

5th Grade Science Curriculum Calendar

2020-2021

1st Nine Weeks

Dates	# of Days with Students	Objectives/"I Can" Statements	Standards	Academic Vocabulary
Week 1 (8/3/20 – 8/7/20)	2	I Can" Statements: I can describe the relationship between evidence and opinion in scientific explanations. I can identify elements of well-designed investigations and make valid conclusions	ETS2.3 Identify how scientific discoveries lead to new and improved technologies ETS2.1 Use appropriate measuring tools, simple hand tools, and fasteners to construct a prototype of a new or an improved technology	Investigation Science Evidence Opinion
Week 2 (8/10/20- 8/14/20)	5	I can explain that there are many methods to investigate phenomena, and compare various forms of investigations. I can demonstrate the ability to predict, hypothesize; identify and control variables; experiment; formulate and use models; and collect, record, and interpret data.	ETS2.2 Describe how human beings have made tools and machines (x-ray cameras, microscopes, satellites, computers) to observe and do things that they could not otherwise sense or do at all, or a quickly or efficiently	Scientific method Experiment Variable control
Week 3 (8/17/20 – 8/21/20)	5	I can identify how engineers find solutions to problems. I can explain why a prototype is developed.	ETS1.1 Research, test, re test, and communicate a design to solve a problem	Engineering Technology Prototype criteria

		I can define engineering and technology.		
Week 4 (8/24/20-8/28/20)	5	I can give examples of technology used in daily life I can describe why new products are developed I can identify consequences or tradeoffs associated with technology	ETS1.2 Plan and carry out tests on one or more elements of a prototype in which variables are controlled and failure points are considered to identify which elements need to be improved. Apply the results of the test to redesign the prototype. ETS1.3 Describe how failure provides valuable information toward finding a solution.	Bioengineering biotechnology
Week 5 (8/31/20-9/4/20)	5	I can recognize that some properties such as shape and appearance, may change during and change of state. I can recognize that the mass of water remains unchanged as it undergoes a change of state.	PSI1.1 Analyze and Interpret data from observations and measurement of the physical properties of matter to explain phase changes between solid, liquid, or gas.	<i>Matter</i> <i>Temperature</i> <i>Liquid</i> <i>Volume</i> <i>Solid</i> <i>Gas</i>
Week 6 (9/7/20-9/11/20) *Sept. 7 th – Labor Day *Sept. 10 th – PTC from 2-6 *Sept. 11 th – Inservice	3	I can recognize that the mass of water remains unchanged as it undergoes a change of state	PSI1.1 Analyze and Interpret data from observations and measurement of the physical properties of matter to explain phase changes between solid, liquid, or gas PS1.2 Analyze and interpret data to show that the amount of matter is conserved even when it	Physical change Chemical Change Reaction Conservation of mass

			changes form, including transitions where matter seems to vanish	
Week 7 9/14/20- 9/18/20)	5	I can compare and contrast mixtures and solution I can determine ways that mixtures can be separated I can classify substances based on whether they dissolve in water I can relate the properties of mixtures with the proportions of starting materials	PS1.4 Evaluate the results of an experiment to determine whether the mixing of two or more substances in a change of properties	Mixture solution
Week 8 (9/21/20- 9/25/20) *CASE Testing Window	5	I can conduct an experiment to determine how temperature, stirring, and particle size, affect the rate at which substances dissolve	PS1.3 Design a process to measure how different variables (temperature, particle size, stirring) affect the rate of dissolving solids into liquids	
Week 9 (9/28/20- 10/2/20) *CASE Testing Window	5	*9 Weeks Tests Review	Review	Review

2nd Nine Weeks

Dates	# of Days with Students	Objectives/"I Can" Statements	Standards	Academic Vocabulary
Week 1 (10/12/20 - 10/16/20) *Oct. 16 th - Staff Dev.	4	PS1.3 Design a process to measure how different variables (temperature, particle size, stirring) affect the rate of dissolving solids into liquids	PS2.2 Make observations and measurements of an object's motion to provide evidence that a pattern can be used to predict future motion PS2.1 Test the effects of balanced and unbalanced forces on the speed and direction of motion of objects	Force Friction Unbalanced forces Gravity Balanced forces
Week 2 (10/19/20 - 10/23/20)	5	I can describe balanced and unbalanced forces I can identify forces that act on an object you are trying to move, and explain how to measure the force needed to overcome each	PS2.2 Make observations and measurements of an object's motion to provide evidence that a pattern can be used to predict future motion PS2.1 Test the effects of balanced and unbalanced forces on the speed and direction of motion of objects	
Week 3 (10/26/20 - 10/30/20)	5	I can follow directions for an investigation to observe how an object's mass relates to its motion.	PS2.4 Explain the cause and effect relationship of two factors (mass and distance) that affect gravity PS2.5 Explain how forces can create patterns within a system (moving in one direction, shifting back and forth, or moving in cycles),	

			and describe conditions that affect how fast or slowly these patterns occur.	
Week 4 (11/2/20-11/6/20)	5	I can follow directions for an investigation to observe how plant growth is affected when plants are trimmed	LS1.1 Compare and contrast animal responses that are instinctual versus those that are gathered through the senses, processed and stored as memories to guide their actions. LS3.1 Distinguish between inherited characteristics and those that result from a direct interaction with the environment. Apply this concept by giving examples of characteristics of living organisms that are influenced by both inheritance and the environment	Adaptation Instinct Learned behavior
Week 5 (11/9/20-11/13/20)	5	I can learn how traits are inherited I can model inherited traits	LS3.2 Provide evidence and analyze data that plants and animal have traits inherited from parents and that variations of these exists in a group of similar organisms	
Week 6 (11/16/20 - 11/20/20)	5	I can identify certain aspects within a species that help the survive and reproduce	LS4.2 Use evidence to construct an explanation for how variations in characteristics among individuals with the same species may provide	

			advantages to these individuals in their survival and reproduction.	
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Week 7 (11/30/20 -12/4/20)	5	I can plan and conduct research to learn which animals undergo incomplete and complete metamorphosis		
Week 8 (12/7/20- 12/11/20)	5	*9 Weeks Tests Review	Review	Review
*CASE Testing Window				
Week 9 (12/14/20 - 12/18/20)	4	*Midterms		
*CASE Testing Window				

3rd Nine Weeks

Dates	# of Days with Students	Objectives/"I Can" Statements	Standards	Academic Vocabulary
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<p>Week 1 (1/4/21-1/8/21)</p> <p>*Jan. 1st - Inservice</p>	<p>4</p>	<p>I can understand how fossils and fossil fuels are formed I can recognize different types of fossils</p>	<p>LS4.1 Analyze and interpret data from fossils to describe types of organisms and their environments that existed long ago. Compare similarities and differences of those to living organisms and their environments. Recognize that most kinds of animals (and plants) that once lived on Earth are now extinct.</p>	<p>Vocabulary: Fossil Cast Mold Extinct</p>
<p>Week 2 (1/11/21-1/15/21)</p>	<p>5</p>	<p>I can understand how fossils and fossil fuels are formed I can recognize different types of fossils I can relate what fossils tell us about Earth's history I can describe what an index fossil is I can understand how fossils can be used to learn about ancient ecosystems</p>	<p>LS4.1 Analyze and interpret data from fossils to describe types of organisms and their environments that existed long ago. Compare similarities and differences of those to living organisms and their environments. Recognize that most kinds of animals (and plants) that once lived on Earth are now extinct. ESS1.7 Use evidence from the presence and location of fossils to determine the order in which rock strata were formed</p>	
<p>Week 3 (1/18/21-1/22/21)</p>	<p>4</p>	<p>I can identify the major components of the solar system I can describe the major characteristics of the planets of the solar system</p>	<p>ESS1.4 Explain the cause and effect relationship between the positions of the Sun, Earth and Moon resulting in eclipses, position</p>	<p>Solar system Planet Comet Dwarf planet asteroid</p>

*Jan. 20 th – MLK Jr. Day			of constellations, and appearance of the moon.	
Week 4 (1/25/21- 1/29/21)	5	I can identify the major components of the solar system I can describe the major characteristics of the planets of the solar system	I can identify the major components of the solar system I can describe the major characteristics of the planets of the solar system	
Week 5 (2/1/21- 2/5/21)	5	I can explain that stars are very large and appear small in the sky because they are very far away	ESS 1.1 Explain the differences in the apparent brightness of the Sun compared to other stars is due to their relative distances from the Earth	Astronomy Star
Week 6 (2/8/21- 2/12/21)	5	I can explain what galaxies are and how they are classified. I can describe the solar systems place in the Milky way galaxy.	ESS1.2 Research and explain the position of the Earth and the solar system within the Milky Way galaxy, and compare the size and shape of the Milky Way to other galaxies.	Universe galaxy
Week 8 (2/22/21- 2/26/21)	2	I can Explain the cause and effect relationship between the positions of the Sun, Earth and Moon resulting in eclipses, position of constellations, and appearance of the moon	ESS1.4 Explain the cause and effect relationship between the positions of the Sun, Earth and Moon resulting in eclipses, position of constellations, and appearance of the moon	Revolve Orbit Rotate Axis Solar eclipse Lunar eclipse Moon phase Constellation
Week 9 (3/1/21- 3/5/21)	5	*9 Weeks Tests I Can” Statemen Explain the cause and effect relationship	ESS1.4 Explain the cause and effect relationship	

Extra Week (3/8/21 – 3/12/21) *CASE Testing Window		between the positions of the Sun, Earth and Moon resulting in eclipses, position of constellations, and appearance of the moon	between the positions of the Sun, Earth and Moon resulting in eclipses, position of constellations, and appearance of the moon	
4th Nine Weeks		The plans for 4 th 9 Weeks will more than likely be edited. Standards will be covered based on student performance throughout the year.		
Week 1 (3/15/21- 3/19/21)	5	I Can” Statements: I can describe the relationship between evidence and opinion in scientific explanations. I can identify elements of well-designed investigations and make valid conclusions	ETS2.1 Use appropriate measuring tools, simple hand tools, and fasteners to construct a prototype of a new or an improved technology	

Dates	# of Days with Students	Objectives/”I Can” Statements	Standards	Academic Vocabulary
Week 2 (3/22/21- 3/26/21) *Mar. 26 th - Inservice	4	I Can” Statements: I can describe the relationship between evidence and opinion in scientific explanations. I can identify elements of well-designed investigations and make valid conclusions	ETS2.1 Use appropriate measuring tools, simple hand tools, and fasteners to construct a prototype of a new or an improved technology	

Week 3 (4/5/21- 4/9/21)	5	I Can" Statements: I can describe the relationship between evidence and opinion in scientific explanations. I can identify elements of well-designed investigations and make valid conclusions	ETS2.1 Use appropriate measuring tools, simple hand tools, and fasteners to construct a prototype of a new or an improved technology	
Week 4 (4/12/21- 4/16/21)	5	I Can" Statements: I can describe the relationship between evidence and opinion in scientific explanations. I can identify elements of well-designed investigations and make valid conclusions	ETS2.1 Use appropriate measuring tools, simple hand tools, and fasteners to construct a prototype of a new or an improved technology	
Week 5 (4/19/21- 4/23/21)	4	TNREADY Review		

Week 6 (4/26/21- 4/30/21) *Apr. 30 th – Staff Dev	4	TNREADY Review		
Week 7 (5/3/21- 5/7/21)	5	TNREADY		

Week 8 (5/10/21- 5/14/21)	5	I can give examples of technology used in daily life I can describe why new products are developed I can identify consequences or tradeoffs associated with technology	ETS1.2 Plan and carry out tests on one or more elements of a prototype in which variables are controlled and failure points are considered to identify which elements need to be improved. Apply the results of the test to redesign the prototype. ETS1.3 Describe how failure provides valuable information toward finding a solution.	
Week 9 (5/17/21- 5/21/21)	5			
Extra Week (5/24/21- 5/28/21) *May 27 th - Admin. Day *May 28 th - Graduation				

