

Grade 8 Science Pacing Guide 2022-2023

*NOTE: This guide identifies an APPROXIMATE place at which teachers should be in their instruction. Individual pace MAY VARY according to student supports and needs.

*Mandatory labs identified are required for understanding the topic and must be included during science instructional time on a weekly basis.

Quarter 1

Date	Grade 8 Topics (topic guides are linked) Grade 8 CLRI Connections (CLRI information is linked)	Mandatory Science Labs
Week 1 9.05.22 – 9.09.22* *9.05.22 - Labor Day	Establish Classroom Routines Overview of Class Structure	
Week 2 9.12.22 – 9.16.22	Unit 1 – Physical Science Topic 1 – Atoms and the Periodic Table	Topic 1 Opener: <i>u</i> Connect Lab – Modeling Matter
Week 3 9.19.22 – 9.23.22	Unit 1 – Physical Science Topic 1 – Atoms and the Periodic Table Lesson 2: Information Sheet: James Andrew Harris Lesson 2: Nearpod with 2 short embedded videos about James Andrew Harris	Lesson 2: <i>u</i> Investigate Lab – Classifying Elements
Week 4 9.26.22- 9.30.22	Unit 1 – Physical Science Topic 1 – Atoms and the Periodic Table	Lesson 4: <i>u</i> Investigate Lab – Properties of Molecular Compounds
Week 5 10.03.22 – 10.07.22	Unit 1 – Physical Science Topic 1 – Atoms and the Periodic Table Topic 2 – Chemical Reactions	Topic 2 Opener: <i>u</i> Connect Lab – What Happens When Chemicals React?
Week 6 10.10.22 – 10.14.22* *10.10.22 - Indigenous Peoples' and Italian-Heritage Day	Unit 1 – Physical Science Topic 2 – Chemical Reactions	Lesson 1: <i>u</i> Investigate Lab – Particles in Liquids
Week 7 10.17.22 – 10.21.22	Unit 1 – Physical Science Topic 2 – Chemical Reactions Lesson 3: Lloyd Albert Quarterman Article	Lesson 3: <i>u</i> Investigate Lab – Is Matter Conserved?
Week 8 10.24.22 – 10.28.22	Unit 1 – Physical Science Topic 2 – Chemical Reactions - (Lesson 4 enrichment) Lesson 4: George Washington Carver Article Topic 3 – Forces and Motion	Topic 3 Opener: <i>u</i> Connect Lab – Identifying Motion
Week 9 10.31.22 – 11.04.22	Unit 1 – Physical Science Topic 3 – Forces and Motion	Lesson 2: <i>u</i> Investigate Lab – Walking the Walk
Week 10 11.07.22 – 11.11.22* *11.08.22 - Election Day *11.11.22 – Veterans Day	Unit 1 – Physical Science Topic 3 – Forces and Motion	

[Sample Grade 8 Lab Activity Lesson Plan](#)- Use this lesson as an example of how to break up a 30-minute hands-on activity from 1 to 2 days

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Week 11 11.14.22– 11.18.22	Unit 1 – Physical Science Topic 3 – Forces and Motion	Lesson 3: <i>u</i> Investigate Lab – Newton Scooters
Week 12 11.21.22 – 11.25.22* *11.24.22-11.25.22 Thanksgiving Recess	Unit 1 – Physical Science Topic 3 – Forces and Motion	Lesson 4: <i>u</i> Investigate Lab – Observing Friction
Week 13 11.28.22 – 12.02.22	Unit 2 – Life Science Topic 4 – Genes and Heredity	Lesson 1: <i>u</i> Investigate Lab – Observing Pistils and Stamens
Week 14 12.05.22 – 12.09.22	Unit 2 – Life Science Topic 4 – Genes and Heredity	Lesson 2: <i>u</i> Investigate Lab – Chromosomes and Inheritance
Week 15 12.12.22 – 12.16.22	Unit 2 – Life Science Topic 4 – Genes and Heredity - (Lesson 5 enrichment) Lesson 5: “How can we find out about ancient Egyptian germs?”	Lesson 4: <i>u</i> Investigate Lab – Observing Traits
Week 16 12.19.22 – 12.23.22* *12.26.22-1.02.23 Winter Recess	Unit 1 – Life Science Topic 5 – Natural Selection and Changes Over Time	Topic 5 Opener: <i>u</i> Connect Lab – Walking Whales?
Week 17 1.03.23 – 1.06.23* *1.02.23 Winter Recess	Unit 1 – Life Science Topic 5 – Natural Selection and Changes Over Time	Lesson 1: <i>u</i> Investigate Lab – How Do Species Change Over Time?
Week 18 1.09.23 – 1.13.23	Unit 1 – Life Science Topic 5 – Natural Selection and Changes Over Time	Lesson 2: <i>u</i> Investigate Lab – Variation in a Population
Week 19 1.16.23 – 1.20.23* *1.16.2023 MLK Jr. Day	Unit 1 – Life Science Topic 5 – Natural Selection and Changes Over Time	Lesson 3: <i>u</i> Investigate Lab – Adaptations of Birds
Week 20 1.23.23 – 1.27.23	Unit 1 – Life Science Topic 5 – Natural Selection and Changes Over Time - (Lesson 5 enrichment) Lesson 5: “Where did the first people in the Caribbean come from?” Unit 3 – Earth and Space Science Topic 6 – History of Earth	Topic 6 Opener: <i>u</i> Connect Lab – Dividing History

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Week 21 1.30.23 – 2.03.23	Unit 3 – Earth and Space Science Topic 6 – History of Earth	Lesson 1: <i>u</i> Investigate Lab – The Story of Rocks
Week 22 2.06.23 – 2.10.23	Unit 3 – Earth and Space Science Topic 6 – History of Earth	Lesson 3: <i>u</i> Investigate Lab – Changes in the Water
Week 23 2.13.23 – 2.17.23	Unit 3 – Earth and Space Science Topic 7 – Energy in the Atmosphere and Ocean	Topic 7 Opener: <i>u</i> Connect Lab – Does a Plastic Bag Trap Heat?
*Mid-Winter Recess 2.20.23 – 2.24.23		
Week 24 2.27.23 – 3.03.23	Unit 3 – Earth and Space Science Topic 7 – Energy in the Atmosphere and Ocean Lesson 2: Warren Washington Biography	Lesson 2: <i>u</i> Investigate Lab – United States Precipitation
Week 25 3.06.23 – 3.10.23	Unit 3 – Earth and Space Science Topic 7 – Energy in the Atmosphere and Ocean	Lesson 3: <i>u</i> Investigate Lab – Modeling Ocean Current Formation
Week 26 3.13.23 – 3.17.23	Unit 3 – Earth and Space Science Topic 8 – Climate	Topic 8 Opener: <i>u</i> Connect Lab – How Do Climates Differ?
Week 27 3.20.23 – 3.24.23	Unit 3 – Earth and Space Science Topic 8 – Climate	Lesson 1: <i>u</i> Investigate Lab – Classifying Climates
Week 28 3.27.23 – 3.31.23	Unit 3 – Earth and Space Science Topic 8 – Climate Lesson 2: “What Climate Science Loses Without Enough Black Researchers”	Lesson 2: <i>u</i> Investigate Lab – What is the Greenhouse Effect?
*Spring Recess 4.03.23-4.07.23		
Week 29 4.10.23 – 4.14.23	Unit 3 – Earth and Space Science Topic 8 – Climate Lesson 3: “Four Black advocates who are diversifying the climate movement”	
Week 30 4.17.23 – 4.21.23	Unit 3 – Earth and Space Science Topic 9 – Earth-Sun-Moon System	Topic 9 Opener: <i>u</i> Connect Lab – What is at the Center?

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Week 31 4.24.23 – 4.28.23* *4.26.23 – Early Release Day *4.27.23 – Superintendent Conference Day	Unit 3 – Earth and Space Science Topic 9 – Earth-Sun-Moon System Lesson 2: Mae Jemison PBS Video	Lesson 2: <i>u</i> Investigate Lab – Lighten Up!
Week 32 5.01.23 – 5.05.23	Unit 3 – Earth and Space Science Topic 9 – Earth-Sun-Moon System	Lesson 3: <i>u</i> Investigate Lab – How Does the Moon Move?
Week 33 5.08.23 - 5.12.23* *5.10.23 – Early Release Day *5.11.23 – Superintendent Conference Day	Unit 3 – Earth and Space Science Topic 10 – Solar System and the Universe Lesson 1 – Solar System Objects Topic 10 Opener: “The African Americans in Air and Space”	Topic 10 Opener: <i>u</i> Connect Lab – Planetary Measures
Week 34 5.15.23 – 5.19.23	ILST REVIEW <u>*last year of testing with 1996 standards*</u>	
Week 35 5.22.23 – 5.26.23	ILST REVIEW ILST Performance Administration <u>*last year of testing with 1996 standards*</u>	
Week 36 5.29.23– 6.02.23* *5.29.2023 – Memorial Day	ILST REVIEW ILST Performance Administration <u>*last year of testing with 1996 standards*</u>	
Week 37 6.05.23– 6.09.23 *ILST Written Assessment 6.5.2023	Unit 3 – Earth and Space Science Topic 10 – Solar System and the Universe Lesson 2: George Carruthers Article Lesson 2: Neil deGrasse Tyson Article	Lesson 2: <i>u</i> Investigate Lab – Space Exploration Vehicle
Week 38 6.12.23 – 6.16.23	Unit 3 – Earth and Space Science Topic 10 – Solar System and the Universe	Lesson 3: <i>u</i> Investigate Lab – How Far is That Star?
Week 39 6.19.23 – 6.23.23* *6.19.23 – Juneteenth Holiday *6.23.23 – Rating Day/SCD	Unit 3 – Earth and Space Science Topic 10 – Solar System and the Universe	Lesson 4: <i>u</i> Investigate Lab – Model the Milky Way