2nd Grade Science Teaching and Learning Framework					
Quarter 1	**Quarter 2**		**Quarter 3**		**Quarter 4**
Unit 1 **9 weeks**	**Unit 2** **4 weeks**	**Unit 3** **5 weeks**	**Unit 4** **4 weeks**	**Unit 5** **5 weeks**	**Unit 6** **9 weeks**
Properties of Matter/Intro to Pushes and Pull	**Pushes and Pulls**	**Stars**	**Seasons, Shadows, and the Moon**	**Environmental Changes**	**Life Cycles**
S2P1. Obtain, evaluate & communicate information about the properties of matter & changes that occur in objects. a. Describe & classify different objects according to their physical properties. b. Explain how structures made from small pieces can be disassembled & then rearranged to make new/different structures c. Observe & construct an explanation that some changes in matter caused by heating & cooling can be reversed & some changes are irreversible. **S2P2. Obtain, evaluate & communicate information to explain the effect of a force (a push or pull) in the movement of an object.**	**S2P2. Obtain, evaluate & communicate information to explain the effect of a force (a push or pull) in the movement of an object.** a. Plan & carry out an investigation to demonstrate how pushing & pulling on an object affects the motion of the object. b. Design a device to change the speed or direction of an object. c. Record & analyze data to decide if a design solution works as intended to change the speed or direction of an object with a force.	**S2E1. Obtain, evaluate & communicate information about stars having different sizes & brightness** a. Ask questions to describe the physical attributes (size and brightness) of stars. b. Construct an argument to support the claim that, although the sun appears to be the brightest and largest star, it is actually medium in size and brightness.	**S2E2. Obtain, evaluate & communicate information regarding the sun and moon and the sun's effect on Earth.** a. Carry out an investigation to determine the effect of the position of the sun in relation to a fixed object on Earth at various times of the day. b. Design/build a structure to demonstrate shadows changing throughout the day. c. Represent data in tables/graphs of length of day & night in seasons changing. d. Describe, illustrate & predict how appearance of the moon changes over time in a pattern.	**S2E3. Obtain, evaluate, and communicate information about how weather, plants, animals, and humans cause changes to the environment.** (*Clarification statement:* Changes should be easily observable and could be seen on school grounds or at home.) a. Ask questions to obtain information about major changes to the environment in your community. b. Construct an explanation of the causes and effects of a change to the environment in your community.	**S2L1. Obtain, evaluate & communicate information about life cycles of different living organisms** a. Ask questions to determine the sequence of the life cycle of common animals in your area: a mammal such as a cat, dog or classroom pet, a bird such as a chicken, an amphibian such as a frog, and an insect such as a butterfly. b. Plan and carry out an investigation of the life cycle of a plant by growing a plant from a seed and by recording changes over a period of time. c. Construct an explanation of an animal's role in dispersing seeds or in the pollination of plants. d. Develop models to illustrate the unique and diverse life cycles of other organisms.