

White County Schools

2025-2026 4th Grade Science Pacing Guide

(We need to put in Maps testing window dates and end core dates as soon as they roll out)

<u>Grading Period</u>	<u>Topics Covered</u>	<u>Descriptions: (Topic Titles, Days Spent on each Topic, Standards)</u>	<u>Common Assessments: (Dates/Standards/Notes)</u>
First Nine Weeks August 1 - October 3	Map Testing Window: Sept. 4-progress reports **End Core testing window: **Fall break October 13-17**	Topic 1: Energy and Motion Topic 2: Waves and Information	4.PS3.1: Use evidence to explain the cause and effect relationship between the speed of an object and the energy of an object. 4.PS3.2: Carry out an investigation to show how faster speeds during a collision can cause a bigger change in the shape of the colliding objects. 4.PS3.3: Describe how stored energy can be converted into another form for practical use in a system. PS3.A: Definitions of Energy PS3.B: Conservation of Energy and Energy Transfer PS3.C: Relationship Between Energy and Forces and Fields 4.PS4.1: Use a model of a simple wave to describe amplitude, wavelength, and how waves can add or cancel each other as they cross. 4.PS4.2: Construct an explanation for how the colors of available light

			4.ETS2.1: Explain how existing technologies have been designed or improved to increase their benefits, to decrease known risks, and to meet societal demands (e.g., artificial limbs, seatbelts, cellphones). PS4.A Wave Properties: Mechanical and Electromagnetic PS4.B Electromagnetic Radiation PS4.C Information Technologies and Instrumentation
Second Nine Weeks October 6 - December 17	Map Testing Window: Progress reports: November 13 **End Core Test window:	Topic 3: Matter and Energy in Ecosystems	Mid Core (19 days) 4.LS2.1 Develop and use models to illustrate the flow of matter through a food web/food chain beginning with sunlight and including producers, consumers, and decomposers. 4.LS2.2 Using information about the roles of organisms (producers, consumers, decomposers) in an ecosystem, evaluate how those roles are interconnected in a food web, and communicate how the organisms are continuously able to meet their needs in a stable food web. 4.LS2.3 Develop and use models to determine the effects of introducing a species to, or removing a species from, an ecosystem and how either one can damage the balance of an ecosystem. 4.LS2.4

		Topic 4: Earth's Features and Patterns	Analyze and interpret data about changes in the environment to explain how some organisms may survive and reproduce, some may not survive, others move to new locations, yet others move into the transformed environment. 4.ESS2.3 Provide examples to support the claim that organisms affect the physical characteristics of their regions (e.g., plants' roots hold soil in place, beaver shelters alter the flow of water, paved surfaces affect runoff, leaves from trees can obstruct waterways). 4.ESS1.1: Generate and support a claim with evidence that over long periods of time, erosion (i.e., weathering and transportation) and deposition have changed landscapes and created new landforms. 4.ESS2.1: Collect and analyze data from observations to provide evidence that rocks, soils, and sediments are broken into smaller pieces through mechanical weathering (e.g., frost wedging, abrasion, tree root wedging) and are transported by water, ice, wind, gravity, and vegetation. 4.ESS2.2: Explain how data from maps and other reliable sources can be used to determine patterns for the locations of mountain ranges, deep ocean trenches, volcanoes, and earthquakes. 4.ESS2.3: Provide examples to support the claim that organisms affect the
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			physical characteristics of their regions (e.g., plants' roots hold soil in place, beaver shelters alter the flow of water, paved surfaces affect runoff, leaves from trees can obstruct waterways). ESS2.A: Earth Materials and Systems ESS2.B: Plate Tectonics and Large-Scale System Interactions End Core (24 days)
Third Nine Weeks January 5- March 6	Map Testing Window: Progress report- February 5 ** End Core Testing Window:	Topic 5: The History of Planet Earth Topic 6: Fossil Evidence	Mid Core (20 days) 4.ESS1.2: Use evidence from the presence and location of fossils to determine the order in which rock strata were formed. ESS1.C: The History of Planet Earth 4.LS4.1 Obtain, evaluate, and communicate information about what a fossil is and ways a fossil can provide information about the past, such as a) the nature of environments and b) animals that existed long ago but no longer exist. 4.ETS1.1 Categorize the effectiveness of design solutions by testing and comparing them to specified criteria and constraints LS4.A Evidence of Common Ancestry

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