|  |  |  |
| --- | --- | --- |
| **SCIENCE Pacing Guide 2018/19** | | |
| **Time frame** | **Standards** | **Resources** |
| Aug. - Sept. | **PS2.A: Forces and Motion**  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, but not quantitative addition of forces are used at this level.) (3-PS2-1)  The patterns of an object’s motion in various situations can be observed and measured; when that past motion exhibits a regular pattern, future motion can be predicted from it. (Boundary: Technical terms, such as magnitude, velocity, momentum, and vector quantity, are not introduced at this level, but the concept that some quantities need both size and direction to be described is developed.) (3-PS2-2)   |  | | --- | |  | | Engineering/ Technology |
| Oct. | **PS2.B: Types of Interactions**  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 the forces in each situation 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) | Engineering/ Technology |
| Dec.- Jan. | |  | | --- | | **ESS2.D: Weather and Climate**  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) | | Physical  Science |
| Feb. | |  | | --- | | **LS2.D: Social Interactions and Group Behavior**  Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size (Note: Moved from K–2). (3-LS2-1) | | Life Science |
| Apr. | **LS1.B: Growth and Development of Organisms**  Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles. (3-LS1-1)  **LS3.A: Inheritance of Traits**  Many characteristics of organisms are inherited from their parents. (3-LS3-1)  Other characteristics result from individuals’ interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment. (3-LS3-2)  **LS3.B: Variation of Traits**  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) | Life Science |