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| **Standard** | **First Nine Weeks** | **Second Nine Weeks** | **Third Nine Weeks** | **Fourth Nine Weeks** |
| **5.P.1 Understand force, motion and the relationship between them.** |  |  |  | **5.P.1.1** Explain how factors such as gravity, friction, and change in mass affect the  motion of objects.  **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.  **5.P.1.3** Illustrate the motion of an object using a graph to show a change in position  over a period of time.  **5.P.1.4** Predict the effect of a given force or a change in mass on the motion of an  object. |
| **5.P.2 Understand the interactions of matter and energy and the changes that occur.** | **5.P.2.1 Explain how the sun’s energy impacts the processes of the water cycle (including evaporation, transpiration,**  **condensation, precipitation and runoff).** | **5.P.2.3 Summarize properties of original materials, and the new material(s) formed, to demonstrate that a change**  **has occurred.** |  | **5.P.2.2** Compare the weight of an object to the sum of the weight of its parts before  and after an interaction. |

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| **5.P.3 Explain how the properties of some materials change as a result of heating and cooling.** |  | **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)**  **5.P.3.2 Explain how heating and cooling affect some materials and how this relates to their purpose and practical applications.** |  |  |
| **5.E.1 Understand weather patterns and phenomena, making connections to the weather in a particular place and time.** | **5.E.1.1** Compare daily and seasonal changes in weather conditions (including wind  speed and direction, precipitation, and  temperature) and patterns.  **5.E.1.2** Predict upcoming weather events from  weather data collected through observation and measurements.  **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. |  |  |  |

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| **5.L.1 Understand how structures and systems of organisms (to include the human body) perform functions necessary for life.** |  |  | **5L1.1** Explain why some organisms are capable of surviving as a single cell  while others require many cells that are specialized to survive.  **5L1.2** Compare the major systems of the  human body (digestive, respiratory, circulatory, muscular, skeletal, and  cardiovascular) in terms of their functions necessary for life. |  |
| **5.L.2 Understand the interdependence of plants and animals with their ecosystem.** |  | **5L2.1** Compare the characteristics of several common ecosystems, including estuaries and salt marshes, oceans, lakes and ponds, forests, and grasslands.  **5L2.2** Classify the organisms within an ecosystem according to the function they serve: producers, consumers, or  decomposers (biotic factors).  **5L2.3** Infer the effects that may result from the interconnected relationship of  plants and animals to their ecosystem. |  |  |
| **5.L.3 Understand why organisms differ from or are similar to their parents based on the characteristics of the organism** |  |  | **5L3.1** Explain why organisms differ from or are similar to their parents based on  the characteristics of the organism.  **5.L.3.2** Give examples of likenesses that are inherited and some that are not. |  |