

5th grade Science Pacing guide 2014-2015

1 st 9 weeks	2 nd 9 weeks	3 rd 9 weeks	4 th 9 weeks
<p><u>Earth Systems, Structures & Processes</u> 5.E.1 Understand weather patterns and phenomena, making connections to the weather in a particular place and time.</p> <p>5.E.1.1 Compare daily and seasonal changes in weather conditions (including wind speed and direction, precipitation, and temperature) and patterns.</p> <p>5.E.1.2 Predict upcoming weather events from weather data collected through observation and measurements.</p> <p>5.E.1.3 Explain how global patterns such as the jet stream and water currents influence local weather in measurable terms such as temperature, wind direction and speed, and precipitation.</p> <p><u>*Understand and be able to explain the steps of the scientific process.</u></p> <p>5.P.2.1 Explain how the sun’s energy impacts the processes of the water cycle (including, evaporation, transpiration, condensation, precipitation and runoff).</p>	<p><u>Structures & Functions of Living Organisms</u> 5.L.1 Understand how structures and systems of organisms (to include the human body) perform functions necessary for life.</p> <p>5.L.1.1 Explain why some organisms are capable of surviving as a single cell while others require many cells that are specialized to survive.</p> <p>5.L.1.2 Compare the major systems of the human body (digestive, respiratory, circulatory, muscular, skeletal, and cardiovascular) in terms of their functions necessary for life.</p> <p><u>Ecosystems</u></p> <p>5.L.2 Understand the interdependence of plants and animals with their ecosystem.</p> <p>5.L.2.1 Compare the characteristics of several common ecosystems, including estuaries and salt marshes, oceans, lakes and ponds, forests, and grasslands).</p> <p>5.L.2.2 Classify the organisms within an ecosystem according to the function they serve: producers, consumers, or decomposers (biotic factors).</p> <p>5.L.2.3 Infer the effects that may result from the interconnected relationship of plants and animals to their ecosystem.</p> <p><u>Evolution and Genetics</u></p> <p>5.L.3 Understand why organisms differ from or are similar to their parents based on the characteristics of the organism.</p> <p>5.L.3.1 Explain why organisms differ from or are similar to their parents based on the characteristics of the organism.</p> <p>5.L.3.2 Give examples of likenesses that are inherited and some that are not.</p>	<p><u>Matter, Properties and Change</u> 5.P.2 Understand the interactions of matter and energy and the changes that occur.</p> <p>5.P.2.2 Compare the weight of an object to the sum of the weight of its parts before and after an interaction.</p> <p>5.P.2.3 Summarize properties of original materials, and the new material(s) formed, to demonstrate that a change has occurred.</p> <p><u>Energy: Conservation and Transfer</u> 5.P.3 Explain how the properties of some materials change as a result of heating and cooling.</p> <p>5.P.3.1 Explain the effects of the transfer of heat (either by direct contact or at a distance) that occurs between objects at different temperatures. (conduction, convection or radiation)</p> <p>5.P.3.2 Explain how heating and cooling affect some materials and how this relates to their purpose and practical applications.</p>	<p><u>Forces and Motion</u> 5.P.1 Understand force, motion and the relationship between them.</p> <p>5.P.1.1 Explain how factors such as gravity, friction, and change in mass affect the motion of objects.</p> <p>5.P.1.2 Infer the motion of objects in terms of how far they travel in a certain amount of time and the direction in which they travel.</p> <p>5.P.1.3 Illustrate the motion of an object using a graph to show a change in position over a period of time.</p> <p>5.P.1.4 Predict the effect of a given force or a change in mass on the motion of an object.</p>

