

Cycle 1	27 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Aug. 23 - Oct. 1, 2021	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 1: Chemistry Students compare properties of matter, make models of elements, calculate density of unknown substances, explain the arrangement of the Periodic Table, and compare and contrast properties of metals, nonmetals, and metalloids.	8 class periods (90-min. each) or 16 class periods (45-min. each) <i>Enrichment Opportunities</i> Aug. 2-13 <i>Teachers Report to Work</i> Aug. 16 <i>Teacher Service Days</i> Aug. 16-17, Aug. 19-20 <i>Teacher Prep Day</i> (no students) Aug. 18 <i>Labor Day</i> Sept. 6 <i>Fall Holiday</i> Sept. 16 <i>Teacher Service Day</i> (no students) Sept. 17	Science process standards are embedded into lessons on science content throughout the entire year. Science Content Standards: SCI.6.5A Know that an element is a pure substance represented by a chemical symbol and that a compound is a pure substance represented by a chemical formula. SCI.6.5B Recognize that a limited number of the many known elements comprise the largest portion of solid Earth, living matter, oceans, and the atmosphere. SCI.6.5C Identify the formation of a new substance by using the evidence of a possible chemical change such as production of a gas, change in temperature, production of a precipitate, or color change. SCI.6.6A Compare metals, nonmetals, and metalloids using physical properties such as luster, conductivity or malleability. SCI.6.6B Calculate density to identify an unknown substance. SCI.8.5A Describe the structure of atoms including the masses, electrical charges and locations of protons and neutrons in the nucleus and electrons in the electron cloud. SCI.8.5B Identify that protons determine an element's identity and valence electrons determine its chemical properties, including reactivity. SCI.8.5C Interpret the arrangement of the Periodic Table including groups and periods, to explain how properties are used to classify elements. Science Process Standards: PS.6.1A Demonstrate safe practices during laboratory and field investigations as outlined in the Texas Education Agency – approved safety standards. PS.6.1B Practice appropriate use and conservation of resources including disposal, reuse, or recycling of materials. PS.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology. PS.6.2B Design and implement experimental investigations by making observations, asking well defined questions, formulating testable hypotheses, and using appropriate equipment and technology. PS.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers. PS.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns. PS.6.3B Use models to represent aspects of the natural world such as a model of Earth's layers. PS.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials.

Cycle 1	27 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Aug. 23 - Oct. 1, 2021	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
		<p>Ⓟ SCI.6.3B Use models to represent aspects of the natural world such as a model of Earth's layers.</p> <p>Ⓟ SCI.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials.</p> <p>Ⓟ SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information.</p> <p>Ⓟ SCI.8.3D Relate the impact of research on scientific thought and society, including the history of science and contributions of scientists as related to the content.</p>

Cycle 1	27 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Aug. 23 - Oct. 1, 2021	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 2: Rock Cycle Students model the layers of Earth, test properties of minerals, and classify rocks by the process of their formation.	3 class periods (90-min. each) or 6 class periods (45-min. each)	<p>Science Content Standards:</p> <p>SCI.6.6C Test the physical properties of minerals including hardness, color, luster, and streak.</p> <p>SCI.6.10A Build a model to illustrate the compositional and mechanical layers of Earth including the inner core, outer core, mantle, crust, asthenosphere, and lithosphere.</p> <p>SCI.6.10B Classify rocks as metamorphic, igneous, or sedimentary by the processes of their formation.</p> <p>Science Process Standards:</p> <p>Ⓟ SCI.6.1A Demonstrate safe practices during laboratory and field investigations as outlined in the Texas Education Agency – approved safety standards.</p> <p>Ⓟ SCI.6.1B Practice appropriate use and conservation of resources including disposal, reuse, or recycling of materials.</p> <p>Ⓟ SCI.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers.</p> <p>Ⓟ SCI.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns.</p> <p>Ⓟ SCI.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.</p> <p>Ⓟ SCI.6.3A Analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning and experimental and observational testing, so as to encourage critical thinking by the student.</p> <p>Ⓟ SCI.6.3B Use models to represent aspects of the natural world such as human body systems, and plant and animal cells.</p> <p>Ⓟ SCI.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials.</p> <p>Ⓟ SCI.6.3D Relate the impact of research on scientific thought and society including the history of science and contributions of scientists as related to the content.</p> <p>Ⓟ SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information.</p> <p>Ⓟ SCI.6.4B 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>

Cycle 2	29 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Oct. 5 - Nov. 12, 2021	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 3: Maps, Plate Tectonics, Satellite Images Students identify and describe tectonic plate movements, and explain changes in Earth's features using topographic maps and satellite images.	6 class periods (90-min. each) or 12 class periods (45-min. each) <i>Teacher Service Day (no students) Oct. 4</i>	Science Content Standards: SCI.6.10C Identify the major tectonic plates including Eurasian, African, Indo-Australian, Pacific, North American, and South American. SCI.6.10D Describe how plate tectonics causes major geological events, such as ocean basin formation, earthquakes, volcanic eruptions, and mountain building. SCI.8.9A Describe the historical development of evidence that supports plate tectonic theory. SCI.8.9B Relate plate tectonics to the formation of crustal features. SCI.8.9C Interpret topographic maps and satellite views to identify land and erosional features and predict how these features may be reshaped by weathering. Science Process Standards: SCI.6.1A Demonstrate safe practices during laboratory and field investigations as outlined in the Texas Education Agency – approved safety standards. SCI.6.1B Practice appropriate use and conservation of resources including disposal, reuse, or recycling of materials. SCI.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology. SCI.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers SCI.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. SCI.6.3A Analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning and experimental and observational testing, so as to encourage critical thinking by the student. SCI.6.3B Use models to represent aspects of the natural world such as a model of Earth's layers. SCI.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials. SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information. SCI.6.4B 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.

Cycle 2	29 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Oct. 5 - Nov. 12, 2021	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 4: Energy Students explore the use of energy, compare and contrast potential and kinetic energy interactions, and investigate types of energy transformations.	6 class periods (90-min. each) or 12 class periods (45-min. each)	<p>Science Content Standards:</p> <p>Ⓢ SCI.6.8A Compare and contrast potential and kinetic energy.</p> <p>SCI.6.9A Investigate methods of thermal energy transfer including conduction, convection, and radiation.</p> <p>SCI.6.9B Verify through investigations that thermal energy moves in a predictable pattern from warmer to cooler until all the substances attain the same temperature such as an ice cube melting.</p> <p>Ⓢ SCI.6.9C Demonstrate energy transformations such as the energy in a flashlight battery changing from chemical energy to electrical energy to light energy.</p> <p>SCI.6.7A Research and discuss the advantages and disadvantages of using coal, oil, natural gas, nuclear power, biomass, wind, hydropower, geothermal, and solar resources.</p> <p>Science Process Standards:</p> <p>Ⓢ SCI.6.1A Demonstrate safe practices during laboratory and field investigations as outlined in the Texas Education Agency – approved safety standards.</p> <p>Ⓢ SCI.6.1B Practice appropriate use and conservation of resources including disposal, reuse, or recycling of materials.</p> <p>Ⓢ SCI.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology.</p> <p>Ⓢ SCI.6.2B Design and implement experimental investigations by making observations, asking well defined questions, formulating testable hypotheses, and using appropriate equipment and technology.</p> <p>Ⓢ SCI.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers.</p> <p>Ⓢ SCI.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns.</p> <p>Ⓢ SCI.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.</p> <p>Ⓢ SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information.</p> <p>Ⓢ SCI.6.4B 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>

Cycle 3	30 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Nov. 15, 2021 - Jan. 14, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 5: Force and Motion Students explore changes the motion of objects, calculate speed of objects, graph changes in motion, and investigate Newton’s Laws of Motion in everyday situations.	9 class periods (90-min. each) or 18 class periods (45-min. each) <i>Thanksgiving Break</i> Nov. 22-26 <i>Enrichment Opportunities</i> Dec. 20-21 <i>Winter Break</i> Dec. 20-31 <i>MLK Jr. Day</i> Jan. 17 <i>Teacher Prep Day</i> <i>(no students)</i> Jan. 18	Science Content Standards: Ⓢ SCI.6.8A Compare and contrast potential and kinetic energy. SCI.6.8B Identify and describe the changes in position, direction, and speed of an object when acted upon by unbalanced forces. Ⓢ SCI.6.8C Calculate average speed using distance and time measurements. Ⓢ SCI.6.8D Measure and graph changes in motion. Ⓡ SCI.8.6A Demonstrate and calculate how unbalanced forces change the speed or direction of an object’s motion. Ⓢ SCI.8.6B Differentiate between speed, velocity and acceleration. Ⓡ SCI.8.6C Investigate and describe applications of Newton’s three laws of motion such as in vehicle restraints, sports activities, amusement park rides, Earth’s tectonic activities, and rocket launches. Science Process Standards: Ⓢ SCI.6.1A Demonstrate safe practices during laboratory and field investigations as outlined in the Texas Education Agency – approved safety standards. Ⓢ SCI.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology. Ⓢ SCI.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers. Ⓢ SCI.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns. Ⓢ SCI.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. Ⓢ SCI.6.3B Use models to represent aspects of the natural world such as a model of Earth’s layers. Ⓢ SCI.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials. Ⓢ SCI.6.3D Relate the impact of research on scientific thought and society including the history of science and contributions of scientists as related to the content. Ⓢ SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information.

Cycle 3	30 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Nov. 15, 2021 - Jan. 14, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 6: Simple Machines and STEM Students investigate simple machines such as inclined planes.	3 class periods (90-min. each) or 6 class periods (45-min. each)	<p>Science Content Standards: SCI.6.8E Investigate how inclined planes can be used to change the amount of force to move an object.</p> <p>Science Process Standards: PS SCI.6.1A Demonstrate safe practices during laboratory and field investigations as outlined in the Texas Education Agency – approved safety standards. PS SCI.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology. PS SCI.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers. PS SCI.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns. PS SCI.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. PS SCI.6.3B Use models to represent aspects of the natural world such as a model of Earth’s layers. PS SCI.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials. PS SCI.6.3D Relate the impact of research on scientific thought and society including the history of science and contributions of scientists as related to the content. PS SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information.</p>

Cycle 4	27 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Jan. 19 - Feb. 25, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 7: Space Science Students identify and describe components of the universe, explore wavelengths of the electromagnetic spectrum, and use models to describe interactions between the sun, moon, and Earth.	7 class periods (90-min. each) or 14 class periods (45-min. each) <i>Teacher Service Day/Presidents' Day (no students) Feb. 21</i>	Science Content Standards: SCI.6.11A Describe the physical properties, locations, and movements of the Sun, planets, moons, meteors, asteroids, and comets. SCI.6.11B Understand that gravity is the force that governs the motion of our solar system. SCI.6.11C Describe the history and future of space exploration including the types of equipment and transportation needed for space travel. SCI.8.7A Model and illustrate how the tilted Earth rotates on its axis, causing day and night, and revolves around the sun causing changes in seasons. SCI.8.7B Demonstrate and predict the sequence of events in the lunar cycle. SCI.8.7C Relate the position of the Moon and Sun to their effect on ocean tides. SCI.7.9A Analyze the characteristics of objects in our solar system that allow life to exist such as proximity of the Sun, presence of water, and composition of the atmosphere. SCI.7.9B Identify the accommodations, considering the characteristics of our solar system that enabled manned space exploration. SCI.8.8A Describe components of the universe including stars, nebulae and galaxies, and use models such as the Hertzsprung-Russell diagram for classification. SCI.8.8B Recognize that the Sun is a medium-sized star located in a spiral arm of the Milky Way galaxy and that the Sun is many thousands of times closer to Earth than any other star. SCI.8.8C Identify how different wavelengths of the electromagnetic spectrum such as visible light and radio waves are used to gain information about distances and properties of components in the universe. SCI.8.8D Research how scientific data are used as evidence to develop scientific theories to describe the origin of the universe. Science Process Standards: SCI.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology. SCI.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers. SCI.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns. SCI.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. SCI.6.3B Use models to represent aspects of the natural world such as a model of Earth's layers. SCI.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials.

Cycle 4		27 Days	<i>The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i>
		Jan. 19 - Feb. 25, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs)	
		The student will:	
		<p>Ⓡ SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information.</p>	

Cycle 4	27 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Jan. 19 - Feb. 25, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 8: Atmospheric Movement Students investigate and model weather patterns.	4 class periods (90-min. each) or 8 class periods (45-min. each)	<p>Science Content Standards:</p> <ul style="list-style-type: none"> Ⓢ SCI.8.10A Recognize that the Sun provides the energy that drives convection within the atmosphere and oceans, producing winds. Ⓢ SCI.8.10B Identify how global patterns of atmospheric movement influence local weather using maps that show high and low pressures and fronts. Ⓢ SCI.8.10C Identify the role of the ocean in the formation of weather systems, such as hurricanes. <p>Science Process Standards:</p> <ul style="list-style-type: none"> Ⓢ SCI.6.1A Demonstrate safe practices during laboratory and field investigations as outlined in the Texas Education Agency – approved safety standards. Ⓢ SCI.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology. Ⓢ SCI.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers. Ⓢ SCI.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns. Ⓢ SCI.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. Ⓢ SCI.6.3A Analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning and experimental and observational testing, so as to encourage critical thinking by the student. Ⓢ SCI.6.3B Use models to represent aspects of the natural world such as a model of Earth’s layers. Ⓢ SCI.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials. Ⓢ SCI.6.3D Relate the impact of research on scientific thought and society including the history of science and contributions of scientists as related to the content. Ⓢ SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information. Ⓢ SCI.6.4B 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.

Cycle 5	33 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Feb. 28 - Apr. 22, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 9: PBL STEM, Special Projects Students use the methods of scientific inquiry to plan comparative, descriptive, and experimental investigations, investigate STEM and PBL activities, and explore careers which focus on science, math, and engineering concepts.	9 class periods (90-min. each) or 18 class periods (45-min. each) <i>Enrichment Opportunities</i> <i>Mar. 14-16</i> <i>Spring Break</i> <i>Mar. 14-18</i> <i>Chávez-Huerta Day</i> <i>Mar. 28</i> <i>Spring Holiday</i> <i>Apr. 15</i>	Science Process Standards: Ⓟ SCI.6.1A Demonstrate safe practices during laboratory and field investigations as outlined in the Texas Education Agency – approved safety standards. Ⓟ SCI.6.1B Practice appropriate use and conservation of resources including disposal, reuse, or recycling of materials. Ⓟ SCI.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology. Ⓟ SCI.6.2B Design and implement experimental investigations by making observations, asking well defined questions, formulating testable hypotheses, and using appropriate equipment and technology. Ⓟ SCI.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers. Ⓟ SCI.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns. Ⓟ SCI.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. Ⓟ SCI.6.3A Analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning and experimental and observational testing, so as to encourage critical thinking by the student. Ⓟ SCI.6.3B Use models to represent aspects of the natural world such as an atom, a molecule, space or a geologic feature. Ⓟ SCI.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials. Ⓟ SCI.6.3D Relate the impact of research on scientific thought and society including the history of science and contributions of scientists as related to the content. Ⓟ SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information. Ⓟ SCI.6.4B 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.

Cycle 5	33 Days Feb. 28 - Apr. 22, 2022	<i>The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i>
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
<p>Unit 10: Space Science Students identify and describe components of the solar system and conduct research on the history and future of space exploration.</p>	<p>4 class periods (90-min. each) or 8 class periods (45-min. each)</p>	<p>Science Content Standards: SCI.6.11A Describe the physical properties, locations, and movements of the Sun, planets, moons, meteors, asteroids, and comets. SCI.6.11B Understand that gravity is the force that governs the motion of our solar system. SCI.6.11C Describe the history and future of space exploration including the types of equipment and transportation needed for space travel.</p> <p>Science Process Standards: PS.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology. PS.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers. PS.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns. PS.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. PS.6.3B Use models to represent aspects of the natural world such as a model of Earth's layers. PS.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials. PS.6.3D Relate the impact of research on scientific thought and society including the history of science and contributions of scientists as related to the content.</p>

Cycle 6	31 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Apr. 25 - June 7, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 11: Cells Students identify and describe basic components of cells and compare characteristics of prokaryotic to eukaryotic cells.	4 class periods (90-min. each) or 8 class periods (45-min. each) <i>Memorial Day May 30</i> <i>Teacher Prep Day (no students) June 8</i>	Science Content Standards: SCI.6.12A Understand that all organisms are composed of one or more cells. SCI.6.12B Recognize the presence of a nucleus is a key factor used to determine whether a cell is prokaryotic or eukaryotic. Science Process Standards: ^{PS} SCI.6.1A Demonstrate safe practices during laboratory and field investigations as outlined in the Texas Education Agency – approved safety standards. ^{PS} SCI.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology. ^{PS} SCI.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers. ^{PS} SCI.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns. ^{PS} SCI.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. ^{PS} SCI.6.3A Analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning and experimental and observational testing, so as to encourage critical thinking by the student. ^{PS} SCI.6.3B Use models to represent aspects of the natural world such as a model of Earth’s layers. ^{PS} SCI.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials. ^{PS} SCI.6.3D Relate the impact of research on scientific thought and society including the history of science and contributions of scientists as related to the content. ^{PS} SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information. ^{PS} SCI.6.4B 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.

Cycle 6	31 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Apr. 25 - June 7, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 12: Classifying Organisms Students identify and classify organisms from currently recognized domains.	4 class periods (90-min. each) or 8 class periods (45-min. each)	<p>Science Content Standards:</p> <p>SCI.6.12C Recognize the broadest taxonomic classification of living organisms is divided into currently recognized domains.</p> <p>Ⓢ SCI.6.12D Identify the basic characteristics of organisms, including prokaryotic or eukaryotic, unicellular or multicellular, autotrophic or heterotrophic, and mode of reproduction, that further classify them in the currently recognized kingdoms.</p> <p>Science Process Standards:</p> <p>Ⓡ SCI.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology.</p> <p>Ⓡ SCI.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers.</p> <p>Ⓡ SCI.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns.</p> <p>Ⓡ SCI.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.</p> <p>Ⓡ SCI.6.3A Analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning and experimental and observational testing, so as to encourage critical thinking by the student.</p> <p>Ⓡ SCI.6.3B Use models to represent aspects of the natural world such as a model of Earth's layers.</p> <p>Ⓡ SCI.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials.</p> <p>Ⓡ SCI.6.3D Relate the impact of research on scientific thought and society including the history of science and contributions of scientists as related to the content.</p> <p>Ⓡ SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information.</p>

Cycle 6	31 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Apr. 25 - June 7, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 13: Ecosystems Students describe components of ecosystems in which organisms interact.	5 class periods (90-min. each) or 10 class periods (45-min. each)	<p>Science Content Standards:</p> <p>Ⓢ SCI.6.12D Identify the basic characteristics of organisms, including prokaryotic or eukaryotic, unicellular or multicellular, autotrophic or heterotrophic, and mode of reproduction, that further classify them in the currently recognized kingdoms.</p> <p>SCI.6.12E Describe biotic and abiotic parts of an ecosystem in which organisms interact.</p> <p>SCI.6.12F Diagram the levels of organization within an ecosystem including organism, population, community, and ecosystem.</p> <p>SCI.7.7A Illustrate the transformation of energy within an organism such as the transfer from chemical energy and thermal energy.</p> <p>Science Process Standards:</p> <p>Ⓢ SCI.6.1A Demonstrate safe practices during laboratory and field investigations as outlined in the Texas Education Agency – approved safety standards.</p> <p>Ⓢ SCI.6.2A Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology.</p> <p>Ⓢ SCI.6.2C Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers.</p> <p>Ⓢ SCI.6.2D Construct tables, using repeated trials and means, to organize data and identify patterns.</p> <p>Ⓢ SCI.6.2E Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.</p> <p>Ⓢ SCI.6.3A Analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning and experimental and observational testing, so as to encourage critical thinking by the student.</p> <p>Ⓢ SCI.6.3B Use models to represent aspects of the natural world such as a model of Earth’s layers.</p> <p>Ⓢ SCI.6.3C Identify advantages and limitations of models such as size, scale, properties, and materials.</p> <p>Ⓢ SCI.6.4A Use appropriate tools including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record and analyze information.</p> <p>Ⓢ SCI.6.4B 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>