

# 6<sup>th</sup> Science



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# Clint ISD

## 6<sup>th</sup> Grade

### Science Calendar 2019-2020

The following calendar does not contain the process standards but are included at the end of this booklet on page 14. The Seidlitz 7 can be found on page 16 and a table version of this calendar is on page 15 for your reference.

This calendar can be used along with the TEKS Resource System (IFD) to plan instruction. Quality instruction aligned with the curriculum at an appropriate level of rigor will ensure that students are successful.

The 3rd and 6th week are short checkpoints (10 items or less) covering only that 3 week window of instructional time. The 9 weeks checkpoint is longer (20-40 items); it covers content taught during the full preceding 9 weeks of instructional time. The 3-6-9 Week Checkpoints will include open ended and griddable questions. The 3rd and 6th weeks assessment can be taken for a daily grade at your discretion. The 9 weeks exam can be counted as a test grade at teacher discretion and data will be pulled at the campus and district level to support instruction. Please see CISD 3-6-9 Week Checkpoint FAQ.

### July 2019 - 6<sup>th</sup> Science - Clint ISD

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22 Teacher PD	23 Teacher PD	24 Teacher PD	25 Teacher PD	26 Teacher PD	27
28	29 First Day Student Designed Investigations	30	31			

### August 2019 - 6<sup>th</sup> Science - Clint ISD

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Student Designed Investigations	2	3
4	5 Student Designed Investigations	6	7 6.5A Unit 1	8	9	10
11	12 6.5A	13	14	15	16 3-Weeks	17
18	19 6.5C	20	21	22	23	24
25	26 6.5C	27	28 6.6A Unit 2	29	30	31

## July 2019

## August 2019

### Unit 01: Investigating Chemicals

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. (R)

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. (S)

### Unit 02: Investigating Properties of Matter

6.6A Compare metals, nonmetals, and metalloids using physical properties such as luster, conductivity, or malleability. (R)

### September 2019 - 6<sup>th</sup> Science - Clint ISD

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Labor Day	3 6.6A →	4	5 6.6C →	6 6-Weeks	7
8	9 6.6C →	10	11	12 6.6B →	13	14
15	16 6.6B →	17	18	19	20	21
22	23 6.6B →	24 9-Weeks	25 9-Weeks	26	27	28
29	30 intersession					

### October 2019 - 6<sup>th</sup> Science - Clint ISD

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 intersession	2 intersession	3 intersession	4 intersession	5
6	7 intersession	8 intersession	9 intersession	10 intersession	11 intersession	12
13	14 6.8A Unit 3 →	15	16	17	18	19
20	21 6.8B →	22	23 6.8C →	24	25	26
27	28 6.8C →	29	30 3-Weeks	31 teacher PD		

## September 2019

### Unit 02: Investigating Properties of Matter

6.6A Compare metals, nonmetals, and metalloids using physical properties such as luster, conductivity, or malleability. (R)

6.6B Calculate density to identify an unknown substance. (R)

6.6C Test the physical properties of minerals, including hardness, color, luster, and streak. (S)

## October 2019

### Unit 03: Investigating Force and Motion

6.8A Compare and contrast potential and kinetic energy. (R)

6.8B Identify and describe the changes in position, direction, and speed of an object when acted upon by unbalanced forces. (S)

6.8C Calculate average speed using distance and time measurements. (R)

### November 2019 - 6<sup>th</sup> Science - Clint ISD

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Teacher PD	2
3	4 6.8C →	5 6.8D →	6	7	8	9
10	11 Veterans Day	12 6.8D →	13	14	15 6.8E →	16
17	18 6.8E →	19 6.8A Unit 4	20	21	22 6-Weeks	23
24	25 T-Giving	26 T-Giving	27 T-Giving	28 T-Giving	29 T-Giving	30

### December 2019 - 6<sup>th</sup> Science - Clint ISD

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 6.9C →	3	4	5	6	7
8	9 6.9C →	10 6.7A →	11	12	13	14
15	16 9-Weeks 6.7A →	17 9-Weeks	18 Last Day	19 Break	20 Break	21
22	23 Break	24 Break	25 Break	26 Break	27 Break	28
29	30 Break	31 Break				

## November 2019

### Unit 03: Investigating Force and Motion

6.8C Calculate average speed using distance and time measurements. (R)

6.8D Measure and graph changes in motion. (S)

6.8E Investigate how inclined planes can be used to change the amount of force to move an object. (S)

### Unit 04: Investigating Energy Resources and Transformations

6.8A Compare and contrast potential and kinetic energy. (S)

## December 2019

### Unit 04: Investigating Energy Resources and Transformations

6.7A Research and discuss the advantages and disadvantages of using coal, oil, natural gas, nuclear power, biomass, wind, hydropower, geothermal, and solar resources. (S)

6.9C Demonstrate energy transformations such as energy in a flashlight battery changes from chemical energy to electrical energy to light energy. (R)

### JANUARY 2020 - 6<sup>th</sup> Science - Clint ISD

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	1 New Year's Day	2 Holiday	3 Teacher PD	4
5	6 6.9A Unit 5	7	8	9	10 6.9B	11
12	13 6.9B	14	15	16 6.10A Unit 6	17	18
19	20 M L King Day	21 6.10A	22	23	24 3-Weeks 6.5B	25
26	27 6.5B	28	29	30	31 6.10B	

### FEBRUARY 2020 - 6<sup>th</sup> Science - Clint ISD

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27 X	28 X	29 X	30 X	31 X	1
2	3 6.10B	4	5	6	7 6.10 C Unit 7	8
9	10 6.10C	11	12	13 6-Weeks	14 Valentine's Day	15
16	17 Presidents' Day	18 6.10C	19	20	21 Teacher PD	22
23	24 6.10D	25	26	27	28	29

### January 2020

#### Unit 05: Investigating Thermal Energy

**6.9A** Investigate methods of thermal energy transfer, including conduction, convection, and radiation. (R)

**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. (S)

#### Unit 06: Investigating Earth Materials

**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. (S)

**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. (S)

**6.10B** Classify rocks as metamorphic, igneous, or sedimentary by the processes of their formation. (R)

6.9A, 6.9B – 3wks Tested

### February 2020

#### Unit 06: Investigating Earth Materials

**6.10B** Classify rocks as metamorphic, igneous, or sedimentary by the processes of their formation. (R)

#### Unit 07: Investigating Plate Tectonics

**6.10C** Identify the major tectonic plates, including Eurasian, African, Indo-Australian, Pacific, North American, and South American. (S)

**6.10D** Describe how plate tectonics causes major geological events such as ocean basin formation, earthquakes, volcanic eruptions, and mountain building. (S)

6.10A, 6.5B, 6.10B – 6wks Tested

**MARCH 2020 - 6<sup>th</sup> Science - Clint ISD**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 6.10D	3 9-Weeks	4 9-Weeks	5	6	7
8	9 Intercession	10 Intercession	11 Intercession	12 Intercession	13 Intercession	14
15	16 Spring Break	17 Spring Break	18 Spring Break	19 Spring Break	20 Spring Break	21
22	23 6.11B Unit 8	24	25	26 6.11A	27	28
29	30 6.11A	31	1	2	3	4

**APRIL 2020 - 6<sup>th</sup> Science - Clint ISD**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	1 6.11A	2 6.11C	3	4
5	6 State Testing 6.11C	7 State Testing	8 State Testing 6.12A Unit 9	9 State Testing 3-Weeks	10 Good Friday	11
12 Easter Sunday	13 Holiday	14 6.12A	15 6.12B	16	17	18
19	20 6.12D	21	22	23	24 6.12C	25
26	27 6.12C	28	29	30 6.5B Unit 10	1	2

**March 2020**

**Unit 07: Investigating Plate Tectonics**

6.10D Describe how plate tectonics causes major geological events such as ocean basin formation, earthquakes, volcanic eruptions, and mountain building. (S)

**Unit 08: Investigating the Solar System**

- 6.11A Describe the physical properties, locations, and movements of the Sun, planets, moons, meteors, asteroids, and comets. (R)
- 6.11B Understand that gravity is the force that governs the motion of our solar system. (S)
- 6.11C Describe the history and future of space exploration, including the types of equipment and transportation needed for space travel. (S)

6.9A, 6.9B, 6.10A, 6.5B, 6.10B, 6.10C, 6.10D – 9wks Tested

**April 2020**

**Unit 08: Investigating the Solar System**

6.11C Describe the history and future of space exploration, including the types of equipment and transportation needed for space travel. (S)

**Unit 09: Investigating Taxonomic Groups**

6.12A Understand that all organisms are composed of one or more cells. (S)

6.12B Recognize that the presence of a nucleus is a key factor used to determine whether a cell is prokaryotic or eukaryotic. (S)

6.12C Recognize that the broadest taxonomic classification of living organisms is divided into currently recognized domains. (S)

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. (R)

**Unit 10: Investigating Ecosystems**

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. (S)

6.11A, 6.11B – 3wks Tested

**MAY 2020 - 6<sup>th</sup> Science - Clint ISD**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	6-Weeks 1 6.5B →	2
	X	X	X	X		
3	4	5	6	7	8	9
	6.12E →			6.12F →		
10	11	12	13	14	15	16
Mother's Day	State Testing	State Testing	State Testing	State Testing	State Testing	
17	18	19	20	21	22	23
	6.12F →					
24	25	26	27	28	29	30
	Memorial Day	Student Designed Investigations →		9-Weeks	9-Weeks	
31	1	2	3	4	5	6
	X	X	X	X	X	

**JUNE 2020 - 6<sup>th</sup> Science - Clint ISD**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	1	2	3	4	5	6
	Student Designed Investigations →			Last Day	Teacher PD	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
Father's Day	State Testing	State Testing	State Testing	State Testing		
28	29	30	1	2	3	4

**May 2020**

**Unit 10: Investigating Ecosystems**

**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.

**6.12E** Describe biotic and abiotic parts of an ecosystem in which organisms interact. (S)

**6.12F** Diagram the levels of organization within an ecosystem, including organism, population, community, and ecosystem.

6.11C, 6.12A, 6.12B, 6.12C, 6.12D – 6wks Tested

6.11A, 6.11B, 6.11C, 6.12A, 6.12B,

6.12C, 6.12D, 6.5B, 6.12E, 6.12F – 9wks Tested

**June 2020**



## Science Process Standards

(Blue—Tools to Know, Green—Ways to Show)

(1) Scientific investigation and reasoning. The student, for at least 40% of the instructional time, conducts laboratory and field investigations following safety procedures and environmentally appropriate and ethical practices. The student is expected to:

- (A) demonstrate safe practices during laboratory and field investigations as outlined in Texas Education Agency-approved safety standards; and
- (B) practice appropriate use and conservation of resources, including disposal, reuse, or recycling of materials.

(2) Scientific investigation and reasoning. The student uses scientific practices during laboratory and field investigations. The student is expected to:

- (A) plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology;
- (B) design and implement experimental investigations by making observations, asking well defined questions, formulating testable hypotheses, and using appropriate equipment and technology;
- (C) collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers;
- (D) construct tables and graphs, using repeated trials and means, to organize data and identify patterns; and
- (E) analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.

(3) Scientific investigation and reasoning. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists. The student is expected to:

- (A) 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;
- (B) use models to represent aspects of the natural world such as human body systems and plant and animal cells;
- (C) identify advantages and limitations of models such as size, scale, properties, and materials; and
- (D) relate the impact of research on scientific thought and society, including the history of science and contributions of scientists as related to the content.

(4) Science investigation and reasoning. The student knows how to use a variety of tools and safety equipment to conduct science inquiry. The student is expected to:

- (A) use appropriate tools, including life science models, hand lenses, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other necessary equipment to collect, record, and analyze information; and
- (B) 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.

Time Frame	Unit(s)	TEKS	Checkpoint Date
July 29 - Aug 16 (1st-3 Weeks)	Unit 1	6.5A	Aug 16
Aug 19 - Sept 6 (1st-6 Weeks)	Unit 1, Unit 2	6.5C, 6.6A	Sept 6
Sept 9 - Sept 24 (1st-9 Weeks)	Unit 1, Unit 2	6.5A, 6.5C, 6.6A, 6.6C, 6.6B,	Sept 24/25
Oct 14 - Oct 30 (2nd-3 Weeks)	Unit 3	6.8A, 6.8B, 6.8C	Oct 30
Nov 4 - Nov 22 (2nd- 6 weeks)	Unit 3	6.8C, 6.8D, 6.8E	Nov 22
Dec 2 - Dec 16 (2nd- 9 weeks)	Unit 3, Unit 4	6.8A, 6.8B, 6.8C, 6.8D, 6.8E, 6.9C, 6.7A	Dec 16/17
Jan 6 - Jan 24 (3rd- 3 weeks)	Unit 5, Unit 6	6.9A, 6.9B, 6.10A	Jan 24
Jan 27 - Feb 13 (3rd- 6 weeks)	Unit 6, Unit 7	6.5B, 6.10B, 6.10A	Feb 13
Feb 18 - March 3 (3rd- 9 weeks)	Unit 5, Unit 6, Unit 7	6.9A, 6.9B, 6.10A, 6.5B, 6.10B, 6.10C, 6.10D	March 3/4
March 23 - April 9 (4th- 3 weeks)	Unit 8 , Unit 9	6.11B, 6.11A, 6.11C,	April 9
April 14 - May 1 (4th- 6 weeks)	Unit 9, Unit 10	6.12A, 6.12B, 6.12D, 6.12C,	May 1
May 4 - May 28 (4th- 9 weeks)	Unit 8, Unit 9, Unit 10	6.11B, 6.11A, 6.11C, 6.12A, 6.12B, 6.12D, 6.12C, 6.5B, 6.12E, 6.12F	May 28/29

## The 7 Steps.—John Seidlitz

1. **Teach students what to say when they don't know what to say**
2. **Have students speak in complete sentences**
3. **Randomize & Rotate when calling on students**
4. **Use total response signals**
5. **Use visuals and vocabulary strategies that support your objective**
6. **Have students participate in structured conversations**
7. **Have students participate in structured reading/writing activities**



Together...  
*We Build Tomorrow!*

**Together We Build Tomorrow**  
**#WeAreClintISD**

**Committed**

**Learner-centered**



**Innovative**

**Nurturing**

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