2021-2022 Scope and Sequence

Science – Grade 3

Cycle 1	27 Days Aug. 23 - Oct. 1,	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. 2021 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:
Unit 1: Setting Up for Science In this unit, students will begin building the foundation for science learning, including using organizing their notebooks for future investigations and following safety procedures.	3 45-minute lessons Suggested Pacing: Aug. 23-25 Enrichment Opportunities Aug. 2-13 Teachers Report to Work Aug. 16 Teacher Service Days Aug. 16-17, Aug. 19-20 Teacher Prep Day (no students) Aug. 18	 Unit 1: Setting Up for Science (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
Unit 2: Investigating Force and Motion In this unit, students will conduct descriptive investigations, collect data, and draw conclusions about force and motion.	5 45-minute lessons Suggested Pacing: Aug. 26 – Sept. 1	 Unit 2: Investigating Force and Motion (5 lessons) SCI.3.6B Demonstrate and observe how position and motion can be changed by pushing and pulling objects such as swings, balls, and wagons. SCI.3.6C Observe forces such as magnetism and gravity acting on objects. 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. 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.



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2021-2022 Scope and Sequence

Science – Grade 3

	Science – Gra			
Cycle 1	27 Days Aug. 23 - Oct. 1,	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:		
Unit 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.	Number of	 Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will: Part 1: States of Matter (3 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. Part 2: Measuring Temperature (1 lesson) SCI.3.5A Measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float. Part 3: How Temperature Changes Affect Matter (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.3.5C 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. Part 4: Measuring Mass (1 lesson) 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. Part 5: 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.3.5A Measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float. SCI.3.5A Measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to		
Servia (no sta Sep Pa Sugg Pac Sep Ext Re Ass Ret 4 c	Teacher Service Day (no students) Sept. 17 <u>Part 6</u> Suggested Pacing: Sept. 21 Extend Review Assess Reteach 4 days Sept. 22-27	 explanations based on evidence from investigations. Part 6: Magnetism (1 lesson) 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. 		



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2021-2022 Scope and Sequence

Science – Grade 3

Cycle 1	27 Days	The recommended number of lessons is less than the number of days in the grad	
Cycle 1	Aug. 23 - Oct. 1,	2021	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		s Essential Knowledge and Skills/Student Expectations (TEKS/SEs) student will:
	District Formative Assessment (DFA) 1 Suggested Window: Sept. 23-27 See Outline for TEKS Details		
Cycle 1 Cumulative Project Students will use the content learned during this cycle to engage in Project- Based Learning.	4 45-minute lessons Suggested Pacing: Sept. 28 – Oct. 1	<u>Cycle</u>	e 1 Cumulative Project: Matter in Motion (4 lessons)



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2021-2022 Scope and Sequence

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Cycle 2	Curala 2 29 Days		The recommended number of lessons is less than the number of days in the grading cycle to
Cycle 2	Oct. 5 - Nov. 12,	2021	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		s Essential Knowledge and Skills/Student Expectations (TEKS/SEs) student will:
Unit 4: Mixtures In this unit, students will conduct investigations to identify what happens to materials when they are combined.	5 45-minute lessons Suggested Pacing: Oct. 5-11 Teacher Service Day (no students) Oct. 4	SCI.3	<u>4: Mixtures</u> (5 lessons) 3.5D Explore and recognize that a mixture is created when two materials ombined such as gravel and sand or metal and plastic paper clips.
Unit 5: Energy In this unit, students will explore different forms of energy.	14 45-minute lessons Suggested Pacing: Oct. 12-29 Extend Review Assess Reteach 5 days Nov. 1-5	SCI.3	5: Energy (14 lessons) 3.6A Explore different forms of energy, including mechanical, light, sound, hermal in everyday life.
Cycle 2 Cumulative Project Students will use the content learned during this cycle to engage in Project-Based Learning.	5 45-minute lessons Suggested Pacing: Nov. 8-12	<u>Cycl</u>	e 2 Cumulative Project: Energy in Our Lives (5 lessons)



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Cycle 2	30 Days		The recommended number of lessons is less than the number of days in the grading cycle to		
Cycle 3	Nov. 15, 2021 - Jan. 14, 2022		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:			
Unit 6: Weather In this unit, students will observe, measure and record weather changes.	10 45-minute lessons Suggested Pacing: Nov. 15 – Dec. 3 <i>Thanksgiving</i> <i>Break</i> <i>Nov.</i> 22-26	SCI.: chan	<u>6: Weather</u> (10 lessons) 3.8A Observe, measure, record, and compare day-to-day weather liges in different locations at the same time that include air temperature, direction, and precipitation.		
Unit 7: Natural Resources In this unit, students will explore the usefulness of natural resources and how natural resources can be conserved.	10 45-minute lessons Suggested Pacing: Dec. 6-17 Enrichment Opportunities Dec. 20-21 Winter Break Dec. 20-31 Extend Review Assess Reteach 6 days Jan. 3-10 District Formative Assessment (DFA) 2 Suggested Window: Jan. 6-10 See Outline for	SCI.: usefu	7: Natural Resources (10 lessons) 3.7C Explore the characteristics of natural resources that make them ul in products and materials such as clothing and furniture and how urces may be conserved.		



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Cycle 3	30 Days Nov. 15, 2021 Jan. 14, 2022	IC omplete instructional planning information and support are in the HISU CURRICULUM documents
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Cycle 3 Cumulative Project Students will use the content learned during this cycle to engage in Project-Based Learning.	4 45-minute lessons Suggested Pacing: Jan. 11-14 MLK Jr. Day Jan. 17 Teacher Prep Day (no students) Jan. 18	Cycle 3 Cumulative Project: Our Earth and Its Resources (4 lessons)



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Cycle 4	27 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.		
		, 2022 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:		
Unit 8: Soil Formation In this unit, students will explore and	4 45-minute lessons Suggested	<u>Unit 8: Soil Formation</u> (4 lessons) SCI.3.7A Explore and record how soils are formed by weathering of rock and the decomposition of plant and animal remains.		
record how soils are formed.	Pacing: Jan. 19-24			
Unit 9: Changes to Earth's Surface	5 45-minute lessons	<u>Unit 9: Changes to Earth's Surface</u> (5 lessons) SCI.3.7B Investigate rapid changes in Earth's surface such as volcanic eruptions, earthquakes, and landslides.		
In this unit, students will investigate and construct models of common landforms and identify how they change rapidly.	Suggested Pacing: Jan. 25-31	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.		
Unit 10: The Solar System In this unit, students will explore the characteristics of the Sun, the Sun,	45-minute lessons pro <u>Part 1</u> f Suggested	Part 1: The Sun (2 lessons) SCI.3.8B Describe and illustrate the Sun as a star composed of gases that provides light and thermal energy.		
relationship, and the location of the planets in the Su solar system.	Feb. 1-2 Part 2 Suggested Pacing: Feb. 3-7	Part 2: The Sun, Earth, and Moon System (3 lessons) SCI.3.8C Construct models that demonstrate the relationship of the Sun, Earth, and Moon, including orbits and positions		
	Pacing:Feb. 8-11	Part 3: Planets and their Orbits (4 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		
	Extend Review Assess Reteach 5 days Feb. 14-18	relation to the Sun.		

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Cycele 4	27 Days		The recommended number of lessons is less than the number of days in the grading cycle to
Cycle 4	Jan. 19 - Feb. 25,	2022	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		Sessential Knowledge and Skills/Student Expectations (TEKS/SEs) tudent will:
	District Formative Assessment (DFA) 3 Suggested Window: Feb. 16-18 See Outline for TEKS Details Teacher Service Day / Presidents' Day (no students)		
	Feb. 21		
Cycle 4 Cumulative Project Students will use the content learned during this cycle to engage in Project-Based Learning.	4 45-minute lessons Suggested Pacing: Feb. 22-25	Cycle	<u>4 Cumulative Project: From Land to Sky</u> (4 lessons)



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Science – Grac		The recommended number of lessons is less than the number of days in the grading cycle to
Cycle 5		accommodate differentiated instruction, extended learning time, and assessment days. , 2022 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:
Unit 11: Life Cycles In this unit, students will investigate and compare life cycles.	12 45-minute lessons <u>Part 1</u> Suggested Pacing: Feb. 28 – Mar. 4	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.
	Part 2 Suggested Pacing: Mar. 7-11 Enrichment Opportunities Mar. 14-16	Part 2: Animal Life Cycles (5 lessons) (S) 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.
	Spring Break Mar. 14-18 Part <u>3</u> Suggested Pacing: Mar. 21-22	Part 3: Comparing Plant and Animal Life Cycles (2 lessons) (a) 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.
Unit 12: Energy Flow in an Ecosystem In this unit, students will identify and describe the energy flow in a food chain.	10 45-minute lessons Suggested Pacing: Mar. 23 – Apr. 6 Chávez-Huerta Day Mar. 28 Extend Review Assess Reteach 6 days	<u>Unit 12: Energy Flow in an Ecosystem</u> (10 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.

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	33 Days		The recommended number of lessons is less than the number of days in the grading cycle to
Cycle 5	Feb. 28 - Apr. 22,	2022	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		s Essential Knowledge and Skills/Student Expectations (TEKS/SEs) student will:
	District Formative Assessment (DFA) 4 Suggested Window: Apr. 12-14 See Outline for TEKS Details Spring Holiday Apr. 15		
Cycle 5 Cumulative Project Students will use the content learned during this cycle to engage in Project-Based Learning.	5 45-minute lessons Suggested Pacing: Apr. 18-22	<u>Cycle</u>	e 5 Cumulative Project: How Organisms Survive and Grow (5 lessons)



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Cucle C 31 Days		The recommended number of lessons is less than the number of days in the grading cycle to
Cycle 6	Apr. 25 - June 7,	accommodate differentiated instruction, extended learning time, and assessment days. 2022 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:
Unit 13: Environmental Interactions In this unit, students will investigate different environmental interactions and how environmental conditions affect populations within an ecosystem.	14 45-minute lessons <u>Part 1</u> Suggested Pacing: Apr. 25-29 <u>Part 2</u> Suggested Pacing: May 2-6; 12-17	 Part 1: Environmental Changes (5 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.
	Extend Review Assess Reteach 6 days May 9-11 May 18-20	 Part 2: Adaptations (9 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.
	District Pre- Approved Assessment Suggested Window: May 2-27 See Blueprint for TEKS Details	



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Science –	Grade	3
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Ovela C	31 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.
Cycle 6			
Unit	Number of Lessons		s Essential Knowledge and Skills/Student Expectations (TEKS/SEs) student will:
Unit 14: Descriptive Investigations In this unit, students will conduct various descriptive investigations.	6 45-minute lessons Suggested Pacing: May 24-31 Memorial Day May 30	 (b) SC and a equip world (c) SC metri data. (c) SC graph meas (c) SC graph meas (c) SC reliab (c) SC reliab (c) Writin (c) SC writin (c) SC sc	CI.3.2B Collect and record data by observing and measuring using the c system and recognize differences between observed and measured
Cycle 6 Cumulative Project Students will use the content learned during this cycle to engage in Project-Based Learning.	5 45-minute lessons Suggested Pacing: Jun. 1-7 Teacher Prep Day (no students) June 8	<u>Cycl</u>	e 6 Cumulative Project: Investigating Change (5 lessons)



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