



1 st Quarter			
Resources:			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
1 st	<p>Welcome Survey – getting to know you Collect & log Supplies received Classroom Rules Curriculum overview</p>	<p>Ice breaking activities/games Supply/intro games Class room rules, survey, placement test</p>	
2 nd	<p>Introductory Chapter</p> <p>Getting Ready for Science</p> <ol style="list-style-type: none"> 1) What are tools for Inquiry? 2) What are the inquiry skills? 3) What is the Scientific Method? 	<ul style="list-style-type: none"> *Describe tools used for measuring, observing, and manipulating *Describe inquiry skills that scientists use *Explain how using these skills helps scientists learn and understand *explain the steps in the scientific method *Describe how this method helps scientists gain knowledge *Experiment with ways to increase the strength of straw models 	<p>4.1(A) demonstrate safe practices and the use of safety equipment as described in the Texas Safety Standards during classroom and outdoor investigations</p> <p>4.3(D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists</p> <p>4.4(B) use safety equipment as appropriate, including safety goggles and gloves.</p> <p>4.2(F) communicate valid oral and written results supported by data</p> <p>4.3(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>3rd</p>	<p>PHYSICAL SCIENCE</p> <p>Unit E- Matter and Energy</p> <p>Chapter 11-Matter and Its Properties</p> <ol style="list-style-type: none"> 1) How can physical properties be used to identify matter? 2) How does matter change state? 3) What are mixtures and solutions? 	<ul style="list-style-type: none"> *measure the density of liquids *explain how physical properties can be used to identify matter *explore the difference between mass, volume, and density of a matter *Describe how water changes states *explain how temperature changes the states of matter *explain that matter isn't lost or gained as matter changes states *determine which solids dissolve *understand difference between mixture and solution *explain why some solids dissolve and some do not 	<p>4.2(B) collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps</p> <p>4.3(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>4th</p>	<p>Chapter 12- Changes in Matter</p> <p>4) What is matter made of?</p>	<ul style="list-style-type: none"> *compare the properties of materials, including how they dissolve in water *Understand that the atom is the smallest particle of matter *know that elements are substances made of just one kind of atom 	<p>4.2(C) construct simple tables, charts, bar graphs, and maps using tools and current technology to organize, examine, and evaluate data</p>
<p>5th</p>	<p>Continue Changes in Matter</p> <ol style="list-style-type: none"> 5) What are physical changes in matter? 6) How does matter react chemically? 	<ul style="list-style-type: none"> *compare evaporation rates for different materials *Describe states of matter and changes of state *understand physical changes *Look for similarities and differences in states of matter *identify the conditions that foster rusting *understand chemical changes and know how they differ from physical changes *understand compounds and know how they differ from elements *Compare chemical changes to physical changes 	<p>4.2(B) collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps</p> <p>4.3(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>6th</p>	<p>Chapter 13- Sound</p> <ol style="list-style-type: none"> 1) What is Sound? 2) What are the properties of waves? 3) How do sound waves travel? 	<ul style="list-style-type: none"> *Explain what produces sound *Describe how sound varies in pitch and intensity *Identify how the intensity of sound is measured *describe how variance in vibrating objects affects the sound the objects produce *describe the basic attributes of a wave *explain how the attributes of a wave determine the sound that is produced *describe the differences in a given wave when it passes through different media *explain how the human ear functions *list the three ways a sound wave can react when it strikes a surface 	<p>4.2(C) construct simple tables, charts, bar graphs, and maps using tools and current technology to organize, examine, and evaluate data</p> <p>4.2(D) analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured</p> <p>4.3(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>7th</p>	<p>Chapter 14- Light and Heat</p> <ol style="list-style-type: none"> 1) How does light behave? 2) How can heat be transferred? 3) How is heat produced and used? 	<ul style="list-style-type: none"> *observe that light travels in straight line *define reflection, absorption, and refraction *describe how light passes through eyes *look for ways in which matter affects light *observe and measure changes in temperature *define temperature and heat *Describe three ways to transfer heat *build and test a solar heater *identify sources of heat *describe ways in which heat is used *look for examples how heat is produced and used 	<p>4.2(D) analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured</p> <p>4.2(B) collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps</p>
<p>8th</p>	<p>Unit F- Forces and Motion</p> <p>Chapter 15-Making and Using Electricity</p> <ol style="list-style-type: none"> 1) What is electricity? 2) How are electricity and magnetism related? 	<ul style="list-style-type: none"> *demonstrate how to construct a simple circuit *explain static and current electricity *recognize how electricity moves in circuits *look for the steps in which electricity is generated and the ways it moves *compare the effects of a magnet and an electric current on a compass *compare the properties of magnets with those of electromagnets 	<p>4.3(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>



9 th	<p>Continue Making and using electricity</p> <p>3) What are some sources of electricity? 4) How do people use energy resources?</p>	<p>*investigate variables that affect the amount of potential energy an object has *recognize that energy can change form *recognize that electricity can be produced by energy transformations of different kinds *Identify energy uses and their sources *Describe the uses of chemical and mechanical energy and how chemical energy can be changed to other forms of energy *Identify the need for energy conservation</p>	<p>4.1(B) make informed choices in the use and conservation of natural resources and reusing and recycling of materials such as paper, aluminum, glass, cans, and plastic 4.2(D) analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured 4.2(F) communicate valid oral and written results supported by data</p>
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2nd Quarter			
Resources:			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
1 st	<p>Chapter 16-Forces and Motion</p> <p>1) How is motion described and measured? 2) What is acceleration? 3) Why is the force of gravity important?</p>	<p>*Observe and record changes of position *Explain how to measure motion *compare the motion of various objects *observe how a force affects matter *describe how velocity and acceleration are related *observe the forces involved in circular motion *identify several natural forces including gravity and friction *Explain weight and how it is measured</p>	<p>4.4(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, mirrors, spring scales, pan balances, triple beam balances, graduated cylinders, beakers, hotplates, meter sticks, compasses, magnets, collecting nets, and notebooks, timing devices including clocks and stop watches; and materials to support observation of habitats of organisms such as terrariums and aquariums</p>
2 nd	<p>Continue Forces and Motion</p>	<p>*Create an experiment demonstrating force causing acceleration *Compare and contrast between motion and speed *List details about gravitation, weight, and gravity</p>	<p>4.2(E) perform repeated investigations to increase the reliability of results 4.2(F) communicate valid oral and written results supported by data</p>
3 rd	<p>Chapter 17- Simple Machines</p> <p>1) How do simple machines help people do work?</p>	<p>*investigate levers *explain work and simple machines *explain how a lever changes the way work is done</p>	<p>4.2(B) collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps</p>
4 th	<p>Continue Simple Machines</p> <p>2) How do a pulley and a wheel-</p>	<p>*investigate pulley *explain how a pulley changes how work is done</p>	<p>4.3(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical</p>



2nd Quarter			
Resources:			
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	and-axle help people do work?	*explain how a wheel-and-axle changes how work is done	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
5 th	Continue Simple Machines 3) How do other simple machines help people do work?	*investigate inclined planes *explain how a screw changes the way work is done *Explain how a wedge changes the way work is done *Research relationships of science, technology, and society	4.2(A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions
6 th	Earth Science Unit C Earth's Changing Surface Chapter 7- The Rock Cycle 1) What are the types of rocks? 2) What is the rock cycle?	*make a model to see how sedimentary rock forms *describe what minerals are *identify the three types of rocks *model the steps in the rock cycle *explain what the rock cycle is *describe the processes that take place during the rock cycle	4.1(B) make informed choices in the use and conservation of natural resources and reusing and recycling of materials such as paper, aluminum, glass, cans, and plastic 4.3(C) represent the natural world using models such as rivers, stream tables, or fossils and identify their limitations, including accuracy and size
7 th	Continue The Rock Cycle 3) How do weathering and erosion affect rocks?	*experiment to see how rocks break down *describe how weathering affects rocks *explain how erosion affects rock	4.2(D) analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured
8 th	Continue The Rock Cycle 4) What is soil?	*compare particle sizes in different types of soil *describe what soil is *explain how soil forms, and how soils differ *experiment planting a seed in various types of soil to see results	4.2(B) collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps 4.3(C) represent the natural world using models such as rivers, stream tables, or fossils and identify their limitations, including accuracy and size
9 th	Chapter 8- Changes to Earth's Surface 1) What are some of Earth's landforms? 2) What causes changes to Earth's	*make a model of a landform *identify and describe major landforms *explain how landforms develop *make a model of a volcanic eruption	4.2(D) analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured



2nd Quarter

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	landforms? 3) What are fossils?	<ul style="list-style-type: none"> *describe earth's structure *identify and describe the forces that change Earth's surface *investigate what animal tracks tell about the animals that made them *define fossils and explain how they form *explain what is a fossil record 	4.3(C) represent the natural world using models such as rivers, stream tables, or fossils and identify their limitations, including accuracy and size 4.2(F) communicate valid oral and written results supported by data

3rd Quarter

Resources:			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
1 st	Unit D- Weather and Space Chapter 9- The Water Cycle 1) What is the Water Cycle? 2) How is the water cycle related to weather?	<ul style="list-style-type: none"> *Demonstrate how to extract fresh water from salt water *illustrate and describe the water cycle *understand how precipitation forms *demonstrate how a flood can occur *describe different kinds of precipitation *understand what causes different kinds of weather 	4.1(B) make informed choices in the use and conservation of natural resources and reusing and recycling of materials such as paper, aluminum, glass, cans, and plastic 4.2(B) collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps 4.3(C) represent the natural world using models such as rivers, stream tables, or fossils and identify their limitations, including accuracy and size
2 nd	Continue The Water Cycle 3) How do land features affect the water cycle? 4) How can weather be predicted?	<ul style="list-style-type: none"> *determine that land heats up and cools down more quickly than water *describe how temperature affects the water cycle *describe how landforms affect the water cycle *construct a barometer *understand what air masses are and how they move *recognize what the symbols on a weather map represent 	4.4(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, mirrors, spring scales, pan balances, triple beam balances, graduated cylinders, beakers, hotplates, meter sticks, compasses,



3rd Quarter			
Resources:			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
			magnets, collecting nets, and notebooks, timing devices including clocks and stop watches; and materials to support observation of habitats of organisms such as terrariums and aquariums 4.2(B) collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps 4.3(C) represent the natural world using models such as rivers, stream tables, or fossils and identify their limitations, including accuracy and size
3 rd	Chapter 10- Planets and other Objects in Space 1) How do Earth and its moon move? 2) How do objects move in the solar system?	*explore why seasons exist *explain how Earth's tilt affects the seasons *describe the phases of the moon *model the distances between planets *describe our solar system *identify the planets and other objects in our solar system	4.2(B) collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps 4.2(D) analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured
4 th	Continue Planets and other Objects in Space 3) What other objects can be seen in the sky?	*observe constellations as points of light *describe the sun, other stars, and groups of stars *identify groups of stars *When events are in a sequence, they happen in order *illustrate and explain the phases of the moon	4.2(B) collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps 4.2(D) analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured
5 th	Life Science Unit A- The World of Living things Chapter 1- Classifying Living Things 1) How are living things classified?	*construct a model of a cell *identify and describe structures that make up plant cells and animal cells *describe the characteristics of one-celled organisms, bacteria, and protists	4.2(C) construct simple tables, charts, bar graphs, and maps using tools and current technology to organize, examine, and evaluate data
6 th	Continue Classifying Living things 2) How are plants and fungi classified?	*observe the function of a plant stem *describe the structures of vascular and nonvascular plants *describe the structure of fungi	4.3(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical



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		*illustrate how plants and fungi are classified	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
7th	Continue Classifying living things 3) How are Animals Classified?	*make a model of a backbone *describe characteristics of vertebrates *describe characteristics of invertebrates	4.2(F) communicate valid oral and written results supported by data 4.2(A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions
8th	Chapter 2- Life Cycles 1) What is Heredity? 2) What are some life cycles of plants? 3) What are some life cycles of animals?	*observe inherited characteristics *observe how seeds germinate *describe the stages in the life cycle of flowering plants *describe how plants reproduce from spores *order the stages of an animal's life cycle *describe the stages of an animal's life cycle *describe how some animals grow and develop *observe similarities and differences in animal life cycles	4.3(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
9th	Chapter 3- Adaptations 1) How do the bodies of animals help them meet their needs? 2) Continue Adaptations 3) 2) How do the behaviors of animals help them meet their needs? 4) 3) How do living things of the past compare with those of today?	*choose the best tools for eating *name the basic needs of living things *explain how adaptations help living things meet their needs *observe the behavior of a fish *describe how instinctive behaviors help animals survive and meet *describe how learned behaviors help animals survive *make a model to infer how fossils form *describe how plants and animals have changed over time *describe the causes of extinction	4.2(A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions 4.4(A) collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, mirrors, spring scales, pan balances, triple beam balances, graduated cylinders, beakers, hotplates, meter sticks, compasses, magnets, collecting nets, and notebooks, timing devices including clocks and



3rd Quarter			
Resources:			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
			stop watches; and materials to support observation of habitats of organisms such as terrariums and aquariums

4th Quarter			
Resources:			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
1st	Chapter 4- The Human Body 1) How does your body get oxygen and nutrients?	<ul style="list-style-type: none"> *infer how exercise affects the heart *describe the jobs of the respiratory and circulatory systems *describe how the respiratory and circulatory systems work together to distribute oxygen and nutrients to the body's cells 	4.3(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 4.3(B) draw inferences and evaluate accuracy of services and product claims found in advertisements
2nd	Continue The Human body 2) How does your body think and move?	<ul style="list-style-type: none"> *investigate how touch is sensed *describe the role of the nervous system and tell how it carries out its jobs *describe the role of the digestive system and the events during digestion *Write out a play over the topic and present it in assembly 	4.2(F) communicate valid oral and written results supported by data 4.2(A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions
3rd	Unit B- Looking at Ecosystems Chapter 5- Understanding Ecosystems 1) What are the parts of an ecosystem?	<ul style="list-style-type: none"> *construct a model of an ecosystem *explain how the living and nonliving parts of an ecosystem interact *define population and community 	4.2(F) communicate valid oral and written results supported by data 4.2(A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions



4th Quarter

Resources:

Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
4th	Continue Understanding Ecosystems 2) What factors influence ecosystems?	<ul style="list-style-type: none"> *Observe how water affects an ecosystem *Explain how biotic and abiotic factors affect ecosystems *Describe how climate affects ecosystems *Create a cause and effect graph showing factors which affect ecosystems 	4.3(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
5th	Continue Understanding Ecosystems 3) How do humans affect ecosystems?	<ul style="list-style-type: none"> *observe the effects of erosion *explain how humans use resources *describe positive and negative ways humans affect ecosystems 	4.2(A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions
6th	Chapter 6- Energy Transfer in Ecosystems 1) What are the roles of living things?	<ul style="list-style-type: none"> *describe how yeast decays bananas *explain how living things use the energy from sunlight *describe how living things relate to each other 	4.2(F) communicate valid oral and written results supported by data
7th	Continue Energy transfer in ecosystems 2) How do living things get energy?	<ul style="list-style-type: none"> *plan and construct a food chain *explain how consumers depend on other living things *describe how energy moves through food chains and food webs 	4.3(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
8th	Continue Energy transfer in ecosystems 3) Understanding energy transfer	<ul style="list-style-type: none"> *Research and create a food web with at least 3 food chains within an ecosystem 	4.3(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
9th	Let's Recycle, Reuse and Reduce	<ul style="list-style-type: none"> *understand the importance of the 3Rs *demonstrate how to recycle, reuse and reduce for future's sake 	4.1(B) make informed choices in the use and conservation of natural



4th Quarter

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			resources and reusing and recycling of materials such as paper, aluminum, glass, cans, and plastic