

# CLAY COUNTY DISTRICT SCHOOLS

## Curriculum Hyperdoc for Grade 7 Science



**Grade 7 STANDARD #2002070**  
**Grade 7 ADVANCED #2002080**

### Resources In This Document:

- ★ [Science Frameworks](#)
- ★ [Historical SSA Reports](#)
- ★ [Assessment Schedule](#)
- ★ [Middle School Resources](#)
- ★ [Science Fair Resources](#)
- ★ [BEST ELA/MATH](#)
- ★ [ESOL Resources](#)

1st Quarter (46 Days)	2nd Quarter (41 Days)	3rd Quarter (42 Days)	4th Quarter (51 Days)
<p><b>Unit 1: Nature of Science [11]</b>  <b>*(EMBEDDED THROUGHOUT THE YEAR)</b></p> <p>A. <a href="#">Lab Safety</a> [1]            B. <a href="#">Experimental Design*</a> [5]            C. <a href="#">Theories, Laws, Hypotheses, &amp; Models</a> [3]  <i>Nature of Science [2]</i></p> <p><b>Unit 2: Forces and Energy Review through experimental design [14]</b></p> <p>A. <a href="#">Distance Vs Time Graphs through experimental design</a> [3]            B. <a href="#">Types of Energy</a> [3]            C. <a href="#">Types of Forces</a> [4]  <i>Nature of Science [4]</i></p> <p><b>Unit 3: Waves [17]</b></p> <p>A. <a href="#">Properties of Waves</a> [5]            B. <a href="#">EM Spectrum and Light Waves</a> [5]            C. <a href="#">Waves through Different Media</a> [5]  <i>Nature of Science [2]</i></p>	<p><b>Unit 9: Energy &amp; Heat [17]</b></p> <p>A. <a href="#">Energy Conversion &amp; Conservation</a> [5]            B. <a href="#">Temperature</a> [3]            C. <a href="#">Heat Flow and Heating Curves</a> [7]  <i>Nature of Science [2]</i></p> <p><b>Unit 5: Dynamic Earth [16]</b></p> <p>A. Atmospheric Layers Review [2]            B. Weather Review [3]            C. <a href="#">Earth's Layers</a> [4]            D. Weathering and Erosion Review [2]            E. The Rock Cycle [3]  <i>Nature of Science [2]</i></p> <p><b>Unit 6: Plate Tectonics [5]</b></p> <p>A. <a href="#">Theory of Plate Tectonics</a> [5]</p>	<p><b>Unit 6: Plate Tectonics [8]</b></p> <p>A. <a href="#">Theory of Plate Tectonics</a> [3]            B. <a href="#">Mountain Building, Earthquakes, and Volcanoes</a> [5]</p> <p><b>Unit 7: Relative &amp; Absolute Dating [10]</b></p> <p>A. <a href="#">Relative Dating</a> [3]            B. <a href="#">Absolute Dating</a> [3]            C. <a href="#">Geologic Change Over Time</a> [2]  <i>Nature of Science [2]</i></p> <p><b>Unit 8: Hierarchy of Life [15]</b></p> <p>A. <a href="#">Homeostasis &amp; Cell Theory</a> Review [2]            B. <a href="#">Cell Organelles</a> Review [3]            C. DNA [2]            D. <a href="#">Human Body Systems</a> [4]            E. <a href="#">Classification</a> [3]  <i>Nature of Science [1]</i></p> <p><b>Unit 9: Cell Division and Reproduction [7]</b></p> <p>A. <a href="#">Mitosis and Asexual Reproduction</a> [4]            B. <a href="#">Meiosis and Sexual Reproduction</a> [3]</p>	<p><b>Unit 10: Heredity &amp; Punnett Squares [15]</b></p> <p>A. <a href="#">Heredity</a> [6]            B. <a href="#">Punnett Squares and Pedigrees</a> [7]  <i>Nature of Science [2]</i></p> <p><b>Unit 11: Scientific Theory of Evolution [12]</b></p> <p>A. <a href="#">Theory of Evolution by Natural Selection</a> [6]            B. <a href="#">Evidence Supporting Evolution</a> [6]</p> <p><b>Unit 12: Ecology [12]</b></p> <p>A. <a href="#">Roles in Energy Transfer</a> [4]            B. <a href="#">Interactions in Communities</a> [4]            C. <a href="#">Limiting Factors</a> [3]  <i>Nature of Science [1]</i></p> <p><b>Unit 13: Human Impact [3]</b></p> <p>A. <a href="#">Human Impact on Land</a> [1]            B. <a href="#">Human Impact on Air &amp; Water</a> [2]</p> <p><b>Unit 13: Foundations of Biology</b>            Impacts of Biotechnology [2]</p>

**CROSS CURRICULAR BEST BENCHMARK INTEGRATION**

*These benchmarks should be integrated into science lessons as appropriate as a part of the new course descriptions.*

BEST ELA EXPECTATIONS	BEST MATHEMATICS
<a href="#">ELA.K12.EE.1.1</a> Cite evidence to explain and justify reasoning	<a href="#">MA.K12.MTR.1.1</a> Actively participate in effortful learning both individually and collectively.
<a href="#">ELA.K12.EE.2.1</a> Read and comprehend grade-level complex texts proficiently	<a href="#">MA.K12.MTR.2.1</a> Demonstrate understanding by representing problems in multiple ways.
<a href="#">ELA.K12.EE.3.1</a> Make inferences to support comprehension.	<a href="#">MA.K12.MTR.3.1</a> Complete tasks with mathematical fluency.
<a href="#">ELA.K12.EE.4.1</a> Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.	<a href="#">MA.K12.MTR.4.1</a> Engage in discussions that reflect on the mathematical thinking of self and others.
<a href="#">ELA.K12.EE.5.1</a> Use the accepted rules governing a specific format to create quality work.	<a href="#">MA.K12.MTR.5.1</a> Use patterns and structure to help understand and connect mathematical concepts
<a href="#">ELA.K12.EE.6.1</a> Use appropriate voice and tone when speaking or writing.	<a href="#">MA.K12.MTR.6.1</a> Assess the reasonableness of solutions.
	<a href="#">MA.K12.MTR.7.1</a> Apply mathematics to real-world contexts.
<b><a href="#">ELD Standards for Science Grades 6-8</a></b>	<b><a href="#">ESOL Content Area Glossaries</a></b>

RESOURCE	DESCRIPTION	SCIENCE FAIR
<a href="#">One Clay Vision</a>	This is the One Clay Vision for Instruction. Included are links to each of the indicators as well as the Quarterly Focus areas.	<a href="#">ISEF Rulebook 2023-2024</a>
<a href="#">District Science Instructional Goals and Frameworks</a>	Annual instructional goals and the frameworks for quality science instruction are linked in this document.	<a href="#">Science Fair Participation Plan 2023-2024</a>
Middle School <a href="#">Annually Assessed Benchmarks</a>	A listing of all 32 annually assessed benchmarks grades 6-8 and their also assessed benchmarks.	<a href="#">Clay County Science Fair Teacher Resources Folder</a>
FLDOE <a href="#">Grade 8 Item Specifications</a>	This document outlines the benchmarks that are taught (by grade level) and gives guidance on what will and will not be assessed on our district tests as well as the FLDOE SSA.	<a href="#">Science Fair: A Teacher's Guide</a>
SSA Item Specification <a href="#">Task Cards</a>	Task cards for each for the 32 annually assessed benchmarks that include multiple strategies and resources	<a href="#">Science Fair Research Plan: Hyperlinked Slide for Students</a>
FLDOE <a href="#">Cognitive Complexity Classifications</a>	This document differentiates between what students will be required to do for a low, moderate, or high complexity item. Science descriptors can be found on page 4.	<b><a href="#">Links to ISEF Paperwork*</a></b> <b><a href="#">*Coming Soon</a></b>
FLDOE <a href="#">SSA Assessment Schedules</a>	A listing of the State testing windows for all assessments.	<b>Science Fair Display Resources*</b> <b>*Coming Soon</b>

## QUARTER 1 PACING GUIDE

### AUGUST

31	1	2 Preplanning	3 Preplanning	4 District Inservice Day
7 Preplanning	8 Preplanning	9 Preplanning	10 First Day for Students	11 Rules and Procedures
14 <a href="#">Lab Safety</a>	15 <a href="#">Experimental Design</a>	16 Experimental Design	17 Experimental Design	18 Experimental Design
21 Experimental Design	22 <i>Nature of Science</i>	23 <i>Nature of Science</i>	24 <a href="#">Theories and Laws</a>	25 Theories and Laws

### SEPTEMBER

28 Theories and Laws	29 <a href="#">Distance vs Time</a>	30 Distance vs Time	31 Distance vs Time	1 <i>Nature of Science</i>
4 Labor Day	5 FLEX <i>Nature of Science</i>	6 <a href="#">Energy</a>	7 Energy	8 Energy
11 <a href="#">Forces</a>	12 Forces	13 Forces	14 Forces	15 <i>Nature of Science</i>
18 <i>Nature of Science</i>	19 Flex	20 <a href="#">Waves</a>	21 Waves	22 Waves
25 Waves	26 Waves	27 <a href="#">EM Spectrum</a>	28 EM Spectrum	29 EM Spectrum

### OCTOBER

2 EM Spectrum	3 EM Spectrum	4 <a href="#">Waves in Media</a>	5 Waves in Media	6 Waves in Media
9 Waves in Media	10 Waves in Media	11 <i>Nature of Science</i>	12 <i>Nature of Science</i>	13 FLEX End 1st Quarter

**QUARTER 2 PACING GUIDE****OCTOBER**

16 Planning Day	17 Energy Conservation	18 Energy Conservation	19 Energy Conservation	20 Energy Conservation
23 Energy Conservation	24 Temperature	25 Temperature	26 Temperature	27 Heat Flow

**NOVEMBER**

30 Heat Flow	31 Heat Flow	1 Heat Flow	2 Heat Flow	3 Heat Flow
6 Heat Flow	7 <i>Nature of Science</i>	8 FLEX <i>Nature of Science</i>	9 Atmosphere Layers	10 Veteran's Day
13 Atmosphere Layers	14 Weather	15 Weather	16 Weather	17 Earth's Layers

**20-24: THANKSGIVING BREAK****DECEMBER**

27 Earth's Layers	28 Earth's Layers	29 Earth's Layers	30 Weathering/Erosion	1 Weathering/Erosion
4 Rock Cycle	5 Rock Cycle	6 Rock Cycle	7 <i>Nature of Science</i>	8 FLEX <i>Nature of Science</i>
11 Plate Tectonics	12 Plate Tectonics	13 Plate Tectonics	14 Plate Tectonics	15 Plate Tectonics
18 Mid Year	19 Mid Year	20 End 2nd Quarter	21 Winter Break	22 Winter Break

**QUARTER 3 PACING GUIDE****JANUARY**

1 Winter Break	2 Winter Break	3 Winter Break	4 Winter Break	5 Planning Day
8 Rules and Procedures	9 Plate Tectonics	10 Plate Tectonics	11 Plate Tectonics	12 Mount. EQ. Volcanoes
15 Dr. MLK Day	16 Mount. EQ. Volcanoes	17 Mount. EQ. Volcanoes	18 Mount. EQ. Volcanoes	19 Mount. EQ. Volcanoes
22 Relative Dating	23 Relative Dating	24 Relative Dating	25 Absolute Dating	26 Absolute Dating

**FEBRUARY**

29 Absolute Dating	30 Geo Change/ Time	31 Geo Change/ Time	1 <i>Nature of Science</i>	2 FLEX <i>Nature of Science</i>
5 Homeostasis/Cell The.	6 Homeostasis/Cell The.	7 Organelles	8 Organelles	9 Organelles
12 Organelles	13 DNA	14 DNA	15 Human Body	16 Human Body
19 President's Day	20 Human Body	21 Human Body	22 Classification	23 Classification

**MARCH**

26 Classification	27 FLEX <i>Nature of Science</i>	28 Mitosis	29 Mitosis	1 Mitosis
4 Mitosis	5 Meiosis	6 Meiosis	7 Meiosis End of 3rd Quarter	8 Planning Day

**QUARTER 4 PACING GUIDE****MARCH****11-15 SPRING BREAK**

18 Heredity	19 Heredity	20 Heredity	21 Heredity	22 Heredity
25 Heredity	26 Punnett Squares	27 Punnett Squares	28 Punnett Squares	29 Good Friday

**APRIL**

1 Pedigrees	2 Pedigrees	3 Pedigrees	4 Pedigrees	5 <i>Nature of Science</i>
8 FLEX <i>Nature of Science</i>	9 Theory of Evolution	10 Theory of Evolution	11 Theory of Evolution	12 Fair Day
15 Theory of Evolution	16 Theory of Evolution	17 Theory of Evolution	18 Evidence of Evolution	19 Evidence of Evolution
22 Evidence of Evolution	23 Evidence of Evolution	24 Evidence of Evolution	25 Evidence of Evolution	26 Flex

**MAY**

29 Energy Transfer	30 Energy Transfer	1 Energy Transfer	2 Energy Transfer	3 Communities
6 Communities	7 Communities	8 Communities	9 Limiting Factors	10 Limiting Factors
13 Limiting Factors	14 <i>Nature of Science</i>	15 Human Impact	16 Human Impact	17 Human Impact
20 Review	21 Review	22 Review	23 EOC	24 EOC
27 Memorial Day	28 Biotechnology	29 Biotechnology	30 Last Day of School	31