

Cycle 1	38 Days	
	Aug. 26 – Oct. 18, 2019	
	The recommended number of lessons 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.	
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
<u>Unit 1: Setting Up for Science</u> In this unit, students will begin building the foundation for science learning, including using appropriate tools for investigations and measurement and following safety procedures.	5 45-minute lessons Part 1 Suggested Pacing: Aug. 26-28 Part 2 Suggested Pacing: Aug. 29-30 <i>Labor Day</i> <i>Sept. 2</i>	Part 1: Safety and Routines (3 lessons) Ⓢ SCI.3.1A Demonstrate safe practices as described in Texas Education Agency-approved safety standards during classroom and outdoor investigations using safety equipment as appropriate, including safety goggles or chemical splash goggles, as appropriate and gloves. Ⓢ SCI.3.4A Collect, record, and analyze information using tools, including cameras, computers, hand lenses, metric rulers, Celsius thermometers, wind vanes, rain gauges, pan balances, graduated cylinders, beakers, spring scales, hot plates, meter sticks, magnets, collecting nets, notebooks , and Sun, Earth, and Moon system models; timing devices, and materials to support observation of habitats of organisms such as terrariums and aquariums Part 2: Metric Measurement and Tools (2 lessons) Ⓢ SCI.3.2B Collect and record data by observing and measuring using the metric system and recognize differences between observed and measured data. Ⓢ SCI.3.2C Construct maps, graphic organizers, simple tables, charts, and bar graphs using tools and current technology to organize, examine, and evaluate measured data. Ⓢ SCI.3.4A Collect, record, and analyze information using tools, including cameras, computers, hand lenses, metric rulers, Celsius thermometers, wind vanes, rain gauges, pan balances, graduated cylinders, beakers, spring scales, hot plates, meter sticks, magnets, collecting nets, notebooks, and Sun, Earth, and Moon system models; timing devices, and materials to support observation of habitats of organisms such as terrariums and aquariums
	<u>Unit 2: Investigating Force and Motion</u> In this unit, students will conduct descriptive investigations, collect data, and draw conclusions about force and motion.	7 45-minute lessons Part 1 Suggested Pacing: Sept. 3-11 Extend Review Assess Reteach Sept. 12-13

Cycle 1	38 Days	
	Aug. 26 – Oct. 18, 2019	
	The recommended number of lessons 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.	
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
<p>Unit 3: Matter In this unit, students will describe, classify, and predict changes in the states of matter by measuring, testing, and recording their physical properties.</p>	<p>18 45-minute lessons</p> <p>Part 1 Suggested Pacing: Sept. 16-20</p> <p>Part 2 Suggested Pacing: Sept. 23-24</p> <p>Part 3 Suggested Pacing: Sept. 25-26</p> <p><i>Early Dismissal</i> Sept. 27</p> <p>Part 4 Suggested Pacing: Sept. 30 – Oct. 1</p> <p>Part 5 Suggested Pacing: Oct. 2-4</p> <p>Part 6 Suggested Pacing: Oct. 7-11</p> <p><i>Fall Holiday</i> Oct. 9 (students only)</p> <p>Extend Review Assess Reteach Oct. 14-18</p>	<p>Part 1: States of Matter (5 lessons) SCI.3.5B Describe and classify samples of matter as solids, liquids, and gases and demonstrate that solids have a definite shape and that liquids and gases take the shape of their container. Ⓟ SCI.3.2C Construct maps, graphic organizers, simple tables, charts, and bar graphs using tools and current technology to organize, examine, and evaluate measured data.</p> <p>Part 2: How Temperature Changes Affect Matter (2 lessons) SCI.3.5A Measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float. Ⓢ SCI.3.5C Predict, observe, and record changes in the state of matter caused by heating or cooling such as ice becoming liquid water, condensation forming on the outside of a glass of ice water, or liquid water being heated to the point of becoming water vapor.</p> <p>Part 3: Measuring Mass (2 lessons) SCI.3.5A Measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float. Ⓟ SCI.3.2C Construct maps, graphic organizers, simple tables, charts, and bar graphs using tools and current technology to organize, examine, and evaluate measured data.</p> <p>Part 4: Sink or Float (2 lessons) SCI.3.5A Measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float. Ⓟ SCI.3.2D Analyze and interpret patterns in data to construct reasonable explanations based on evidence from investigations.</p> <p>Part 5: Magnetism (3 lessons) SCI.3.5A Measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float. Ⓟ SCI.3.2D Analyze and interpret patterns in data to construct reasonable explanations based on evidence from investigations.</p> <p>Part 6: Mixtures (4 lessons) SCI.3.5D Explore and recognize that a mixture is created when two materials are combined such as gravel and sand or metal and plastic paper clips.</p>

Cycle 1	38 Days		The recommended number of lessons 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. 26 – Oct. 18, 2019		
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:	
	<p>District Formative Assessment 1 Suggested Window: Oct. 15-17</p> <p>See Outline for TEKS Details.</p> <p><i>Early Dismissal</i> Oct. 18</p>		

Cycle 2	39 Days	
	Oct. 21 – Dec. 19, 2019	
	The recommended number of lessons 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.	
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
<p><u>Unit 4: Energy</u> In this unit, students will explore different forms of energy.</p>	<p>15 45-minute lessons</p> <p>Suggested Pacing: Oct. 21 – Nov. 8</p> <p><i>Early Dismissal</i> Nov. 8</p>	<p><u>Unit 4: Energy</u> (15 lessons) SCI.3.6A Explore different forms of energy, including mechanical, light, sound, and thermal in everyday life.</p>
<p><u>Unit 5: Weather</u> In this unit, students will observe, measure and record weather changes.</p>	<p>10 45-minute lessons</p> <p>Suggested Pacing: Nov. 11-22</p> <p><i>Thanksgiving Holiday</i> Nov. 25-29</p>	<p><u>Unit 5: Weather</u> (10 lessons) SCI.3.8A Observe, measure, record, and compare day-to-day weather changes in different locations at the same time that include air temperature, wind direction, and precipitation.</p>

HISD | Elementary Curriculum and Development

INSPIRING TEACHING, IGNITING LITERACY & LEARNING.

2019-2020 Scope and Sequence

Science – Grade 3

Cycle 2	39 Days	
	Oct. 21 – Dec. 19, 2019	
	The recommended number of lessons 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.	
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
<p><u>Unit 6: Natural Resources</u> In this unit, students will explore the usefulness of natural resources and the formation of soil.</p>	<p>8 45-minute lessons</p> <p>Suggested Pacing: Dec. 2-11</p> <p>Extend Review Assess Reteach Dec. 12-19</p> <p>District Formative Assessment 2 Suggested Window: Dec. 16-18</p> <p>See Outline for TEKS Details.</p> <p><i>Teacher Preparation Day</i> <i>Dec. 20</i></p> <p><i>Winter Break</i> <i>Dec. 23 – Jan. 3</i></p>	<p>Unit 6: Natural Resources (8 lessons) SCI.3.7C Explore the characteristics of natural resources that make them useful in products and materials such as clothing and furniture and how resources may be conserved.</p>



Cycle 3	49 Days		The recommended number of lessons 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. 6 – Mar. 13, 2020		
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:	
<p><u>Unit 7: Soil Formation</u> In this unit, students will explore and record how soils are formed.</p>	<p>5 45-minute lessons</p> <p>Suggested Pacing: Jan. 6-10</p>	<p><u>Unit 7: Soil Formation</u> (5 lessons) SCI.3.7A Explore and record how soils are formed by weathering of rock and the decomposition of plant and animal remains.</p>	
<p><u>Unit 8: Changes to Earth's Surface</u> In this unit, students will investigate and construct models of common landforms and identify how they change rapidly.</p>	<p>9 45-minute lessons</p> <p>Suggested Pacing: Jan. 13-24</p> <p><i>Early Dismissal</i> Jan. 17</p> <p><i>MLK Jr. Day</i> Jan. 20</p>	<p><u>Unit 8: Changes to Earth's Surface</u> (9 lessons) Ⓢ SCI.3.7B Investigate rapid changes in Earth's surface such as volcanic eruptions, earthquakes, and landslides. Ⓢ SCI.3.3B Represent the natural world using models such as volcanoes or Sun, Earth, and Moon system and identify their limitations, including size, properties, and materials.</p>	
<p><u>Unit 9: The Solar System</u> In this unit, students will explore the characteristics of the Sun, the location of the planets in the solar system, and the Sun, Earth, and Moon relationship.</p>	<p>12 45-minute lessons</p> <p>Part 1 Suggested Pacing: Jan. 27-28</p> <p>Part 2 Suggested Pacing: Jan. 29 – Feb. 11</p> <p>Extend Review Assess Reteach Feb. 12-14</p> <p><i>Early Dismissal</i> Feb. 14</p>	<p><u>Part 1: The Sun</u> (2 lessons) SCI.3.8B Describe and illustrate the Sun as a star composed of gases that provides light and thermal energy.</p> <hr/> <p><u>Part 2: Planets and their Orbits</u> (10 lessons) SCI.3.8C Construct models that demonstrate the relationship of the Sun, Earth, and Moon, including orbits and positions. Ⓢ SCI.3.8D Identify the planets in Earth's solar system and their position in relation to the Sun.</p>	

HISD | Elementary Curriculum and Development

INSPIRING TEACHING, IGNITING LITERACY & LEARNING.

2019-2020 Scope and Sequence

Science – Grade 3

Cycle 3	49 Days	The recommended number of lessons 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. 6 – Mar. 13, 2020	
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
<p><u>Unit 10: Life Cycles</u> In this unit, students will investigate and compare life cycles.</p>	<p>15 45-minute lessons</p> <p>Part 1 Suggested Pacing: Feb. 17-21</p>	<p>Part 1: Plant Life Cycles (5 lessons) © SCI.3.10B Investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs, and lady beetles.</p>
	<p>Part 2 Suggested Pacing: Feb. 24-28</p>	<p>Part 2: Animal Life Cycles (5 lessons) © SCI.3.10B Investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs, and lady beetles.</p>
	<p>Part 3 Suggested Pacing: Mar. 2-6</p>	<p>Part 3: Comparing Plant and Animal Life Cycles (5 lessons) © SCI.3.10B Investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs, and lady beetles.</p>
	<p>Extend Review Assess Reteach Mar. 9-13</p>	
	<p>District Formative Assessment 3 Suggested Window: Mar. 10-12</p> <p>See Outline for TEKS Details.</p>	
<p><i>Spring Break</i> Mar. 16-20</p>		



Cycle 4	47 Days	
	Mar. 23 – May 29, 2020	
	The recommended number of lessons 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.	
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
<p><u>Unit 11: Energy Flow in a Food Chain</u> In this unit, students will identify and describe the energy flow in a food chain.</p>	<p>9 45-minute lessons</p> <p>Suggested Pacing: Mar. 23 – Apr. 3</p> <p><i>Chávez/Huerta Day</i> Mar. 30</p>	<p><u>Unit 11: Energy Flow in a Food Chain</u> (9 lessons) SCI.3.9B Identify and describe the flow of energy in a food chain and predict how changes in a food chain affect the ecosystem such as removal of frogs from a pond or bees from a field.</p>
<p><u>Unit 12: Environmental Interactions</u> In this unit, students will investigate different environmental interactions and how environmental conditions affect populations within an ecosystem.</p>	<p>19 45-minute lessons</p> <p>Part 1 Suggested Pacing: Apr. 6-17</p> <p><i>Spring Holiday</i> Apr. 10</p> <p>Part 2 Suggested Pacing: Apr. 20 – May 1</p> <p>Extend Review Assess Reteach May 4-8</p>	<p><u>Part 1: Environmental Changes</u> (9 lessons) © SCI.3.9A Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem. SCI.3.9C Describe environmental changes such as floods and droughts where some organisms thrive and others perish or move to new locations.</p>
		<p><u>Part 2: Adaptations</u> (10 lessons) SCI.3.10A Explore how structures and functions of plants and animals allow them to survive in a particular environment. © SCI.3.9A Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem.</p>
	<p>District Formative Assessment 4 Suggested Window: May 5-7</p> <p>See Outline for TEKS Details</p>	

HISD | Elementary Curriculum and Development

INSPIRING TEACHING, IGNITING LITERACY & LEARNING.

2019-2020 Scope and Sequence

Science – Grade 3

Cycle 4	47 Days	
	Mar. 23 – May 29, 2020	
	The recommended number of lessons 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.	
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
<p>Unit 13: Descriptive Investigations</p> <p>In this unit, students will conduct various descriptive investigations.</p>	<p>12 45-minute lessons</p> <p>Suggested Pacing: May 11-27</p> <p><i>Memorial Day</i> May 25</p> <p>Extend Review Assess Reteach May 28-29</p>	<p>Unit 13: Descriptive Investigations (12 lessons)</p> <p>Ⓟ SCI.3.2A Plan and implement descriptive investigations, including asking and answering questions, making inferences, and selecting and using equipment or technology needed, to solve a specific problem in the natural world.</p> <p>Ⓟ SCI.3.2B Collect and record data by observing and measuring using the metric system and recognize differences between observed and measured data.</p> <p>Ⓟ SCI.3.2C Construct maps, graphic organizers, simple tables, charts, and bar graphs using tools and current technology to organize, examine, and evaluate measured data.</p> <p>Ⓟ SCI.3.2D Analyze and interpret patterns in data to construct reasonable explanations based on evidence from investigations.</p> <p>Ⓟ SCI.3.2E Demonstrate that repeated investigations may increase the reliability of results.</p> <p>Ⓟ SCI.3.2F Communicate valid conclusions supported by data in writing, by drawing pictures, and through verbal discussion.</p> <p>Ⓟ SCI.3.3A Analyze, evaluate, and critique scientific explanations by using evidence, logical reasoning, and experimental and observational testing.</p>

