Grade 3 Science Progress Report Card Rubric

Science Reporting Standard	December	March	June
Demonstrates understanding of unit concepts, facts, principles and methods ***M: Consistently demonstrates understanding of all of the following unit concepts:*** ***P: Inconsistently demonstrates understanding of one or more of the unit concepts.***	• Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next. (3-ESS2-1) • Climate describes a range of an area's typical weather conditions and the extent to which those conditions vary over years. (3-ESS2-2) • Humans cannot eliminate natural hazards but can take steps to reduce their impacts. (3-ESS3-1)	• Each force acts on one particular object and has both strength and a direction. • An object at rest typically has multiple forces acting on it, but they add to give zero net force on the object. • Forces that do not sum to zero can cause changes in the object's speed or direction of motion. (Boundary: Qualitative and conceptual) (3-PS2-1) • An object's motion can be observed and measured; when that past motion exhibits a regular pattern, future motion can be predicted from it. (3-PS2-2) • Objects in contact exert forces on each other. (3-PS2-1) • Electric and magnetic forces between a pair of objects do not require that the objects be in contact. • The sizes of electrical and magnetic forces depend on the properties of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other. (3-PS2-3),(3-PS2-4)	• Reproduction is essential to the continued existence of every kind of organism. • Plants and animals have unique and diverse life cycles. (3-LS1-1) • Being part of a group helps animals obtain food, defend themselves, and cope with changes. (3-LS2-1) • Many characteristics of organisms are inherited from their parents. (3-LS3-1) • Different organisms vary in how they look and function because they have different inherited information. (3-LS3-1) • The environment also affects the traits that an organism develops. (3-LS3-2) • Many characteristics involve both inheritance and environment. (3-LS3-2)

Observes, questions, investigates, explains, and communicates using appropriate vocabulary. ***M: Consistently demonstrates understanding of all of the following unit concepts:*** ***P: Inconsistently demonstrates understanding of one or more of the unit concepts.***	• Analyzes weather data to make predictions. • Represents weather and climate data in tables and various graphical displays (bar graphs, pictographs and/or pie charts) to reveal patterns. • Obtains and combines information to describe climates in different regions of the world. • Tests the design of a structure that reduces the impacts of a weather-related hazard.	• Plans and conducts an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. • Asks questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. • Generates and compares multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. • Plans and carries out fair tests to identify aspects of a design that can be improved.	• Develops models to describe life cycles that all organisms have in common (birth, growth, reproduction, and death). • Generates and compares multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. • Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms. • Uses evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. • Constructs an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.