

School Name: Port Isabel Jr. High
Course/Grade Level: 7th
Science Curriculum Map

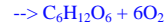
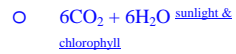
Week	Dates	TEKS	Course Skills	Vocabulary	Resources/Materials
1	8/22-8/26	<p>Science Safety and Procedures MSDS Practice and Journal Setup Become familiar with new science textbook 7.1A, 7.4A, 7.4B (5days)</p> <p>Include: Online resources that available for student use.</p>	<p>7.1A demonstrate safe practices during laboratory and field investigations as outlined in the Texas Safety Standards</p> <p>Demonstrate SAFE PRACTICES DURING LABORATORY AND FIELD INVESTIGATIONS Including, but not limited to:</p> <ul style="list-style-type: none"> • Wear appropriate safety equipment. • Know the location of safety equipment. • Follow classroom guidelines, as outlined in the Texas Education Agency <i>Texas Safety Standards</i>. <ul style="list-style-type: none"> ○ Possible examples may include <ul style="list-style-type: none"> ▪ Read or study the science activity or laboratory investigation prior to conducting the investigation. ▪ Know and follow all safety rules prior to the investigation. ▪ Be alert during the laboratory time. ▪ Do not attempt unauthorized activities. ▪ If a chemical spill occurs, report it immediately, and follow the instructions of the teacher. ▪ Keep your area clean. ▪ Do not enter preparatory or equipment storage rooms or chemical storerooms. ▪ Always wash your hands for at least 20 seconds with soap and warm water before leaving the laboratory. • Use lab equipment appropriately. <p>7.4A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other</p>	<ul style="list-style-type: none"> ❖ Procedures ❖ Operate ❖ Emergency safety ❖ Preventative safety equipment ❖ Investigation ❖ Conservation ❖ Hypothesis ❖ Controlled experiment ❖ Data ❖ Volume ❖ Weight ❖ Mass ❖ Scientific investigation ❖ Science ❖ Descriptive investigation ❖ Observation ❖ Prediction ❖ Experiment ❖ Independent variable ❖ Dependent variable ❖ Scientific law ❖ y-axis, x-axis graphs ❖ quantitative ❖ qualitative model ❖ inference ❖ conclusion 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. YouTube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs 1-53</p> <p>FUSION TEXT: Unit 1 Lesson 1 Pgs 4-13 Lesson 2 pgs. 14-23</p>

			<p>equipment as needed to teach the curriculum</p> <p>Use APPROPRIATE TOOLS TO COLLECT, RECORD, AND ANALYZE INFORMATION Including, but not limited to:</p> <ul style="list-style-type: none"> • Journals/(science) notebooks • Other equipment as needed to teach the curriculum <p>7.4B use preventative safety equipment, including chemical splash goggles, aprons, and gloves, and be prepared to use emergency safety equipment, including an eye/face wash, a fire blanket, and a fire extinguisher</p> <p>Use SAFETY EQUIPMENT Including, but not limited to:</p> <ul style="list-style-type: none"> • Preventative safety equipment <ul style="list-style-type: none"> ○ Chemical splash goggles ○ Aprons ○ Gloves • Emergency safety equipment <ul style="list-style-type: none"> ○ Eye/face wash ○ Fire blanket ○ Fire extinguisher 	<ul style="list-style-type: none"> ❖ bias ❖ hand lens ❖ microscopes ❖ beakers ❖ Petri dish ❖ Microscope slides ❖ Graduated cylinders ❖ Test tubes ❖ Meter sticks ❖ Metric tape ❖ Timing device ❖ Hot plates ❖ Balances ❖ Thermometers ❖ Calculator ❖ Computers ❖ Journals/notebook ❖ **These vocabulary words will be embedded in other TEKS throughout the year. 	<p>Lesson 3 pgs. 24-41</p> <p>Lesson 4 pgs. 42-58</p> <p>Unit 2: Lesson 1 pgs 60-77 Lesson 2 pgs. 78-100</p> <p>FUSION LAB: Student safety contract, quiz</p> <p>FUSION ARP: PGS 1-28</p> <p>**Additional supplemental resources may be used throughout the school year.</p> <p><i>Subject to change due to the need of the students.</i></p>
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2	8/29-9/2	<p>Force and Motion <i>Force, motion, and energy. The student knows that there is a relationship among force, motion, and energy. The student is expected to:</i></p> <p>7.7 A contrast situations where work is done with different amounts of force to situations where no work is done such as moving a box with a ramp and without a ramp, or standing still</p> <p><i>Supporting Standard</i></p> <p>Contrast SITUATIONS IN WHICH WORK IS DONE WITH DIFFERENT AMOUNTS OF FORCE TO SITUATIONS IN WHICH NO WORK IS DONE Including, but not limited to:</p> <ul style="list-style-type: none"> • Work = (force)(distance) • $W = Fd$ • Different amounts of force to do work <ul style="list-style-type: none"> ○ Moving a box with a ramp ○ Moving a box without a ramp • No work done <ul style="list-style-type: none"> ○ Standing still <p>** Introduce Formulas for Physics</p>	<p>7.2 A plan and implement comparative and descriptive investigations by making observations, asking well-defined questions, and using appropriate equipment and technology</p> <p>7.2B plan and implement comparative and descriptive investigations by making observations, asking well-defined questions, and using appropriate equipment and technology</p> <p>7.2C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.2D construct tables and graphs, using repeated trials and means, to organize data and identify patterns</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the</p>	<ul style="list-style-type: none"> ❖ Tugor ❖ pressure ❖ Geotropism ❖ Work ❖ Joule ❖ Newton ❖ Force ❖ Motion ❖ Balanced forces ❖ Unbalanced forces ❖ Simple machine ❖ Pulley ❖ Lever ❖ Wheel and axle ❖ Inclined plane ❖ Friction ❖ Speed ❖ Average speed ❖ acceleration ❖ homeostasis ❖ Fever ❖ Blood Pressure ❖ Arteries ❖ Veins ❖ Stimulus <p>** Add voc. Speed, distance time and formulas</p>	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. YouTube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs. 274-321</p> <p>FUSION TEXT: Lesson 1 Pgs. 326-339</p> <p>FUSION LAB: Selective quick labs in Unit 6</p>

		Speed, distance, time, velocity, acceleration	curriculum 7.4 B use preventative safety equipment, including chemical splash goggles, aprons, and gloves, and be prepared to use emergency safety equipment, including an eye/face wash, a fire blanket, and a fire extinguisher.	❖ **These vocabulary words will be embedded in other TEKS throughout the year.	
3	9/5-9/9 Holiday Labor Day 8/22	7.7 C demonstrate and illustrate forces that affect motion in everyday life such as emergence of seedlings, turgor pressure, and geotropism. Demonstrate, Illustrate FORCES THAT AFFECT MOTION IN EVERYDAY LIFE Including, but not limited to: <ul style="list-style-type: none"> • Forces <ul style="list-style-type: none"> ○ Gravity • Motion <ul style="list-style-type: none"> ○ Emergence of seedlings ○ Turgor pressure ○ Geotropism 	7.2 A plan and implement comparative and descriptive investigations by making observations, asking well-defined questions, and using appropriate equipment and technology 7.2B plan and implement comparative and descriptive investigations by making observations, asking well-defined questions, and using appropriate equipment and technology 7.2C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers 7.2D construct tables and graphs, using repeated trials and means, to organize data and identify patterns 7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends 7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides,	❖ Tugor ❖ pressure ❖ Geotropism ❖ Work ❖ Joule ❖ Newton ❖ Force ❖ Motion ❖ Balanced forces ❖ Unbalanced forces ❖ Simple machine ❖ Pulley ❖ Lever ❖ Wheel and axle ❖ Inclined plane ❖ Friction ❖ Speed ❖ Average speed ❖ acceleration ❖ homeostasis ❖ Fever ❖ Blood Pressure ❖ Arteries ❖ Veins ❖ Stimulus	Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. YouTube science videos Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do Compass Learning: https://www.thelearningodyssey.com/ SCIENCESARUS: 274-321 FUSION TEXT: Lesson 1 pgs 328-339

			<p>graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p> <p>7.4 B use preventative safety equipment, including chemical splash goggles, aprons, and gloves, and be prepared to use emergency safety equipment, including an eye/face wash, a fire blanket, and a fire extinguisher.</p>	<p>** Add voc. Speed, distance time and formulas</p> <p>❖ **These vocabulary words will be embedded in other TEKS throughout the year.</p>	<p>MU lesson Simple machines and force & motion</p> <p>FUSION LAB: Unit 6 quick labs</p> <p>FUSION ARP: Pgs 41-46</p>
4	9/12-9/16	<p>Flow of Energy 7.5A recognize that radiant energy from the Sun is transformed into chemical energy through the process of photosynthesis</p> <p>Recognize THAT RADIANT ENERGY FROM THE SUN IS TRANSFORMED INTO CHEMICAL ENERGY THROUGH THE PROCESS OF PHOTOSYNTHESIS Including, but not limited to:</p> <ul style="list-style-type: none"> • Recognize that radiant energy (sunlight) is transformed into chemical energy. • Recognize the components of the process of photosynthesis. <ul style="list-style-type: none"> ○ Chlorophyll ○ Carbon dioxide ○ Water ○ Energy (sunlight) ○ Glucose (sugar) ○ Oxygen • Recognize the equation for photosynthesis. 	<p>7.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.4A use appropriate tools to collect, record, and analyze information, including life science models, microscopes, microscope slides, graduated cylinders, metric rulers, balances, thermometers, journals/notebooks, and other equipment as needed to teach the curriculum.</p>	<ul style="list-style-type: none"> ❖ Photosynthesis ❖ Chlorophyll ❖ Stomata ❖ Transpiration ❖ Chloroplasts ❖ Glucose ❖ Carbon Dioxide ❖ Radiant Energy ❖ Chemical Energy ❖ Light Energy ❖ Oxygen ❖ Food chain ❖ Food web ❖ Biomass ❖ Energy pyramid ❖ Producers ❖ Consumers ❖ decomposer ❖ Herbivores 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. YouTube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/start.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p>



7.5B demonstrate and explain the cycling of matter within living systems such as in the decay of biomass in a compost bin

Demonstrate, Explain
THE CYCLING OF MATTER WITHIN LIVING SYSTEMS
Including, but not limited to:

- The decay of biomass in a compost bin
 - Decomposition
 - Formation of soil in a compost bin
 - Production of heat
- Possible examples may include
 - Energy pyramids (food webs, food chains)

7.5C diagram the flow of energy through living systems, including food chains, food webs, and energy pyramids
Supporting Standard

Diagram
THE FLOW OF ENERGY THROUGH LIVING SYSTEMS

- ❖ Carnivores
- ❖ Primary
- ❖ Secondary
- ❖ Tertiary
- ❖ 10% Rule

- ❖ **These vocabulary words will be embedded in other TEKS throughout the year.

SCIENCESARUS:
274-321

FUSION TEXT:
Lesson 2 & 3
Pgs. 340-365

FUSION LAB:
Unit 6 quick labs

FUSION ARP:
Pgs. 41-46

Including, but not limited to:

- Food chains
- Food webs
- Energy pyramids
 - Explain energy loss, 10% rule
 -

All organisms, both land-based and aquatic, are interconnected by their need for food. This network of interconnections is referred to as a food web. The entire earth can be considered a single global food web, and food webs can also be described for a particular environment. At the base of any food web are organisms that make their own food, followed by the animals that eat them, then the animals that eat those animals, and so forth.

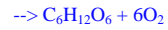
Flow of Energy
7.5A recognize that radiant energy from the Sun is transformed into chemical energy through the process of photosynthesis

Recognize
THAT RADIANT ENERGY FROM THE SUN IS TRANSFORMED INTO CHEMICAL ENERGY THROUGH THE PROCESS OF PHOTOSYNTHESIS

Including, but not limited to:

- Recognize that radiant energy (sunlight) is transformed into chemical energy.
- Recognize the components of the process of photosynthesis.
 - Chlorophyll
 - Carbon dioxide
 - Water

- Energy (sunlight)
- Glucose (sugar)
- Oxygen
- Recognize the equation for photosynthesis.
 - $6\text{CO}_2 + 6\text{H}_2\text{O} \xrightarrow[\text{chlorophyll}]{\text{sunlight}}$



7.5B demonstrate and explain the cycling of matter within living systems such as in the decay of biomass in a compost bin

Demonstrate, Explain
 THE CYCLING OF MATTER WITHIN
 LIVING SYSTEMS

Including, but not limited to:

- The decay of biomass in a compost bin
 - Decomposition
 - Formation of soil in a compost bin
 - Production of heat
- Possible examples may include
 - Energy pyramids (food webs, food chains)

		<p>7.5C diagram the flow of energy through living systems, including food chains, food webs, and energy pyramids</p> <p><i>Supporting Standard</i></p> <p>Diagram THE FLOW OF ENERGY THROUGH LIVING SYSTEMS Including, but not limited to:</p> <ul style="list-style-type: none"> • Food chains • Food webs • Energy pyramids <ul style="list-style-type: none"> ○ Explain energy loss, 10% rule ○ <p>All organisms, both land-based and aquatic, are interconnected by their need for food. This network of interconnections is referred to as a food web. The entire earth can be considered a single global food web, and food webs can also be described for a particular environment. At the base of any food web are organisms that make their own food, followed by the animals that eat them, then the animals that eat those animals, and so forth.</p>			
5	9/19-9/23	<p>Flow of Energy</p> <p>7.5A recognize that radiant energy from the Sun is transformed into chemical energy through the process of photosynthesis</p> <p>Recognize THAT RADIANT ENERGY FROM THE SUN IS TRANSFORMED INTO CHEMICAL</p>	<p>7.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.4A use appropriate tools to collect, record, and analyze information, including life science models, microscopes, microscope slides, graduated cylinders, metric rulers, balances,</p>	<ul style="list-style-type: none"> ❖ Photosynthesis ❖ Chlorophyll ❖ Stomata ❖ Transpiration ❖ Chloroplasts ❖ Glucose ❖ Carbon Dioxide 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils</p>

		<p>ENERGY THROUGH THE PROCESS OF PHOTOSYNTHESIS Including, but not limited to:</p> <ul style="list-style-type: none"> • Recognize that radiant energy (sunlight) is transformed into chemical energy. • Recognize the components of the process of photosynthesis. <ul style="list-style-type: none"> ○ Chlorophyll ○ Carbon dioxide ○ Water ○ Energy (sunlight) ○ Glucose (sugar) ○ Oxygen • Recognize the equation for photosynthesis. <ul style="list-style-type: none"> ○ $6\text{CO}_2 + 6\text{H}_2\text{O} \xrightarrow{\text{sunlight \& chlorophyll}}$ <p>--> $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$</p> <p>7.5B demonstrate and explain the cycling of matter within living systems such as in the decay of biomass in a compost bin</p> <p>Demonstrate, Explain THE CYCLING OF MATTER WITHIN LIVING SYSTEMS Including, but not limited to:</p> <ul style="list-style-type: none"> • The decay of biomass in a compost bin <ul style="list-style-type: none"> ○ Decomposition ○ Formation of soil in a compost bin <ul style="list-style-type: none"> ▪ Production of heat • Possible examples may include 	<p>thermometers, journals/notebooks, and other equipment as needed to teach the curriculum.</p>	<ul style="list-style-type: none"> ❖ Radiant Energy ❖ Chemical Energy ❖ Light Energy ❖ Oxygen ❖ Food chain ❖ Food web ❖ Biomass ❖ Energy pyramid ❖ Producers ❖ Consumers ❖ decomposer ❖ Herbivores ❖ Carnivores ❖ Primary ❖ Secondary ❖ Tertiary ❖ 10% Rule ❖ **These vocabulary words will be embedded in other TEKS throughout the year. 	<p>Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: 274-321</p> <p>FUSION TEXT: 340-365 Lessons 2 & 3</p> <p>FUSION LAB: Unit 6 quick labs</p>
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- Energy pyramids (food webs, food chains)

7.5C diagram the flow of energy through living systems, including food chains, food webs, and energy pyramids
Supporting Standard

Diagram

THE FLOW OF ENERGY THROUGH LIVING SYSTEMS

Including, but not limited to:

- Food chains
- Food webs
- Energy pyramids
 - Explain energy loss, 10% rule
 -

All organisms, both land-based and aquatic, are interconnected by their need for food. This network of interconnections is referred to as a food web. The entire earth can be considered a single global food web, and food webs can also be described for a particular environment. At the base of any food web are organisms that make their own food, followed by the animals that eat them, then the animals that eat those animals, and so forth.

6	9/26-9/30	<p>Flow of Energy 7.5A recognize that radiant energy from the Sun is transformed into chemical energy through the process of photosynthesis</p> <p>Recognize THAT RADIANT ENERGY FROM THE SUN IS TRANSFORMED INTO CHEMICAL ENERGY THROUGH THE PROCESS OF PHOTOSYNTHESIS Including, but not limited to:</p> <ul style="list-style-type: none"> • Recognize that radiant energy (sunlight) is transformed into chemical energy. • Recognize the components of the process of photosynthesis. <ul style="list-style-type: none"> ○ Chlorophyll ○ Carbon dioxide ○ Water ○ Energy (sunlight) ○ Glucose (sugar) ○ Oxygen • Recognize the equation for photosynthesis. <ul style="list-style-type: none"> ○ $6\text{CO}_2 + 6\text{H}_2\text{O} \xrightarrow{\text{sunlight \& chlorophyll}}$ <p>--> $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$</p> <p>7.5B demonstrate and explain the cycling of matter within living systems such as in the decay of biomass in a compost bin</p> <p>Demonstrate, Explain THE CYCLING OF MATTER WITHIN</p>	<p>7.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.4A use appropriate tools to collect, record, and analyze information, including life science models, microscopes, microscope slides, graduated cylinders, metric rulers, balances, thermometers, journals/notebooks, and other equipment as needed to teach the curriculum.</p>	<ul style="list-style-type: none"> ❖ Photosynthesis ❖ Chlorophyll ❖ Stomata ❖ Transpiration ❖ Chloroplasts ❖ Glucose ❖ Carbon Dioxide ❖ Radiant Energy ❖ Chemical Energy ❖ Light Energy ❖ Oxygen ❖ Food chain ❖ Food web ❖ Biomass ❖ Energy pyramid ❖ Producers ❖ Consumers ❖ decomposer ❖ Herbivores ❖ Carnivores ❖ Primary ❖ Secondary ❖ Tertiary ❖ 10% Rule ❖ **These vocabulary words will be embedded in other TEKS throughout the year. 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>FUSION TEXT: 340-365 Lessons 2 & 3</p> <p>Lesson 5 160-171 MU Lesson 16, 17, 18 FUSION LAB: Unit 6 quick labs</p> <p>FUSION ARP: PGS 29-34</p>
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LIVING SYSTEMS

Including, but not limited to:

- The decay of biomass in a compost bin
 - Decomposition
 - Formation of soil in a compost bin
 - Production of heat
- Possible examples may include
 - Energy pyramids (food webs, food chains)

7.5C diagram the flow of energy through living systems, including food chains, food webs, and energy pyramids
Supporting Standard

Diagram

THE FLOW OF ENERGY THROUGH LIVING SYSTEMS

Including, but not limited to:

- Food chains
- Food webs
- Energy pyramids
 - Explain energy loss, 10% rule
 -

All organisms, both land-based and aquatic, are interconnected by their need for food. This network of interconnections is referred to as a food web. The entire earth can be considered a single global food web, and food webs can also be described for a particular environment. At the base of any food web are organisms that make their own food, followed by the animals that eat them, then the animals that eat those animals, and so forth.

7	10/3-10/7	<p>Organisms and the Environment</p> <p><i>The student knows that there is a relationship between organisms and the environment. The student is expected to:</i></p> <p>7.10 A observe and describe how different environments, including microhabitats in schoolyards and biomes, support different varieties of organisms</p> <p>Observe, Describe HOW DIFFERENT ENVIRONMENTS SUPPORT DIFFERENT VARIETIES OF ORGANISMS Including, but not limited to:</p> <ul style="list-style-type: none"> • Different environments <ul style="list-style-type: none"> ○ Microhabitats in schoolyards ○ Biomes • Support different varieties of organisms through <ul style="list-style-type: none"> ○ Providing for basic needs ○ Possible examples may include <ul style="list-style-type: none"> ▪ Climate ▪ Vegetation <p>Location</p>	<p>7.2 A plan and implement comparative and descriptive investigations by making observations, asking well-defined questions, and using appropriate equipment and technology 7.2 C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum.</p>	<ul style="list-style-type: none"> ❖ Biodiversity ❖ Population ❖ Sustain ❖ Sustainability ❖ Ecosystem ❖ Stages of succession ❖ Climax community ❖ Limiting factors ❖ Flora ❖ Fauna ❖ Climate ❖ Predator/prey ❖ Species ❖ Vegetation ❖ Location ❖ Microhabitats ❖ Biomes ❖ Organism ❖ Niche ❖ Habitat ❖ Biotic ❖ Abiotic ❖ Adaptation ❖ Interaction ❖ Ecological succession ❖ Primary succession ❖ Secondary succession ❖ Pioneer species 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. YouTube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs. 129-149 FUSION TEXT: Lesson 4 pgs 370-381 Lesson 5 pgs 382-395 Lesson 6 pgs 396-411</p> <p>FUSION LAB: Unit 6 Living Systems quick labs</p> <p>FUSION ARP: PGS 57-64</p>
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8	<p>10/10-10/14</p> <p>Staff dev. Day 10/10 Monday</p>	<p>7.10 B describe how biodiversity contributes to the sustainability of an ecosystem</p> <p><i>Supporting Standard</i></p> <p>Describe HOW BIODIVERSITY CONTRIBUTES TO THE SUSTAINABILITY OF AN ECOSYSTEM Including, but not limited to:</p> <ul style="list-style-type: none"> • Ecosystem sustainability <ul style="list-style-type: none"> ○ Greater biodiversity leads to population stability. ○ Genetic variation leads to population stability. 	<p>7.2 C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum.</p>	<ul style="list-style-type: none"> ❖ Biodiversity ❖ Population ❖ Sustain ❖ Sustainability ❖ Ecosystem ❖ Stages of succession ❖ Climax community ❖ Limiting factors ❖ Flora ❖ Fauna ❖ Climate ❖ Predator/prey ❖ Species ❖ Vegetation ❖ Location ❖ Microhabitats ❖ Biomes ❖ Organism ❖ Niche ❖ Habitat ❖ Biotic ❖ Abiotic ❖ Adaptation ❖ Interaction ❖ Ecological succession ❖ Primary succession ❖ Secondary succession ❖ Pioneer species 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs.129-149</p> <p>FUSION TEXT: Lesson 6 pgs 396-416</p> <p>FUSION LAB: Unit 6 quick labs</p>
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9	10/17-10/21	<p>7.10 C observe, record, and describe the role of ecological succession such as in a microhabitat of a garden with weeds</p> <p><i>Supporting Standard</i></p> <p>Observe, Record, Describe THE ROLE OF ECOLOGICAL SUCCESSION Including, but not limited to:</p> <ul style="list-style-type: none"> • The role of ecological succession • Stages of ecological succession <ul style="list-style-type: none"> ○ Primary succession <ul style="list-style-type: none"> ▪ Pioneer ○ Secondary succession <ul style="list-style-type: none"> ▪ Environmental disturbances ○ Climax communities • Limiting factors <ul style="list-style-type: none"> ○ Climate ○ Elevation ○ Moisture ○ Soil ○ Food ○ Space • Example <ul style="list-style-type: none"> ○ Microhabitat of a garden with weeds 	<p>7.2 C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum.</p>	<ul style="list-style-type: none"> ❖ Biodiversity ❖ Population ❖ Sustain ❖ Sustainability ❖ Ecosystem ❖ Stages of succession ❖ Climax community ❖ Limiting factors ❖ Flora ❖ Fauna ❖ Climate ❖ Predator/prey ❖ Species ❖ Vegetation ❖ Location ❖ Microhabitats ❖ Biomes ❖ Organism ❖ Niche ❖ Habitat ❖ Biotic ❖ Abiotic ❖ Adaptation ❖ Interaction ❖ Ecological succession ❖ Primary succession ❖ Secondary succession ❖ Pioneer species 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/start.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs. 129-149</p> <p>FUSION TEXT: Lesson 6 pgs. 396-416 MU Lessons</p> <p>FUSION LAB: Unit 5 & 6 quick lab</p>
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10	10/24-10/28 3 weeks	<p>Structure and Function of Cells</p> <p><i>Organisms and environments. The student knows that living systems at all levels of organization demonstrate the complementary nature of structure and function. The student is expected to:</i></p> <p>7.12 C recognize levels of organization in plants and animals, including cells, tissues, organs, organ systems, and organisms</p> <p>Recognize LEVELS OF ORGANIZATION IN PLANTS AND ANIMALS Including, but not limited to:</p> <ul style="list-style-type: none"> • Cells • Tissues • Organs • Organ systems • Organisms • 	<p>7.3 A in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<ul style="list-style-type: none"> ❖ Cell ❖ Tissue ❖ Organ ❖ Organ system ❖ Organism ❖ Population ❖ Cell membrane ❖ Organelle ❖ Cytoplasm ❖ Nucleus ❖ Mitochondria ❖ ATP ❖ Chloroplast ❖ Cell wall ❖ Plant cell ❖ Animal cell ❖ Prokaryote ❖ Eukaryote ❖ Golgi complex ❖ Vacuole ❖ Ribosome ❖ Endoplasmic reticulum ❖ Lysosome ❖ Cellular waste ❖ Permeable ❖ **These vocabulary words will be embedded in other TEKS throughout the year. 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs. 73-81 FUSION TEXT: Unit 3 Lesson 1 pgs 104-117 Lesson 2 pgs 118-131</p> <p>FUSION LAB: Unit 3 Quick labs</p>
11	10/31-11/4	<p>7.12 D differentiate between structure and function in</p>	<p>7.3 A in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and</p>	<ul style="list-style-type: none"> ❖ Cell ❖ Tissue ❖ Organ 	<p>Science books, united-streaming (discovery),</p>

		<p>plant and animal cell organelles, including cell membrane, cell wall, nucleus, cytoplasm, mitochondrion, chloroplast, and vacuole</p> <p>Supporting Standard Know the structure of membranes and how this relates to permeability.</p> <p>Differentiate BETWEEN STRUCTURE AND FUNCTION IN PLANT AND ANIMAL CELL ORGANELLES Including, but not limited to:</p> <ul style="list-style-type: none"> • Cell structure and function of organelles <ul style="list-style-type: none"> ○ Cell membrane (regulates what goes in and out of cell) ○ Cell wall (gives structure to plant cells) ○ Nucleus (controls functions of cells and contains genetic material) ○ Cytoplasm (fluid that surrounds the organelles) ○ Mitochondrion (converts energy for cell use) ○ Chloroplast (site of photosynthesis) ○ Vacuole (storage) • Plant cells differ from animal cells in structure and function. <ul style="list-style-type: none"> ○ Cell walls ○ Chloroplasts ○ Large vacuoles 	<p>experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<ul style="list-style-type: none"> ❖ Organ system ❖ Organism ❖ Population ❖ Cell membrane ❖ Organelle ❖ Cytoplasm ❖ Nucleus ❖ Mitochondria ❖ ATP ❖ Chloroplast ❖ Cell wall ❖ Plant cell ❖ Animal cell ❖ Prokaryote ❖ Eukaryote ❖ Golgi complex ❖ Vacuole ❖ Ribosome ❖ Endoplasmic reticulum ❖ Lysosome ❖ Cellular waste ❖ Permeable ❖ **These vocabulary words will be embedded in other TEKS throughout the year. 	<p>Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs. 73-81</p> <p>FUSION TEXT: Unit 3 Lesson 3 pgs 132-147</p> <p>MU Lessons 9 & 10 FUSION LAB: Unit 3 Quick labs</p>
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12	11/7-11/11	<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><i>Supporting Standard</i> Know the structure of membranes and how this relates to permeability.</p> <p>Differentiate BETWEEN STRUCTURE AND FUNCTION IN PLANT AND ANIMAL CELL ORGANELLES Including, but not limited to:</p> <ul style="list-style-type: none"> • Cell structure and function of organelles <ul style="list-style-type: none"> ○ Cell membrane (regulates what goes in and out of cell) ○ Cell wall (gives structure to plant cells) ○ Nucleus (controls functions of cells and contains genetic material) ○ Cytoplasm (fluid that surrounds the organelles) ○ Mitochondrion (converts energy for cell use) ○ Chloroplast (site of photosynthesis) ○ Vacuole (storage) • Plant cells differ from animal cells in structure and function. <ul style="list-style-type: none"> ○ Cell walls ○ Chloroplasts 	<p>7.3 A in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<ul style="list-style-type: none"> ❖ Cell ❖ Tissue ❖ Organ ❖ Organ system ❖ Organism ❖ Population ❖ Cell membrane ❖ Organelle ❖ Cytoplasm ❖ Nucleus ❖ Mitochondria ❖ ATP ❖ Chloroplast ❖ Cell wall ❖ Plant cell ❖ Animal cell ❖ Prokaryote ❖ Eukaryote ❖ Golgi complex ❖ Vacuole ❖ Ribosome ❖ Endoplasmic reticulum ❖ Lysosome ❖ Cellular waste ❖ Permeable ❖ **These vocabulary words will be embedded in other TEKS throughout the year. 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs. 73-81</p> <p>FUSION TEXT: Unit 3 Lesson 3 pgs 132-147</p> <p>FUSION LAB: Unit 3 quick lab</p>
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		<ul style="list-style-type: none"> ○ Large vacuoles 			
13	11/14-11/18	<p>7.12 E compare the functions of a cell to the functions of organisms such as waste removal</p> <p>Compare FUNCTIONS OF A CELL TO FUNCTIONS OF ORGANISMS Including, but not limited to:</p> <ul style="list-style-type: none"> ● Function of a cell <ul style="list-style-type: none"> ○ Provide structure for the body ○ Take in nutrients from food ○ Convert nutrients into energy ○ Carry out specialized functions ○ Waste removal ○ Extraction of energy from food ● Function of an organism <ul style="list-style-type: none"> ○ Maintain homeostasis <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><i>Supporting Standard</i></p>	<p>7.3 A in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<ul style="list-style-type: none"> ❖ Cell ❖ Tissue ❖ Organ ❖ Organ system ❖ Organism ❖ Population ❖ Cell membrane ❖ Organelle ❖ Cytoplasm ❖ Nucleus ❖ Mitochondria ❖ ATP ❖ Chloroplast ❖ Cell wall ❖ Plant cell ❖ Animal cell ❖ Prokaryote ❖ Eukaryote ❖ Golgi complex ❖ Vacuole ❖ Ribosome ❖ Endoplasmic reticulum ❖ Lysosome ❖ Cellular waste ❖ Permeable 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>SCIENCESARUS: Pgs. 73-81</p> <p>FUSION TEXT: Lesson 3</p> <p>MU Lesson 10 FUSION LAB: Unit 3 quick labs FUSION ARP: PGS. 79-82</p>

Recognize

THAT ACCORDING TO CELL THEORY
ALL ORGANISMS ARE COMPOSED OF
CELLS AND CELLS CARRY ON SIMILAR
FUNCTIONS

Including, but not limited to:

- Cell theory
 - All organisms are composed of cells.
 - Skin comes from skin cells.
 - The cell is the basic unit of structure and function in living organisms.
 - Cells come from other cells by cell reproduction (except the original cell).
 - Mitosis overview
 - Cell function
 - Each cell has a specific function within an organism.
 - Cells extract energy from food to sustain life.

Biology:

Describe, compare, and contrast structures and processes that allow gas exchange, nutrient uptake and processing, waste excretion, nervous and hormonal regulation, and

		reproduction in plants, animals, and fungi; give examples of each.			
14	TG Holidays 11/21-11/25	THANKSGIVING BREAK			
15	11/28-12/2	<p>Structure and Function of Living Systems</p> <p>7.12 Organisms and environments. <i>The student knows that living systems at all levels of organization demonstrate the complementary nature of structure and function. The student is expected to:</i></p> <p>7.12 A investigate and explain how internal structures of organisms have adaptations that allow specific functions such as gills in fish, hollow bones in birds, or xylem in plants</p> <p>Investigate, Explain HOW INTERNAL STRUCTURES OF ORGANISMS ARE ADAPTED TO PERFORM SPECIFIC FUNCTIONS Including, but not limited to: Adaptations and functions</p>	<p>7.2 D construct tables and graphs, using repeated trials and means, to organize data and identify patterns trends</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the</p>	<ul style="list-style-type: none"> ❖ Gills ❖ Xylem ❖ Stem ❖ Equilibrium ❖ Metabolism ❖ Feedback mechanism ❖ External stimulus ❖ Internal stimulus ❖ Diffusion ❖ Turgor pressure ❖ Response ❖ Behavior ❖ Taxis ❖ Hormone ❖ Hibernation ❖ Tropism ❖ **These vocabulary words will be embedded in other TEKS throughout the year. 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p>

		<p>Gills in fish</p> <p>Gill filaments enable oxygen to diffuse into the blood.</p> <p>Hollow bones in birds</p> <p>Hollow bones are lighter, allowing flight.</p> <p>Xylem in plants</p> <p>System of tubes that both support the plant and transport cells that circulate water and dissolved minerals</p> <p>Phloem in plants</p> <p>Cells laid out end-to-end throughout the plant, transporting sugars and other molecules created by the plant</p>	curriculum		
16	12/5-12/9 Open Window for Fall Semester Exam (12/5-12/16)	<p><i>Semester Exam over the concepts learned this semester. Comprehensive 30-40 semester questions.</i></p> <p>Structure and Function of Living Systems</p> <p>7.12 Organisms and environments. <i>The student knows that living systems at all levels of organization demonstrate the complementary nature of structure and function. The student is expected to:</i></p>	<p>7.2 D construct tables and graphs, using repeated trials and means, to organize data and identify patterns trends</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes,</p>	<ul style="list-style-type: none"> ❖ Gills ❖ Xylem ❖ Stem ❖ Equilibrium ❖ Metabolism ❖ Feedback mechanism ❖ External stimulus ❖ Internal stimulus ❖ Diffusion ❖ Turgor pressure ❖ Response ❖ Behavior ❖ Taxis ❖ Hormone ❖ Hibernation ❖ Tropism 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do</p>

		<p>7.12 A investigate and explain how internal structures of organisms have adaptations that allow specific functions such as gills in fish, hollow bones in birds, or xylem in plants</p> <p>Investigate, Explain HOW INTERNAL STRUCTURES OF ORGANISMS ARE ADAPTED TO PERFORM SPECIFIC FUNCTIONS Including, but not limited to:</p> <p>Adaptations and functions</p> <p>Gills in fish</p> <p>Gill filaments enable oxygen to diffuse into the blood.</p> <p>Hollow bones in birds</p> <p>Hollow bones are lighter, allowing flight.</p> <p>Xylem in plants</p> <p>System of tubes that both support the plant and transport cells that circulate water and dissolved minerals</p> <p>Phloem in plants</p> <p>Cells laid out end-to-end throughout the plant, transporting sugars and other molecules created by the plant</p>	<p>microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<p>❖ **These vocabulary words will be embedded in other TEKS throughout the year.</p>	<p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>FUSION TEXT: Unit 5 Lesson 2 pgs. 286-299</p> <p>FUSION LAB: Unit 3 Quick labs</p> <p>MU Lessons</p>
17	12/12-12/16	<i>Week before Christmas break</i>	Sex Ed Curriculum: Draw the Line/Respect the line	<p>❖ Gills</p> <p>❖ Xylem</p>	Science books, united-streaming

		<p><i>Semester Exam over the concepts learned this semester. Comprehensive 30-40 semester questions.</i></p> <p>7.12 A investigate and explain how internal structures of organisms have adaptations that allow specific functions such as gills in fish, hollow bones in birds, or xylem in plants</p> <p>Investigate, Explain HOW INTERNAL STRUCTURES OF ORGANISMS ARE ADAPTED TO PERFORM SPECIFIC FUNCTIONS Including, but not limited to:</p> <ul style="list-style-type: none"> • Adaptations and functions <ul style="list-style-type: none"> ○ Gills in fish <p>Gill filaments enable oxygen to diffuse into the blood.</p> <p>Hollow bones in birds</p> <p>Hollow bones are lighter, allowing flight.</p> <p>Xylem in plants</p> <p>System of tubes that both support the plant and transport cells that circulate water and dissolved minerals</p> <ul style="list-style-type: none"> • Phloem in plants <p>Cells laid out end-to-end throughout the plant, transporting sugars and other molecules created by the plant</p>	<p>7.2 D construct tables and graphs, using repeated trials and means, to organize data and identify patterns trends</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<ul style="list-style-type: none"> ❖ Stem ❖ Equilibrium ❖ Metabolism ❖ Feedback mechanism ❖ External stimulus ❖ Internal stimulus ❖ Diffusion ❖ Turgor pressure ❖ Response ❖ Behavior ❖ Taxis ❖ Hormone ❖ Hibernation ❖ Tropism ❖ Hydrotropism ❖ Thigomotropism ❖ Phototropism ❖ Geotropism ❖ Gravitropism ❖ **These vocabulary words will be embedded in other TEKS throughout the year. 	<p>(discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs 124-128</p> <p>FUSION TEXT: Unit 5 Lesson 2 pgs. 118-301</p> <p>FUSION LAB: Unit 5 Quick labs</p>
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18	12/19-12/20 2 Day week of school CB & NY Holidays 12/21-1/2	Review Semester Exam FMNV CHRISTMAS BREAK AND NEW YEARS			
19	1/3 Workday 1/4-1/6 Staff Dev. days	Holiday Work Day Staff Development Days			
20	1/9-1/13	<p>7.12 B 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><i>Supporting Standard</i> Identify MAIN FUNCTIONS OF THE SYSTEMS OF THE HUMAN ORGANISM Including, but not limited to:</p> <ul style="list-style-type: none"> • Circulatory (transport nutrients and 	<p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water</p>	<ul style="list-style-type: none"> ❖ System ❖ Organ ❖ Organ system ❖ Tissue ❖ Interdependence ❖ Interaction ❖ Organism ❖ Cell ❖ Organelle ❖ Muscle ❖ Ligament ❖ Hormone ❖ Blood ❖ Lymph nodes ❖ Liver ❖ Kidney 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook:</p>

		<ul style="list-style-type: none"> oxygen to the body) <ul style="list-style-type: none"> ○ Heart ○ Blood vessels ○ Blood ● Respiratory (exchange of oxygen and carbon dioxide) <ul style="list-style-type: none"> ○ Trachea ○ Diaphragm ○ Lungs ● Skeletal (provide structure and protection) <ul style="list-style-type: none"> ○ Bones ○ Ligaments ● Muscular (movement) <ul style="list-style-type: none"> ○ Types of muscle <ul style="list-style-type: none"> ■ Skeletal ■ Smooth ■ Cardiac ○ Tendons ● Integumentary (protection) <ul style="list-style-type: none"> ○ Skin ○ Hair ○ Nails ● Digestive (break down food to provide energy and nutrients) <ul style="list-style-type: none"> ○ Mechanical and chemical digestion ○ Mouth <ul style="list-style-type: none"> ■ Salivary glands ■ Tongue ■ Teeth ○ Esophagus ○ Stomach ○ Small intestine ○ Large intestine ○ Liver ○ Gall bladder ○ Pancreas ○ Anus ● Excretory (get rid of body waste) <ul style="list-style-type: none"> ○ Kidneys ○ Urinary bladder ● Reproductive (produce offspring) <ul style="list-style-type: none"> ○ Male <ul style="list-style-type: none"> ■ Testicles ■ Penis 	<p>test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<ul style="list-style-type: none"> ❖ Integumentary ❖ Muscular ❖ Endocrine ❖ Cardiovascular ❖ Lymphatic ❖ Respiratory ❖ Digestive ❖ Urinary ❖ Nervous ❖ Reproductive ❖ Heart ❖ Vessels ❖ Arteries ❖ Ventricular ❖ Atrium ❖ Neuron ❖ Nerve ❖ Excretory ❖ Tendon ❖ Joint ❖ **These vocabulary words will be embedded in other TEKS throughout the year. 	<p>https://www-k6.thinkcentral.com/ePC/start.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs. 73-102</p> <p>FUSION TEXT: Lesson 4 pgs 462-473 Lesson 5 pgs 474-491</p> <p>FUSION LAB: Unit 7 Quick labs</p>
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		<ul style="list-style-type: none"> <ul style="list-style-type: none"> <ul style="list-style-type: none"> ▪ Sperm ○ Female <ul style="list-style-type: none"> ▪ Ovaries ▪ Uterus ▪ Vagina ▪ Egg ● Nervous (coordinate the body) <ul style="list-style-type: none"> ○ Send and receive signals throughout body ○ Brain ○ Spinal cord ○ Nerves ○ Sense organs ● Endocrine (regulate the body) <ul style="list-style-type: none"> ○ Glands ○ Hormones <p>STAAR Note:</p> <ul style="list-style-type: none"> ● This SE contains new concepts for the students, and they are not directly taught again before the STAAR test is given in Grade 8. <p>Introduction Note:</p> <ul style="list-style-type: none"> ● Use models to represent aspects of the natural world such as human body systems 			
21	1/16-1/20	<p>7.12 B identify the main functions of the systems of the human organism, including the circulatory, respiratory, skeletal, muscular, digestive,</p>	<p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p>	<ul style="list-style-type: none"> ❖ System ❖ Organ ❖ Organ system ❖ Tissue ❖ Interdependence ❖ Interaction ❖ Organism 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards</p>

		<p>excretory, reproductive, integumentary, nervous, and endocrine systems</p> <p>Supporting Standard</p> <p>Identify</p> <p>MAIN FUNCTIONS OF THE SYSTEMS OF THE HUMAN ORGANISM</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Circulatory (transport nutrients and oxygen to the body) <ul style="list-style-type: none"> ○ Heart ○ Blood vessels ○ Blood • Respiratory (exchange of oxygen and carbon dioxide) <ul style="list-style-type: none"> ○ Trachea ○ Diaphragm ○ Lungs • Skeletal (provide structure and protection) <ul style="list-style-type: none"> ○ Bones ○ Ligaments • Muscular (movement) <ul style="list-style-type: none"> ○ Types of muscle <ul style="list-style-type: none"> ■ Skeletal ■ Smooth ■ Cardiac ○ Tendons • Integumentary (protection) <ul style="list-style-type: none"> ○ Skin ○ Hair ○ Nails • Digestive (break down food to provide energy and nutrients) <ul style="list-style-type: none"> ○ Mechanical and chemical digestion ○ Mouth <ul style="list-style-type: none"> ■ Salivary glands ■ Tongue ■ Teeth ○ Esophagus ○ Stomach ○ Small intestine ○ Large intestine 	<p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<ul style="list-style-type: none"> ❖ Cell ❖ Organelle ❖ Muscle ❖ Ligament ❖ Hormone ❖ Blood ❖ Lymph nodes ❖ Liver ❖ Kidney ❖ Integumentary ❖ Muscular ❖ Endocrine ❖ Cardiovascular ❖ Lymphatic ❖ Respiratory ❖ Digestive ❖ Urinary ❖ Nervous ❖ Reproductive ❖ Heart ❖ Vessels ❖ Arteries ❖ Ventricular ❖ Atrium ❖ Neuron ❖ Nerve ❖ Excretory ❖ Tendon ❖ joint 	<p>and Equipment</p> <p>Colored Pencils</p> <p>Journals</p> <p>Science Binders</p> <p>PPT.</p> <p>Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/start.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: 73-102</p> <p>FUSION TEXT: Lesson 6 pgs 492-503 Lesson 7 pgs 504-516</p> <p>FUSION LAB: Unit 7 Quick labs</p> <p>FUSION ARP PGS. 75-78</p>
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- Liver
 - Gall bladder
 - Pancreas
 - Anus
- Excretory (get rid of body waste)
 - Kidneys
 - Urinary bladder
- Reproductive (produce offspring)
 - Male
 - Testicles
 - Penis
 - Sperm
 - Female
 - Ovaries
 - Uterus
 - Vagina
 - Egg
- Nervous (coordinate the body)
 - Send and receive signals throughout body
 - Brain
 - Spinal cord
 - Nerves
 - Sense organs
- Endocrine (regulate the body)
 - Glands
 - Hormones

STAAR Note:

- This SE contains new concepts for the students, and they are not directly taught again before the STAAR test is given in Grade 8.

Introduction Note:

- Use models to represent aspects of the natural world such as human body systems

22	1/23-1/27	<p>Physical, Chemical, and Energy Changes in Digestion</p> <p>7.6 Matter and energy. <i>The student knows that matter has physical and chemical properties and can undergo physical and chemical changes. The student is expected to:</i></p> <p>7.6 A identify that organic compounds contain carbon and other elements such as hydrogen, oxygen, phosphorus, nitrogen, or sulfur</p> <p>Supporting Standard</p> <p>Identify THAT ORGANIC COMPOUNDS CONTAIN CARBON AND OTHER ELEMENTS Including, but not limited to:</p> <ul style="list-style-type: none"> • Organic compounds <ul style="list-style-type: none"> ○ Possible examples may include <ul style="list-style-type: none"> ▪ Sucrose ▪ Sodium bicarbonate • Other elements <ul style="list-style-type: none"> ○ C: carbon (required to be organic) ○ H: hydrogen ○ O: oxygen ○ P: phosphorus ○ N: nitrogen ○ S: sulfur 	<p>7.2C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.3B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<ul style="list-style-type: none"> ❖ Compound ❖ Organic compound ❖ Carbon ❖ Nitrogen ❖ Element ❖ Phosphorous ❖ Chemical ❖ Physical changes ❖ Properties ❖ Oxygen ❖ Hydrogen ❖ Sulfur ❖ Sucrose ❖ Glucose ❖ Matter ❖ Sodium bicarbonate ❖ Mechanical digestion ❖ Chemical digestion 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: PGS 250-273, 88-93 FUSION TEXT: Look over Unit 3 & 7 organic compounds</p> <p>MU lessons 20-22</p> <p>Organic compounds stem-scope lessons</p> <p>FUSION LAB: Unit 3 & 7</p>
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		<p>7.6 B distinguish between physical and chemical changes in matter in the digestive system</p> <p><i>Supporting Standard</i></p> <p>Distinguish BETWEEN PHYSICAL AND CHEMICAL CHANGES IN MATTER</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Digestion <ul style="list-style-type: none"> ○ Mechanical (physical) digestion ○ Chemical digestion 			<p>FUSION ARP: Standards review pgs. 35-40</p>
23	1/30-2/3	<p>Continue with Phy., Chem., and Energy changes in Digestion</p> <p>7.6C recognize how large molecules are broken down into smaller molecules such as carbohydrates can be broken down into sugars.</p> <p>Recognize HOW LARGE MOLECULES ARE BROKEN DOWN INTO SMALLER MOLECULES</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Digestion <ul style="list-style-type: none"> ○ Carbohydrates can be broken down into sugars during digestion. <p>7.7 B illustrate the transformation of energy within an organism such as the transfer from chemical energy to heat and thermal</p>	<p>7.2C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.3B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and</p>		<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p>

		<p>energy in digestion</p> <p>Illustrate THE TRANSFORMATION OF ENERGY WITHIN AN ORGANISM Including, but not limited to:</p> <ul style="list-style-type: none"> • Digestion <ul style="list-style-type: none"> ○ Chemical energy to heat or thermal energy 	<p>other equipment as needed to teach the curriculum</p>		<p>SCIENCESARUS: PGS 250-273, 88-93</p> <p>FUSION TEXT: Unit 6 Review Lesson 2 pgs. 340-353 Lesson 3 pgs 354-369</p> <p>Energy transformation</p> <p>FUSION LAB: Unit 3 & 7</p> <p>FUSION ARP: Standards review pgs. 35-40</p>
24	2/6-2/10	<p>Homeostasis</p> <p><i>Organisms and environments. The student knows that a living organism must be able to maintain balance in stable internal conditions in response to external and internal stimuli. The student is expected to:</i></p> <p>7.13 A investigate how organisms respond to external stimuli found in the environment such as phototropism and fight or</p>	<p>7.2 A plan and implement comparative and descriptive investigations by making observations, asking well-defined questions, and using appropriate equipment and technology</p> <p>7.2 C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.2 D construct tables and graphs, using repeated trials and means, to organize data and identify patterns</p> <p>7.4 A use appropriate tools to collect, record,</p>	<ul style="list-style-type: none"> ❖ Phototropism ❖ Homeostasis ❖ Stimuli ❖ Pupil dilation ❖ Fight or flight ❖ Transpiration ❖ Gravitropism ❖ Geotropism ❖ Hibernation ❖ 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook:</p>

		<p>flight</p> <p>Investigate HOW ORGANISMS RESPOND TO EXTERNAL STIMULI FOUND IN THE ENVIRONMENT Including, but not limited to:</p> <ul style="list-style-type: none"> • Response to external stimuli <ul style="list-style-type: none"> ○ The presence of light <ul style="list-style-type: none"> ▪ Phototropism ▪ Pupil dilation ○ The presence or absence of heat <ul style="list-style-type: none"> ▪ Shivering ▪ Panting/sweating ▪ Transpiration ○ Fear <ul style="list-style-type: none"> ▪ Fight or flight ○ Gravity <ul style="list-style-type: none"> ▪ Geotropism <p>7.13 B describe and relate responses in organisms that may result from internal stimuli such as wilting in plants and fever or vomiting in animals that allow them to maintain balance</p> <p>Describe, Relate RESPONSES IN ORGANISMS THAT MAY RESULT FROM INTERNAL STIMULI THAT ALLOW THEM TO MAINTAIN BALANCE Including, but not limited to:</p> <ul style="list-style-type: none"> • Maintain balance (homeostasis) <ul style="list-style-type: none"> ○ Wilting in plants ○ Regulating body 	<p>and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>		<p>https://www-k6.thinkcentral.com/ePC/start.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs 84</p> <p>FUSION TEXT: Lesson 1 pgs 274-285</p> <p>FUSION ARP: PGS 85-89</p> <p>FUSION LAB: Unit 5 quick labs</p>
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		<ul style="list-style-type: none"> ○ temperature ○ Changes in metabolism ○ Fever or vomiting in animals <p>Hunger/thirst</p>			
25	2/13-2/17	<p>Genetics <i>Organisms and environments. The student knows that reproduction is a characteristic of living organisms and that the instructions for traits are governed in the genetic material. The student is expected to:</i></p> <p>7.14 A define heredity as the passage of genetic instructions from one generation to the next generation</p> <p>Define HEREDITY Including, but not limited to:</p> <ul style="list-style-type: none"> • Heredity – the passage of genetic instructions from one generation to the next generation <p>7.14 B compare the results of uniform or diverse offspring from sexual reproduction or</p>	<p>Simulated Assessment Writing Day (2/15)</p> <p>7.2 D construct tables and graphs, using repeated trials and means, to organize data and identify patterns</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 A in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.3 D relate the impact of research on scientific thought and society, including the</p>	<ul style="list-style-type: none"> ❖ Heredity ❖ Genes ❖ Allele ❖ Genotype ❖ Phenotype ❖ Incomplete dominance ❖ Dominant ❖ Recessive ❖ Co dominance ❖ Genetics ❖ Punnett square ❖ Heterozygous ❖ Homozygous ❖ Ratio ❖ Percentage ❖ Trait ❖ Gene 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do Compass Learning: https://www.thelearningodyssey.com/ SCIENCESARUS: Pgs 112-123 FUSION TEXT: Lesson 1 182-191 Lesson 2 192-203 Lesson 3 204-213 Lesson 4 214-227 FUSION LAB:</p>

		<p>asexual reproduction <i>Supporting Standard</i></p> <p>Compare THE RESULTS OF UNIFORM OR DIVERSE OFFSPRING Including, but not limited to:</p> <ul style="list-style-type: none"> • Organisms vary because they have differences in inherited traits. • Asexual reproduction <ul style="list-style-type: none"> ○ Genetic material is donated from only one parent. ○ Offspring are identical (uniform) to the parent and to each other. ○ Disadvantages <ul style="list-style-type: none"> ▪ Lack of diversity decreases chances of survival of species • Sexual reproduction <ul style="list-style-type: none"> ○ Genetic material is donated from two parents. ○ Genetic material from two parents allows for more genetic variation in the offspring. ○ Offspring differ from each parent and from each other. ○ Advantages <ul style="list-style-type: none"> ▪ Diversity increases chances of survival of species • Punnett squares <ul style="list-style-type: none"> ○ Dominant ○ Recessive ○ Genotypes 	<p>history of science and contributions of scientists as related to the content</p> <p>Relate THE IMPACT OF RESEARCH ON SCIENTIFIC THOUGHT AND SOCIETY Including, but not limited to:</p> <ul style="list-style-type: none"> • History of science • Contributions of scientists <ul style="list-style-type: none"> ○ Possible examples may include <ul style="list-style-type: none"> ▪ Gregor Mendel ▪ Charles Darwin ▪ Carolus Linnaeus <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<ul style="list-style-type: none"> ❖ Hybrid ❖ Purebred ❖ Mendel ❖ Darwin ❖ 	<p>FUSION ARP: PGS. 90-95</p>
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		<ul style="list-style-type: none"> ○ Phenotype <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><i>Supporting Standard</i></p> <p>Recognize INHERITED TRAITS ARE GOVERNED IN THE GENETIC MATERIAL FOUND IN THE GENES WITHIN CHROMOSOMES Including, but not limited to:</p> <ul style="list-style-type: none"> ● Cells contain genetic material in the nucleus. <ul style="list-style-type: none"> ○ Genes ○ DNA ○ Chromosomes ● Inherited traits of organisms are passed from parents to the offspring through genes. ● Genes code for dominant and recessive traits ● Genes determine traits. ● Genes are composed of DNA 			
26	2/20-2/24	<p>Genetics Genetics <i>Organisms and environments. The student knows that reproduction is a characteristic of living organisms and that the instructions for traits are governed in the genetic</i></p>	<p>7.2 D construct tables and graphs, using repeated trials and means, to organize data and identify patterns</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 A in all fields of science, analyze, evaluate, and critique scientific explanations</p>	<ul style="list-style-type: none"> ❖ Heredity ❖ Genes ❖ Allele ❖ Genotype ❖ Phenotype ❖ Incomplete 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals</p>

	<p><i>material. The student is expected to:</i></p> <p>7.14 A define heredity as the passage of genetic instructions from one generation to the next generation</p> <p>Define HEREDITY Including, but not limited to:</p> <ul style="list-style-type: none"> Heredity – the passage of genetic instructions from one generation to the next generation <p>7.14 B compare the results of uniform or diverse offspring from sexual reproduction or asexual reproduction</p> <p><i>Supporting Standard</i></p> <p>Compare THE RESULTS OF UNIFORM OR DIVERSE OFFSPRING Including, but not limited to:</p> <ul style="list-style-type: none"> Organisms vary because they have differences in inherited traits. Asexual reproduction <ul style="list-style-type: none"> Genetic material is donated from only one parent. Offspring are identical (uniform) to the parent and to each other. Disadvantages <ul style="list-style-type: none"> Lack of diversity decreases 	<p>by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.3 D 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> <p>Relate THE IMPACT OF RESEARCH ON SCIENTIFIC THOUGHT AND SOCIETY Including, but not limited to:</p> <ul style="list-style-type: none"> History of science Contributions of scientists <ul style="list-style-type: none"> Possible examples may include <ul style="list-style-type: none"> Gregor Mendel Charles Darwin Carolus Linnaeus <p>7.4 A use appropriate tools to collect, record, and analyze information, including life</p>	<p>dominance</p> <ul style="list-style-type: none"> Dominant Recessive Co dominance Genetics Punnett square Heterozygous Homozygous Ratio Percentage Trait Gene Hybrid Purebred Mendel 	<p>Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs 112-123</p> <p>FUSION TEXT: Lesson 5 pgs 228-237 Lesson 6 pgs238-251 Lesson 7 pgs 252-265</p> <p>FUSION LAB: Unit 4 quick labs</p> <p>FUSION ARP: PGS. 90-95</p>
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chances of survival of species

- Sexual reproduction
 - Genetic material is donated from two parents.
 - Genetic material from two parents allows for more genetic variation in the offspring.
 - Offspring differ from each parent and from each other.
 - Advantages
 - Diversity increases chances of survival of species
- Punnett squares
 - Dominant
 - Recessive
 - Genotypes
 - Phenotype

7.14 C recognize that inherited traits of individuals are governed in the genetic material found in the genes within chromosomes in the nucleus

Supporting Standard

Recognize
INHERITED TRAITS ARE GOVERNED IN
THE GENETIC MATERIAL FOUND IN
THE GENES WITHIN CHROMOSOMES
Including, but not limited to:

- Cells contain genetic material in the nucleus.
 - Genes

science models, ~~hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment~~ as needed to teach the curriculum

		<ul style="list-style-type: none"> ○ DNA ○ Chromosomes ● Inherited traits of organisms are passed from parents to the offspring through genes. ● Genes code for dominant and recessive traits ● Genes determine traits. ● Genes are composed of DNA 			
27	2/27-3/3	<p>Genetics Variation and Adaptations (10 days)</p> <p>7.11 Organisms and environments. <i>The student knows that populations and species demonstrate variation and inherit many of their unique traits through gradual processes over many generations. The student is expected to:</i></p> <p>7.11 A examine organisms or their structures such as insects or leaves and use dichotomous keys for identification <i>Supporting Standard</i></p> <p>Examine, Use ORGANISMS OR THEIR STRUCTURES; DICHOTOMOUS KEYS Including, but not limited to:</p> <ul style="list-style-type: none"> ● Insects <ul style="list-style-type: none"> ○ Mouth 	<p>Simulated Assessment Math (2/28) Simulated Assessment Reading (3/1)</p> <p>7.1 A demonstrate safe practices during laboratory and field investigations as outlined in the Texas Safety Standards.</p> <p>7.2 C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 A in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student</p> <p>7.3 D 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> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science</p>	<ul style="list-style-type: none"> ❖ Variation ❖ Dichotomous ❖ Identification ❖ Trait ❖ Genes ❖ Alleles ❖ Dominant trait ❖ Recessive trait ❖ Sexual reproduction ❖ Asexual reproduction ❖ Selective breeding ❖ Offspring 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs 150-164</p> <p>FUSION TEXT: Unit 5</p>

		<p>structures</p> <ul style="list-style-type: none"> ○ Appendages <ul style="list-style-type: none"> ▪ Legs ▪ Wings/ no wings • Leaves <ul style="list-style-type: none"> ○ Shape ○ Veins ○ Margins • Dichotomous key for identification <p>7.11 B explain variation within a population or species by comparing external features, behaviors, or physiology of organisms that enhance their survival such as migration, hibernation, or storage of food in a bulb</p> <p>Explain, Compare</p> <p>VARIATION WITHIN A POPULATION OR SPECIES</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • External features and physiology <ul style="list-style-type: none"> ○ Animal examples <p>Appendages</p> <p>Mouth structures</p>	<p>models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>		<p>Lesson 3 pgs 302-324</p> <p>FUSION LAB: Unit 5 quick lab</p> <p>FUSION ARP: PGS 65-72</p>
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Camouflage

Plant examples

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Storage of food in a bulb

Types of roots

- Types of leaves
- Seed dispersal
- Attraction of pollinators

- Behaviors

- Migration
- Hibernation
- Phototropism
- Geotropism

7.11 C 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 (*Geospiza fortis*) or domestic animals

		<p><i>Supporting Standard</i></p> <p>Identify CHANGES IN GENETIC TRAITS THAT CAN HAVE OCCURRED OVER SEVERAL GENERATIONS</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Changes in genetic traits through <ul style="list-style-type: none"> ○ Adaptation ○ Natural selection <ul style="list-style-type: none"> ▪ Galapagos Medium Ground Finch <p>Size and shape of beaks</p> <ul style="list-style-type: none"> ○ Selective breeding <ul style="list-style-type: none"> ▪ Domestic animals 			
28	3/6-3/10	<p>Genetics Variation and Adaptations</p> <p><i>7.11 Organisms and environments. The student knows that populations and species demonstrate variation and inherit many of their unique traits through gradual processes over many generations. The student is expected to:</i></p> <p>7.11 A examine organisms or their structures such as insects</p>	<p>7.1 A demonstrate safe practices during laboratory and field investigations as outlined in the Texas Safety Standards.</p> <p>7.2 C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 A in all fields of science, analyze, evaluate,</p>	<ul style="list-style-type: none"> ❖ Variation ❖ Dichotomous ❖ Identification ❖ Trait ❖ Genes ❖ Alleles ❖ Dominant trait ❖ Recessive trait ❖ Sexual reproduction 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science</p>

	<p>or leaves and use dichotomous keys for identification <i>Supporting Standard</i> Examine, Use ORGANISMS OR THEIR STRUCTURES; DICHOTOMOUS KEYS Including, but not limited to:</p> <ul style="list-style-type: none"> • Insects <ul style="list-style-type: none"> ○ Mouth structures ○ Appendages <ul style="list-style-type: none"> ▪ Legs ▪ Wings/n ○ wings • Leaves <ul style="list-style-type: none"> ○ Shape ○ Veins ○ Margins <p>Dichotomous key for</p> <p>7.11 B explain variation within a population or species by comparing external features, behaviors, or physiology of organisms that enhance their survival such as migration, hibernation, or storage of food in a bulb</p> <p>Explain, Compare VARIATION WITHIN A POPULATION OR SPECIES Including, but not limited to:</p>	<p>and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student</p> <p>7.3 D 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> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<ul style="list-style-type: none"> ❖ Asexual reproduction ❖ Selective breeding ❖ Offspring 	<p>videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/start.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs 150-164</p> <p>FUSION TEXT: Unit 5 Lesson 3 pgs 302-324</p> <p>MU LESSON 14 &15</p> <p>FUSION LAB: Unit 5 quick lab</p> <p>FUSION ARP: PGS 65-72</p>
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- Identification
- External features and physiology
 - Animal examples

Appendages

Mouth structures

Camouflage

Plant examples

Storage of food in a bulb

Types of roots

Types of leaves

Seed dispersal

Attraction of pollinators

- Behaviors
 - Migration
 - Hibernation
 - Phototropism
 - Geotropism

7.11 C identify some changes in genetic traits that have occurred over several generations through natural selection and selective breeding such as the Galapagos

		<p>Medium Ground Finch (Geospiza fortis) or domestic animals <i>Supporting Standard</i></p> <p>Identify CHANGES IN GENETIC TRAITS THAT CAN HAVE OCCURRED OVER SEVERAL GENERATIONS</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Changes in genetic traits through <ul style="list-style-type: none"> ○ Adaptation ○ Natural selection <p>Galapagos Medium Ground Finch</p> <p>Size and shape of beaks</p> <p>Selective breeding</p> <p>Domestic animals</p>			
29	<p>SB Holidays</p> <p>3/13-3/17</p>	<p>SPRING BREAK</p>			
30	<p>3/20-3/24</p> <p>Staff Dev. Day 3/20</p>	<p>Genetics Variation and Adaptations</p> <p><i>7.11 Organisms and environments. The student knows that populations and species demonstrate variation and inherit many of their unique traits through gradual processes</i></p>	<p>7.1 A demonstrate safe practices during laboratory and field investigations as outlined in the Texas Safety Standards.</p> <p>7.2 C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers</p>	<ul style="list-style-type: none"> ❖ Variation ❖ Dichotomous ❖ Identification ❖ Trait ❖ Genes ❖ Alleles ❖ Dominant trait ❖ Recessive 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils</p>

	<p><i>over many generations. The student is expected to:</i></p> <p>7.11 A examine organisms or their structures such as insects or leaves and use dichotomous keys for identification <i>Supporting Standard</i></p> <p>Examine, Use ORGANISMS OR THEIR STRUCTURES; DICHOTOMOUS KEYS Including, but not limited to:</p> <ul style="list-style-type: none"> • Insects <ul style="list-style-type: none"> ○ Mouth structures ○ Appendages <ul style="list-style-type: none"> ▪ Legs ▪ Wings/ no wings • Leaves <ul style="list-style-type: none"> ○ Shape ○ Veins ○ Margins • Dichotomous key for identification <p>7.11 B explain variation within a population or species by comparing external features, behaviors, or physiology of organisms that enhance their survival such as migration, hibernation, or storage of food in a bulb</p>	<p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 A in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student</p> <p>7.3 D 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> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum</p>	<p>trait</p> <ul style="list-style-type: none"> ❖ Sexual reproduction ❖ Asexual reproduction ❖ Selective breeding ❖ Offspring 	<p>Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs 150-164</p> <p>FUSION TEXT: Unit 5 Lesson 3 pgs 302-324</p> <p>MU LESSON 14 &15</p> <p>FUSION LAB: Unit 5 quick lab</p> <p>FUSION ARP: PGS 65-72</p>
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Explain, Compare
VARIATION WITHIN A
POPULATION OR SPECIES

Including, but not limited to:

- External features and physiology
 - Animal examples

Appendages

Mouth structures

Camouflage

Plant examples

Storage of food in a bulb

Types of roots

Types of leaves

Seed dispersal

Attraction of pollinators

- Behaviors
 - Migration
 - Hibernation
 - Phototropism
 - Geotropism

**7.11 C identify some changes
in genetic traits that have**

		<p>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><i>Supporting Standard</i></p> <p>Identify</p> <p>CHANGES IN GENETIC TRAITS THAT CAN HAVE OCCURRED OVER SEVERAL GENERATIONS</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Changes in genetic traits through <ul style="list-style-type: none"> ○ Adaptation ○ Natural selection <p>Galapagos Medium Ground Finch</p> <p>Size and shape of beaks</p> <ul style="list-style-type: none"> ○ Selective breeding <p>Domestic animals</p>			
31	3/27-3/31	<p>Factors Impacting Earth Systems (17 days)</p> <p>7.8 Earth and space. <i>The student knows that natural events and human activity can impact Earth systems. The</i></p>	<p>7TH Grade STAAR Writing Day 1 (March 28)</p> <p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 B use models to represent aspects of the</p>	<ul style="list-style-type: none"> ❖ Fresh water ❖ Watershed ❖ Precipitation ❖ Runoff ❖ Porous ❖ Groundwater ❖ Aquifer ❖ Water table 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards</p>

	<p><i>student is expected to:</i></p> <p>7.8 A predict and describe how different types of catastrophic events impact ecosystems such as floods, hurricanes, or tornadoes</p> <p>Predict, Describe</p> <p>HOW THE DIFFERENT TYPES OF CATASTROPHIC EVENTS IMPACT ECOSYSTEMS</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Events <ul style="list-style-type: none"> ◦ Weather events <p>Floods</p> <p>Hurricanes</p> <p>Tornadoes</p> <p>Drought</p> <p>Geological events</p> <p>Volcanoes</p> <p>Earthquakes (tsunami)</p> <p>Fires</p> <ul style="list-style-type: none"> • Impacts of events on ecosystems <p>Changes in populations</p>	<p>natural world such as human body systems and plant and animal cells</p> <p>Use</p> <p>MODELS</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Representing aspects of the natural world • Possible examples may include <ul style="list-style-type: none"> ◦ Physical models <ul style="list-style-type: none"> ▪ Effects of human activity on ground and surface water in a watershed <p>identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>Identify</p> <p>ADVANTAGES AND LIMITATIONS OF MODELS</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Size • Scale • Properties • Materials <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum.</p>	<ul style="list-style-type: none"> ❖ Well ❖ Water cycle ❖ Evaporate ❖ Condense ❖ Transpiration ❖ Weathering ❖ Mechanical weathering ❖ Chemical weathering ❖ Erosion ❖ Sediments ❖ Deposition ❖ Dune ❖ Glacier ❖ Rock cycle ❖ Volcano ❖ Magma ❖ Equilibrium ❖ Lava ❖ Earthquake ❖ Fault ❖ Tsunami ❖ Ecoregions 	<p>and Equipment</p> <p>Colored Pencils</p> <p>Journals</p> <p>Science Binders</p> <p>PPT.</p> <p>Youtube science videos</p> <p>Online Textbook:</p> <p>https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning:</p> <p>https://www.thelearningodyssey.com/</p>
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Changes in species

Changes in landforms

7.8 B analyze the effects of weathering, erosion, and deposition on the environment in ecoregions of Texas

Analyze

THE EFFECTS OF WEATHERING, EROSION, AND DEPOSITION ON THE ENVIRONMENT IN ECOREGIONS OF TEXAS

Including, but not limited to:

- Effects of
 - Weathering
 - Erosion
 - Deposition
- Ecoregions of Texas
 - Possible examples may include

High Plains

Rolling Plains

Trans Pecos

Blackland Prairie

	<p>Llano Uplift</p> <p>Edwards Plateau</p> <p>Oak Wood and Prairies</p> <p>Piney Woods</p> <p>South Texas Brush Country</p> <p>Gulf Coast Prairies and Marshes</p> <p>Coastal Sand Plain</p> <p>Marine environment</p> <p>7.8 C model the effects of human activity on groundwater and surface water in a watershed</p> <p><i>Supporting Standard</i></p> <p>Model</p> <p>THE EFFECTS OF HUMAN ACTIVITY ON GROUND WATER AND SURFACE WATER IN A WATERSHED</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none">• Watershed <p>Ground water</p> <p>Recharge zones</p> <p>Aquifers</p>			
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		<p>Springs</p> <p>Wells</p> <p>Water table</p> <p>Surface water</p> <p>Rivers</p> <p>Streams</p> <p>Ponds</p> <p>Lakes</p> <p>Effects of human activity</p> <p>Water pollution</p> <p>Water use and conservation</p>			
32	4/3-4/7	<p>Factors Impacting Earth Systems</p> <p>7.8 Earth and space. <i>The student knows that natural events and human activity can impact Earth systems. The student is expected to:</i></p> <p>7.8 A predict and describe how different types of catastrophic events impact ecosystems such as floods, hurricanes, or tornadoes</p> <p>Predict, Describe</p>	<p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>Use MODELS</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Representing aspects of the natural world • Possible examples may include <ul style="list-style-type: none"> ○ Physical models 	<ul style="list-style-type: none"> ❖ Fresh water ❖ Watershed ❖ Precipitation ❖ Runoff ❖ Porous ❖ Groundwater ❖ Aquifer ❖ Water table ❖ Well ❖ Water cycle ❖ Evaporate ❖ Condense ❖ Transpiration ❖ Weathering ❖ Mechanical 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p>

	<p>HOW THE DIFFERENT TYPES OF CATASTROPHIC EVENTS IMPACT ECOSYSTEMS</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Events <ul style="list-style-type: none"> ○ Weather events <p>Floods</p> <p>Hurricanes</p> <p>Tornadoes</p> <p>Drought</p> <p>Geological events</p> <p>Volcanoes</p> <p>Earthquakes (tsunami)</p> <p>Fires</p> <ul style="list-style-type: none"> • Impacts of events on ecosystems <p>Changes in populations</p> <p>Changes in species</p> <p>Changes in landforms</p> <p>7.8 B analyze the effects of weathering, erosion, and</p>	<ul style="list-style-type: none"> ▪ Effects of human activity on ground and surface water in a watershed <p>identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>Identify</p> <p>ADVANTAGES AND LIMITATIONS OF MODELS</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Size • Scale • Properties • Materials <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum.</p>	<p>weathering</p> <ul style="list-style-type: none"> ❖ Chemical weathering ❖ Erosion ❖ Sediments ❖ Deposition ❖ Dune ❖ Glacier ❖ Rock cycle ❖ Volcano ❖ Magma ❖ Equilibrium ❖ Lava ❖ Earthquake ❖ Fault ❖ Tsunami ❖ Ecoregions ❖ 	<p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs 188-193</p> <p>FUSION TEXT: Lesson 1 526-539 Lesson 2 540-553 Lesson 3 554-563</p> <p>FUSION LAB: Unit 8 Quick labs</p> <p>FUSION ARP: Pgs 47-52</p>
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**deposition on the environment
in ecoregions of Texas**

Analyze
THE EFFECTS OF
WEATHERING, EROSION,
AND DEPOSITION ON THE
ENVIRONMENT IN
ECOREGIONS OF TEXAS

Including, but not limited to:

- Effects of
 - Weathering
 - Erosion
 - Deposition
- Ecoregions of Texas
 - Possible examples may include

High Plains

Rolling Plains

Trans Pecos

Blackland Prairie

Llano Uplift

Edwards Plateau

Oak Wood and Prairies

	<p>Piney Woods</p> <p>South Texas Brush Country</p> <p>Gulf Coast Prairies and Marshes</p> <p>Coastal Sand Plain</p> <p>Marine environment</p> <p>7.8 C model the effects of human activity on groundwater and surface water in a watershed</p> <p><i>Supporting Standard</i></p> <p>Model</p> <p>THE EFFECTS OF HUMAN ACTIVITY ON GROUND WATER AND SURFACE WATER IN A WATERSHED</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none">• Watershed <p>Ground water</p> <p>Recharge zones</p> <p>Aquifers</p> <p>Springs</p> <p>Wells</p> <p>Water table</p>			
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		<p>Surface water</p> <p>Rivers</p> <p>Streams</p> <p>Ponds</p> <p>Lakes</p> <p>Effects of human activity</p> <p>Water pollution</p> <p>Water use and conservation</p>			
33	<p>4/10-4/14</p> <p>Good Friday 4/14</p>	<p>Factors Impacting Earth Systems</p> <p>7.8 Earth and space. <i>The student knows that natural events and human activity can impact Earth systems. The student is expected to:</i></p> <p>7.8 A predict and describe how different types of catastrophic events impact ecosystems such as floods, hurricanes, or tornadoes</p> <p>Predict, Describe</p> <p>HOW THE DIFFERENT TYPES OF CATASTROPHIC EVENTS IMPACT ECOSYSTEMS</p> <p>Including, but not limited to:</p>	<p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells</p> <p>Use</p> <p>MODELS</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Representing aspects of the natural world • Possible examples may include <ul style="list-style-type: none"> ○ Physical models <ul style="list-style-type: none"> ▪ Effects of human activity on ground and surface water in a watershed <p>identify advantages and limitations of models</p>	<ul style="list-style-type: none"> ❖ Fresh water ❖ Watershed ❖ Precipitation ❖ Runoff ❖ Porous ❖ Groundwater ❖ Aquifer ❖ Water table ❖ Well ❖ Water cycle ❖ Evaporate ❖ Condense ❖ Transpiration ❖ Weathering ❖ Mechanical weathering ❖ Chemical weathering ❖ Erosion ❖ Sediments ❖ Deposition 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/s</p>

		<ul style="list-style-type: none"> • Events <p>Weather events</p> <p>Floods</p> <p>Hurricanes</p> <p>Tornadoes</p> <p>Drought</p> <p>Geological events</p> <p>Volcanoes</p> <p>Earthquakes (tsunami)</p> <p>Fires</p> <p>Impacts of events on ecosystems</p> <p>Changes in populations</p> <p>Changes in species</p> <p>Changes in landforms</p> <p>7.8 B analyze the effects of weathering, erosion, and deposition on the environment in ecoregions of Texas</p> <p>Analyze THE EFFECTS OF WEATHERING, EROSION,</p>	<p>such as size, scale, properties, and materials</p> <p>Identify</p> <p>ADVANTAGES AND LIMITATIONS OF MODELS</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Size • Scale • Properties • Materials <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum.</p>	<ul style="list-style-type: none"> ❖ Dune ❖ Glacier ❖ Rock cycle ❖ Volcano ❖ Magma ❖ Equilibrium ❖ Lava ❖ Earthquake ❖ Fault ❖ Tsunami ❖ Ecoregions 	<p>tart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs 188-193</p> <p>FUSION TEXT: Lesson 4 pgs 564-579 Lesson 5 pgs 580-591 Lesson 6 pgs 592-610</p> <p>FUSION LAB:</p> <p>Unit 8 quick lab</p> <p>FUSION ARP: Pgs 47-52</p>
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AND DEPOSITION ON THE ENVIRONMENT IN ECOREGIONS OF TEXAS Including, but not limited to:

- Effects of
 - Weathering
 - Erosion
 - Deposition
- Ecoregions of Texas
 - Possible examples may include

High Plains

Rolling Plains

Trans Pecos

Blackland Prairie

Llano Uplift

Edwards Plateau

Oak Wood and Prairies

Piney Woods

South Texas Brush Country

Gulf Coast Prairies and Marshes

Coastal Sand Plain

Marine environment

7.8 C model the effects of human activity on groundwater and surface water in a watershed

Supporting Standard

Model

THE EFFECTS OF HUMAN ACTIVITY ON GROUND WATER AND SURFACE WATER IN A WATERSHED

Including, but not limited to:

- Watershed
 - Ground water

Recharge zones

Aquifers

Springs

Wells

Water table

Surface water

Rivers

Streams

		<p>Ponds</p> <p>Lakes</p> <p>Effects of human activity</p> <ul style="list-style-type: none"> ○ Water pollution <p>Water use and conservation</p>			
34	<p>4/17-4/21</p> <p>Easter Monday</p>	<p>Life in Our Solar System</p> <p>7.9 Earth and space. <i>The student knows components of our solar system. The student is expected to:</i></p> <p>7.9 A analyze the characteristics of objects in our solar system that allow life to exist such as the proximity of the Sun, presence of water, and composition of the atmosphere</p> <p>Analyze</p> <p>THE CHARACTERISTICS OF OBJECTS IN OUR SOLAR SYSTEM THAT ALLOW LIFE TO EXIST</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Proximity to the Sun • Presence of water • Composition of the atmosphere <p>7.9 B identify the accommodations, considering the characteristics of our solar system, that enabled manned space exploration.</p>	<p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells.</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum.</p>	<ul style="list-style-type: none"> ❖ Solar system ❖ Sun ❖ Planet ❖ Orbit ❖ Revolution ❖ Rotation ❖ Moon ❖ Dwarf planet ❖ Asteroid ❖ Comet ❖ Meteoroid ❖ Atmosphere ❖ Gravity ❖ Shuttle 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p>

		<p>Identify ACCOMMODATIONS THAT ENABLE MANNED SPACE EXPLORATION</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none">• Characteristics of our solar system to consider<ul style="list-style-type: none">○ Gravity <p>Slingshot effect</p> <ul style="list-style-type: none">○ Atmosphere○ Distances• Human accommodations<ul style="list-style-type: none">○ Protective suits <p>Pressure</p> <p>Temperature</p> <p>Effects of microgravity</p> <p>Air systems</p> <p>Food supply</p> <p>Waste management</p>			
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35	4/24-4/28	<p>Life in Our Solar System 7.9 Earth and space. <i>The student knows components of our solar system. The student is expected to:</i></p> <p>7.9 A analyze the characteristics of objects in our solar system that allow life to exist such as the proximity of the Sun, presence of water, and composition of the atmosphere</p> <p>Analyze THE CHARACTERISTICS OF OBJECTS IN OUR SOLAR SYSTEM THAT ALLOW LIFE TO EXIST</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> Proximity to the Sun Presence of water Composition of the atmosphere <p>7.9 B identify the accommodations, considering the characteristics of our solar system, that enabled manned space exploration.</p> <p>Identify ACCOMMODATIONS THAT ENABLE MANNED SPACE EXPLORATION</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> Characteristics of our 	<p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells.</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum.</p>	<ul style="list-style-type: none"> Solar system Sun Planet Orbit Revolution Rotation Moon Dwarf planet Asteroid Comet Meteoroid Atmosphere Gravity Shuttle 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs 231-248</p> <p>FUSION TEXT: Lesson 1 pgs 620-631</p> <p>Mu Lesson 29</p> <p>FUSION LAB: Unit 9 quick labs</p> <p>FUSION ARP: Pgs 53-56</p>
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		<p>solar system to consider</p> <ul style="list-style-type: none"> ○ Gravity <p>Slingshot effect</p> <ul style="list-style-type: none"> ○ Atmosphere ○ Distances ● Human accommodations <ul style="list-style-type: none"> ○ Protective suits <p>Pressure</p> <p>Temperature</p> <p>Effects of microgravity</p> <p>Air systems</p> <p>Food supply</p> <p>Waste management</p>			
36	5/1-5/5	<p>Life in Our Solar System 7.9 Earth and space. <i>The student knows components of our solar system. The student is expected to:</i></p> <p>7.9 A analyze the characteristics of objects in our solar system that allow life to exist such as the proximity of the Sun, presence of water, and composition of the atmosphere</p> <p>Analyze THE CHARACTERISTICS OF OBJECTS IN OUR SOLAR SYSTEM THAT ALLOW LIFE</p>	<p>7.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells.</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing</p>	<ul style="list-style-type: none"> ❖ Solar system ❖ Sun ❖ Planet ❖ Orbit ❖ Revolution ❖ Rotation ❖ Moon ❖ Dwarf planet ❖ Asteroid ❖ Comet ❖ Meteoroid ❖ Atmosphere ❖ Gravity ❖ Shuttle 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook:</p>

		<p>TO EXIST</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Proximity to the Sun • Presence of water • Composition of the atmosphere <p>7.9 B identify the accommodations, considering the characteristics of our solar system, that enabled manned space exploration.</p> <p>Identify</p> <p>ACCOMMODATIONS THAT ENABLE MANNED SPACE EXPLORATION</p> <p>Including, but not limited to:</p> <ul style="list-style-type: none"> • Characteristics of our solar system to consider <ul style="list-style-type: none"> ○ Gravity <p>Slingshot effect</p> <p>Atmosphere</p> <p>Distances</p> <p>Human accommodations</p> <p>Protective suits</p> <p>Pressure</p>	<p>devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum.</p>		<p>https://www-k6.thinkcentral.com/ePC/start.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>SCIENCESARUS: Pgs 231-248</p> <p>FUSION TEXT: Lesson 2 pgs 632-650</p> <p>MU lesson 29 FUSION LAB: Unit 9 quick labs</p>
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		<p>Temperature</p> <p>Effects of microgravity</p> <p>Air systems</p> <p>Food supply</p> <p>Waste management</p>			
37	5/8-5/12	<p>Life in Our Solar System (11 days)</p> <p>7.9 <i>Earth and space. The student knows components of our solar system. The student is expected to:</i></p> <p>7.9 A analyze the characteristics of objects in our solar system that allow life to exist such as the proximity of the Sun, presence of water, and composition of the atmosphere</p> <p>Analyze THE CHARACTERISTICS OF OBJECTS IN OUR SOLAR SYSTEM THAT ALLOW LIFE TO EXIST Including, but not limited to:</p> <ul style="list-style-type: none"> Proximity to the Sun Presence of water 	<p>7TH Grade STAAR Math (May 8th) 7TH Grade STAAR Reading (May 9th)</p> <p>.2 E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends</p> <p>7.3 B use models to represent aspects of the natural world such as human body systems and plant and animal cells.</p> <p>7.3 C identify advantages and limitations of models such as size, scale, properties, and materials</p> <p>7.4 A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as</p>	<ul style="list-style-type: none"> Solar system Sun Planet Orbit Revolution Rotation Moon Dwarf planet Asteroid Comet Meteoroid Atmosphere Gravity Shuttle 	<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/sart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p>

		<ul style="list-style-type: none"> • Composition of the atmosphere <p>7.9 B identify the accommodations, considering the characteristics of our solar system, that enabled manned space exploration.</p> <p>Identify ACCOMMODATIONS THAT ENABLE MANNED SPACE EXPLORATION Including, but not limited to:</p> <ul style="list-style-type: none"> • Characteristics of our solar system to consider <p>Gravity</p> <p>Slingshot effect</p> <p>Atmosphere</p> <p>Distances</p> <p>Human accommodations</p> <p>Protective suits</p> <p>Pressure</p> <p>Temperature</p> <p>Effects of microgravity</p>	<p>needed to teach the curriculum.</p>		<p>SCIENCESARUS: Pgs 231-248</p> <p>FUSION TEXT: Review questions</p> <p>Lesson 2 632-650 FUSION LAB: Unit 9 quick labs</p>
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		<p>Air systems</p> <p>Food supply</p> <p>Waste management</p>			
38	<p>5/15-5/18</p> <p>Workday 5/19</p>	<p>End of the year exams and field day</p>			<p>Science books, united-streaming (discovery), Lab equipment. MSDS Science Chemical sheets. Chemicals Hazards and Equipment Colored Pencils Journals Science Binders PPT. Youtube science videos</p> <p>Online Textbook: https://www-k6.thinkcentral.com/ePC/s tart.do</p> <p>Compass Learning: https://www.thelearningodyssey.com/</p> <p>All materials turned in and final grades entered.</p>
39/40	<p>Holiday 5/29</p>	<p>9 days At-Risk Mandatory Instructional Days</p>	<p>May 22-June 2, 2017</p> <p>Pre 8th grade TEKS (weakest ones) Planning for upcoming school year.</p>		

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