>Textbook Resources</b>  <b>Pgs. 308-340</b></p> <p><b>(ARP)</b></p>

		<p>Universe</p> <p><b>8.8D</b> model and describe how light years are used to measure distances and sizes in the Universe</p>		<p>Ultraviolet Infrared Light years</p>	<p>57-58 (8.8C) 59-60 (8.8D) 61-62 (8.8E)</p> <p><b>Lab Manual</b> Unit 6 The Universe</p>
25	2/6-2/10	<p><b>Readiness 8.7A</b> model and illustrate how the tilted Earth rotates on its axis, causing day and night, and revolves around the Sun causing changes in seasons</p>	8.3B use models to represent aspects of the natural world such as an atom, a molecule, space, or a geologic feature	Tilt Orbit Revolution Rotation Sun Equinox Vernal equinox Autumnal equinox Summer solstice Winter solstice Seasons Moon cycle Lunar cycle Tides Neap tide Spring tide New moon Waxing Crescent 1 <sup>st</sup> quarter Waxing Gibbous Full moon Waning Gibbous 3 <sup>rd</sup> Quarter Waning Crescent Eclipse Solar eclipse Lunar eclipse	<p><b>Textbook Resources</b> 224-233 (8.7A) Days/years/ seasons 234-243 (8.7B) Phases Eclipses 248-257 (8.7C) Tides</p> <p><b>(ARP)</b></p> <p>45-47 (8.7A) 48-49 (8.7B) 50-51 (8.7C) 129-130 (6.11B)</p> <p><b>Lab Manual</b> Unit 5 Earth Moon And Sun Systems</p>
26	2/13-2/17	<p><b>Readiness 8.7B</b> demonstrate and predict the sequence of events in the lunar cycle</p> <p><b>Supporting 8.7C</b> relate the position of the Moon and Sun to their effect on ocean tides</p> <p><b>Supporting 6.11B</b> understand that gravity is the force that governs the motion of our solar system</p> <p>Embedded Processing skills 8.2C, 8.3B, 8.3C</p>	8.3C identify advantages and limitations of model such as size, scale, properties, and materials 8.3D relate the impact of research on scientific thought and society, including the history of science and contributions of scientists as related to the content		
	<p>Simulated Tests</p> <p>2/15 Math</p> <p>2/16 Reading</p>				

27	2/20-2/21	<b>Due to spring benchmarks previous week Continue with 8.7A and B</b>			
27	2/22-2/24	<p><b>Supporting 8.10A</b> recognize that the Sun provides the energy that drives convection within the atmosphere and oceans, producing winds and ocean currents</p> <p><b>Supporting Standard 8.10B</b> identify how global patterns of atmospheric movement influence local weather using weather maps that show high and low pressures and fronts</p> <p><b>8.10C</b> identify the role of the oceans in the formation of weather systems such as hurricanes</p>		Weather Convection Currents Ocean currents Atmosphere Trade winds Polar winds Easterlies Westerlies High pressure Low pressure Weather Climate Cold front Warm front Hurricanes Typhoon Tornado	<b>Textbook Resources</b> <b>422-433 (8.10A)</b> <b>436-449 (8.10A)</b> <b>450-463 (8.10C)</b> <b>468-481 (8.10B)</b>  <b>(ARP)</b>  <b>71-72 (8.10A)</b> <b>73-75 (8.10B)</b> <b>76-77 (8.10C)</b>  <b>Lab Manual</b> <b>Unit 8</b> <b>Earth's Oceans and Astmosphere</b>
28	2/27-3/3  Simulated Tests  2/28 Science	<p><b>Readiness 8.11B</b> 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</p> <p><b>Readiness 8.11A</b> describe</p>		Abiotic factors Biotic factors Temperature Water Light Soil composition Predator Consumer Prey	<b>Textbook Resources</b> <b>Pgs. 492-507</b> <b>512-521</b> <b>524-535</b> <b>536-547</b>  <b>(ARP)</b>

	<p>2/29 Social Studies</p>	<p>producer/consumer, predator prey, and parasite/host relationships as they occur in food webs within marine, freshwater, and terrestrial ecosystems</p> <p>Due to simulated testing, this week may overlap following week by a day or two.</p>		<p>Primary consumer Secondary consumer Food web Food chain Niche Habitat Carrying capacity Marine ecosystem Terrestrial ecosystem energy pyramid Parasite Host Parasitism Commensalism Mutualism 10% rule symbiosis</p>	<p>78-79 (8.11A) 80-81 (8.11B)</p> <p><b>Lab Manual Unit 7 Processes that shape Earth</b></p>
29	3/6-3/10	<p><b><u>Supporting Standard 8.11D</u></b> recognize human dependence on ocean systems and explain how human activities such as runoff, artificial reefs, or use of resources have modified these systems</p> <p><u>7.8C</u> model the effects of human activity on groundwater and surface water in a watershed</p>		<p>Runoff Artificial reefs Human dependence Ground water Surface water Water table Pollutants Point source pollutant Secondary pollutant Predator Consumer Cycles such as water, carbon, nitrogen Decomposition Pesticides Sediments Turbidity Land subsidence Green house effect</p>	<p><b>Textbook Resources Pgs.536-547 548-566</b></p> <p><b>(ARP) 84-85 94-95</b></p> <p><b>Lab Manual Unit 9 Ecosystems</b></p>

				Global warming Accumulation Xeriscaping Soil profile Decay Fertilizers Photosynthesis	
30	3/13-3/17	Spring Break			
31	3/20-3/24	<p><b><u>Readiness 8.11C</u></b> explore how short and long term environmental changes affect organisms and traits in subsequent populations</p> <p><u>7.10B</u> describe how biodiversity contributes to the sustainability of an ecosystem</p> <p><u>7.10C</u> observe, record and describe the role of ecological succession such as in a microhabitat of a garden of weeds</p>		Environmental change Ecological succession Primary succession Lichens Pioneer species Climax community Ecologist Ecology Evolution Biodiversity Sustainability	<p><b>Textbook Resources</b>  <b>Pgs.536-547</b>  <b>548-566</b></p> <p><b>(ARP)</b>  <b>82-83 (8.11C)</b>  <b>96-97 (7.10B0)</b>  <b>98-99 (7.10C)</b></p> <p><b>Reviews 104-114</b></p>

32	3/27-3/31  <b>STAAR</b> <b>3/28</b> <b>Math</b>  <b>3/29</b> <b>Reading</b>	<p><u>7.11A</u> examine organisms or their structures such as insects or leaves and use dichotomous keys for identification</p> <p><u>7.11C</u> identify some changes in genetic traits that have occurred over several generations through natural selection and selective breeding such as the Galapagos Medium Ground Finch (<i>Geospiza fortis</i>) or domestic animals</p>		<p>Genetic traits  Heredity  Galapagos finch  Domestic animals  Natural selection  Environ. Conditions  Survival of the fittest  Adaptation  Variation  Species  Homologous structure  Extinction  Equilibrium  Habitat destruction  Endangered species  Threatened species</p>	<p><b>100-101 (7.11A)</b>  <b>102-103 (7.11C)</b></p>
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33	5/3-5/7	<p><u>7.12.B</u> identify the main functions of the systems of the human organism, including the circulatory, respiratory, skeletal, muscular, digestive, excretory, reproductive, integumentary, nervous, and endocrine systems</p> <p>7.12.D differentiate between structure and function in plant and animal cell organelles, including cell membrane, cell wall, nucleus, cytoplasm, mitochondrion, chloroplast, and vacuole</p> <p>6.12.D identify the basic characteristics of organisms, including prokaryotic or eukaryotic, unicellular or multicellular, autotrophic or heterotrophic, and mode of reproduction, that further classify them in the current</p> <p>7.12.F recognize that according to cell theory all organisms are composed of cells and cells carry on similar functions such as extracting energy from food to sustain life</p> <p>7.14.B compare the results of uniform or diverse offspring from sexual reproduction or asexual reproduction</p> <p>7.14.C recognize that inherited traits of individuals are governed in the genetic material found in the genes within chromosomes in the nucleus</p>		<p><b>7<sup>th</sup> Grade Vocabulary</b></p> <p>system organ organ system tissue interdependence interaction organism cell organelle muscle ligament hormone blood lymph nodes cell wall cell membrane mitochondrion cytoplasm autotrophic heterotrophic chloroplast 11 body systems prokaryotic eukaryotic unicellular inherited traits genes nucleus function DNA Chromosomes Reproduction</p>	
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34	5/10-5/14	Comprehensive review for STAAR exam		<ul style="list-style-type: none"> <li>(1) Nature of Science</li> <li>(2) Measurement and Data</li> <li>(3) Introduction to Chemistry</li> <li>(4) Forces and Motion</li> <li>(5) Earth-Moon-Sun System</li> <li>(6) The Universe</li> <li>(7) Processes that Shape Earth</li> <li>(8) Earth's Oceans and Atmosphere</li> <li>(9) Ecosystems</li> <li>(10) Body Systems/cell structures</li> </ul>	<p>Supplemental reviews Mentoring Minds <b>Assessment Guide</b> TEK based question review</p> <ul style="list-style-type: none"> <li>1. 15-33</li> <li>2. 45-62</li> <li>3. 77-95</li> <li>4. 108-126</li> <li>5. 139-160</li> <li>6. 175-192</li> <li>7. 209-227</li> <li>8. 242-260</li> <li>9. 277-295</li> </ul>
35	4/17-4/21	Comprehensive review for STAAR exam		<ul style="list-style-type: none"> <li>(1) Nature of Science</li> <li>(2) Measurement and Data</li> <li>(3) Introduction to Chemistry</li> <li>(4) Forces and Motion</li> <li>(5) Earth-Moon-Sun System</li> <li>(6) The Universe</li> <li>(7) Processes that Shape Earth</li> <li>(8) Earth's Oceans and Atmosphere</li> <li>(9) Ecosystems</li> <li>(10) Body Systems/cell structures</li> </ul>	<p>Supplemental reviews Mentoring Minds <b>Assessment Guide</b> TEK based question review</p> <ul style="list-style-type: none"> <li>1. 15-33</li> <li>2. 45-62</li> <li>3. 77-95</li> <li>4. 108-126</li> <li>5. 139-160</li> <li>6. 175-192</li> <li>7. 209-227</li> <li>8. 242-260</li> <li>9. 277-295</li> </ul>
36	4/24-4/28	Comprehensive review for STAAR exam		Continued from previous week packets	Continued from previous week

37	5/1-5/5	Comprehensive review for STAAR exam		Continued from previous week packets	Continued from previous week
38	5/8-5/12 5/8 5/9 5/10 5/11	<b>STAAR EXAMS</b> 5/8 retest math 5/09 retest reading <b>5/10 Science</b> 5/11 Social Studies  All afternoon classes will review for exams			
39	5/15-5/18	Genetics (Biology introduction)  End of year field days and productions		Punnett square Homozygous dominant Homozygous recessive Heterozygous Incomplete dominance Zygote Allele Traits Genetics Phenotype Genotype Hybrid Purebred Heredity Allele Chromosome Ratio Codominance Gene	
40-41	5/23-6/3	<b>At Risk Instruction</b> Memorial Day			