Science Pacing Guide

Lessons highlighted in blue were not taught/not taught in depth during the 2020-2021 school year.

Grade /Science/ Unit #1			
Time Frame	**Content Focus**	**Skill Focus**	**Standards**
2 Weeks	**What is a Scientist & Scientific Method** - Make Observations - Make Predictions - Make Inferences - Scientific Method & Lab	Demonstrate an understanding of asking questions, and carrying out investigations in order to solve them	3-5-ETS1-

Formative Assessment Plan	Summative Assessment Plan
● Lab ● Interactive notebook	● Class discussion ● Common Assessments - Post test
Main Resources	**Supplementary Resources**
● Read and Highlight informational texts ● Text Book ● What is a scientist Brain Storm ● Scientific Method chart	● Gummy Bear Lab ● Drops on a penny lab ● Inferencing Briefcase

Science Pacing Guide

Grade /Science/ Unit #2			
Time Frame	**Content Focus**	**Skill Focus**	**Standards**
4 weeks	**Plate Tectonics Unit**		
3-4 days	**Continental Drift**	Identify evidence from rock formations, fossils, and rock layers to identify evidence to support continental drift	1.4-4.4.1.SEP-1 1.4-4.4.3.CC-1
3-4 days	**Plate Boundaries**	Compare the different types of plate boundaries and their impact on the Earth's surface.	1.4-4.4.3.CC-1
4-5 days	**Earthquakes**	Determine that most earthquakes occur in bands that are often along the boundaries between continents and oceans. Plate movement causes earthquakes. Create observations and solutions about humans buildings to reduce impacts of Earths process on humans.	1.4-4.4.3.DCI-1 1.4-4.4.4.CC-1
5-6 days	**Mountain Formations & Volcanos**	Determine how plate boundaries help to form volcanoes. Explain how major mountain chains form inside continents or near their edges based on plate movement.	1.4-4.4.3.DCI-1

Formative Assessment Plan	Summative Assessment Plan
• Lab Activities • Exit Slips	• Class discussion • Quizzes • Common Assessments - Post test

Main Resources	Supplementary Resources
• Read and Highlight informational texts • Text Book • Foldables • Brain Pop •	• Pangea Puzzle • Plate tectonics Lab • Surviving Earthquake • Mountain Types sort • Volcano Types diagram • Scholastic Storyworks: Beauty and Disaster

Grade /Science/ Unit #3			
Time Frame	**Content Focus**	**Skill Focus**	**Standards**
3-4 weeks	**Rock Cycle**		
5-6 days	**Weathering & Erosion**	Explain the process of weathering and erosion to demonstrate how it changes the face of Earth's surface over time.	4-ESS2-1. 1.4-4.4.1.CC-1
5 days	**Classifying Rocks/ Types of Rocks**	Classify rocks by their physical traits including sedimentary rocks, igneous rocks, and metamorphic rocks.	4-ESS1-1 1.4-4.4.1.DCI-1
5 days	**Rock Cycle**	Construct the rock cycle using knowledge about how rocks are formed and created from different processes on Earth.	4-ESS2-1. 1.4-4.4.1.CC-1 1.4-4.4.1.SEP-1

Formative Assessment Plan	Summative Assessment Plan
• Lab Activities • Exit Slips	• Class discussion • Quizzes • Common Assessments - Post test
Main Resources	**Supplementary Resources**
• Read and Highlight informational texts • Text Book • Foldables • Brain Pop • Study Jams	• Classifying Rocks Labs • Rock Sort • Rock on Lab • Rock Cycle Game • Sugar Cube Shake • Chemical Weathering • There She Blows Lab • Sticks and Stones Lab

Grade /Science/ Unit #4			
Time Frame	**Content Focus**	**Skill Focus**	**Standards**
3 weeks	**Energy**		
1-2 days	**Static Electricity**	Explain that energy can be transferred in various ways through objects	4-PS3-1 4-PS3-2 ***1.4-1.4.3.DCI-2***
1-2 days	**Conductors and Insulators**	Determine what materials let electricity easily flow through and which materials do not.	4-PS3-1 4-PS3-2
2 days	**Open and Closed Circuits**	Model how to open and close circuits and how circuits are used to transfer energy from one place to another.	4-PS3-2

2-3 days	**Parts of a Circuit**	Experiment with parts of a circuit in order to understand how electricity can produce motion, sound, heat or light.	4-PS3-3
2-3 days	**Types of Circuits**	Identify different types of circuits to determine how energy can be transferred in different ways.	4-PS3-3
2-3 days	**Electricity**	Use knowledge of the engineering process to discover NJ inventors who battled with different current types: AC and DC, and to make comparisons of these two systems.	4-PS3-3 ***1.5-5.5.2.CC-1***

Formative Assessment Plan	Summative Assessment Plan
• Lab Activities • Exit Slips	• Class discussion • Quizzes • Common Assessments - Post test
Main Resources	**Supplementary Resources**
• Read and Highlight informational texts • Text Book • Foldables • Brain Pop	• Snap Circuits • Science A-Z • Static Lab • Conductors and Insulators Lab • Switch it on Switch it off Lab • All in a row lab • Side by Side lab • Scholastic Storyworks: Light

Grade /Science/ Unit #5			
Time Frame	**Content Focus**	**Skill Focus**	**Standards**
5 weeks	**Plants Adaptations**		
3 days	**Types of plants**	Classify different types of plants based on how they reproduce.	1.4-3.4.2.DCI-1 1.4-3.4.2.CC-1
7 days	**Parts of a plant**	Identify and describe the parts of a plant including, seeds, roots, stems, leaves and their importance for survival.	1.4-3.4.2.DCI-1 1.4-3.4.2.CC-1
3 days	**Photosynthesis**	Analyze the process of photosynthesis and the elements needed in order for plants to make their own energy.	1.4-3.4.2.DCI-1 1.4-3.4.2.CC-1 1.4-3.4.2.SEP-1
2 days	**Parts of a flower**	Categorize the parts of a flower including male and female parts, to support reproduction. Discuss how different plants have adapted parts of a flower to support survival.	1.4-3.4.2.DCI-1 1.4-3.4.2.CC-1
2 days	**Pollination**	Investigate how pollination occurs for different plant species and its importance.	1.4-3.4.2.DCI-1
4-5 days	**Pollinators and Reproduction**	Distinguish how plants and animals have adaptations in order to support the reproduction process for plants.	1.4-3.4.2.DCI-1 1.4-3.4.3.DCI-1
3-4 days	**Plant Life Cycle**	Identify the stages of the life cycle of a plant.	1.4-3.4.2.DCI-1 1.4-3.4.2.CC-1

Formative Assessment Plan	Summative Assessment Plan

• Lab Activities • Exit Slips	• Class discussion • Quizzes • Common Assessments - Post test
Main Resources	**Supplementary Resources**
• Read and Highlight informational texts • Text Book • Foldables • Brain Pop	• Observing a seed lab • Seed sorting lab • Greenhouse experiment • Root classification lab • Chlorophyll Rubbing • Photosynthesis • Parts of a flower dissection • Anatomy of a flower diagram • A closer look at pollination • Honey bees • National Geographic magazine-Pollination Nation