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| **5th Grade Science Teaching & Learning Framework** | | | | | | | |
| **Quarter 1** | **Quarter 2** | | **Quarter 3** | | **Quarter 4** | | |
| **Unit 1**  **9 weeks** | **Unit 2**  **6 weeks** | **Unit 3**  **6 weeks** | | **6 weeks**  **6 weeks** | **Unit 5**  **3 weeks** | **Unit 6**  **3 weeks** | **Review/ Enrich**  **2 weeks** |
| **Constructive and Destructive Forces** | **Physical and Chemical Changes** | **Electricity and Magnetism** | | **Cells and Microorganisms** | **Classification of Organisms** | **Inherited Traits and Learned Behaviors** | **Milestone Preparation** |
| **S5E1. Obtain, evaluate, and communicate information to identify surface features on the Earth caused by constructive &/or destructive processes.**  a. Construct an argument supported by scientific evidence to identify surface features as being caused by constructive &/or destructive processes.  b. Develop simple interactive models to collect data that illustrate how changes in surface features are/were caused by constructive &/or destructive processes.  c. Ask questions to obtain information on how technology is used to limit &/or predict the impact of constructive & destructive processes. | **S5P1. Obtain, evaluate, and, communicate information to explain the differences between a physical change & a chemical change.**  **a.** Plan & carry out investigations by manipulating, separating, & mixing dry & liquid materials & communicate collected data to demonstrate examples of physical change.  b. Construct an argument based on observations that the physical changes in the state of water are due to temperature differences, which cause small particles that cannot be seen to move differently.  c. Plan & carry out an investigation to determine if a chemical change occurred based on observable evidence.  (color, gas, temperature change, odor, new substance produced). | **S5P2. Obtain, evaluate, and communicate information to investigate electricity.**  a. Obtain & combine information from multiple sources to explain the difference between naturally occurring electricity (static) & human-harnessed electricity.  b. Design a complete, simple electric circuit, & explain all necessary components.  c. Plan and carry out investigations on common materials to determine if they are insulators or conductors of electricity. | **S5P3. Obtain, evaluate and communicate information about magnetism & its relationship to electricity.**  a. Construct an argument based on experimental evidence to communicate the differences in function & purpose of an electromagnet & magnet.  b. Plan & carry out an investigation to observe the interaction between a magnetic field and a magnetic object. | **S5L3. Obtain, evaluate, and communicate information to compare and contrast the parts of plant and animal cells.**  a. Gather evidence by utilizing technology tools to support a claim that plants and animals are comprised of cells too small to be seen without magnification.  b. Develop a model to identify and label parts of a plant cell (membrane, wall, cytoplasm, nucleus, chloroplasts) and of an animal cell (membrane, cytoplasm, and nucleus).  c. Construct an explanation that differentiates between the structure of plant and animal cells.  **S5L4. Obtain, evaluate and communicate information about how microorganisms benefit or harm larger organisms.**  a. Construct an argument using scientific evidence to support a claim that microorganisms are beneficial  b. Construct an argument using scientific evidence to support a claim that microorganisms are harmful. | **S5L1.**  **Obtain, evaluate and communicate information to group organisms using scientific, classification procedures.**  a. Develop a model that illustrates how animals are sorted into groups and how vertebrates are sorted into groups using data from multiple sources.  b. Develop a model that illustrates how plants are sorted into groups using data from multiple sources | **S5L2.**  **Obtain, evaluate and communicate information showing that some characteristics of organisms are inherited & other characteristics are acquired.**  a. Ask questions to compare & contrast the characteristics of instincts & learned behaviors.  b. ask questions to compare & contrast inherited & acquired physical traits. |  |