Grade: 1 Subject: Science	Unit of Study: Penguins and/or Other Winter Animal Study
Big Idea/Rationale	 Students will investigate winter animals (penguins and/or other winter animals) to help determine that organisms have certain basic needs in common, such as food and water. In addition, they learn that organisms have certain needs that are specific to the type of organisms - such as type of water, range of temperature, and type of food. Students will investigate how penguins and/or other winter animals must either adapt to their environment or migrate. Students will discover that animals have predictable characteristics at different stages of development and that variations exist with a group of the same type of animal.
Enduring Understanding (Mastery Objective)	 All animals have basic needs, such as food, water, air, space, and shelter. Organisms grow, change, and die over time. Animals must adapt to their environment, migrate or die. There are variations within a group of the same type of animal.
Essential Questions (Instructional Objective)	 How do penguins and/or animals survive climate/temperature changes? How do animals work together to survive weather/climate changes? What are the similarities and differences between humans and other organisms?
Content (Subject Matter)	 Observing and describing the characteristics of penguins (animal). Making comparisons among a variety of penguins (animal) to see that variations exist within the species. Communicating ideas through writing, drawing, and discussion. Reading to enhance understanding of the basic needs of organisms and the diversity of life. Applying what students know about penguins and/or animal to what students know about themselves. Developing an interest in exploring the characteristics of penguins and/or animal. Gaining an awareness of the diversity of life. Developing positive attitudes toward different forms of life. Developing awareness that humans are similar to other living things. Developing sensitivity to the needs of living things.
Skills/ Benchmarks (CCSS Standards)	 5.1.P.B.2 Use basic science terms and topic-related science vocabulary. 5.1.P.C.1 Communicate with other children and adults to share observations, pursue questions, and make predictions and/or conclusions. 5.1.P.D.1 Represent observations and work through drawing, recording data, and writing.

	 5.3.P.B.1 Observe and describe how plants and animals obtain food from their environment, such as by observing the interactions between organisms in a natural habitat. 5.3.2.C.1 Describe the ways in which organisms interact with each other and their habitats in order to meet basic needs. 5.3.P.C.1 Observe and describe how natural habitats provide for the basic needs of plants and animals with respect to shelter, food, water, air, and light (e.g., dig outside in the soil to investigate the kinds of animal life that live in and around the ground). 5.3.2.C.2 Identify the characteristics of a habitat that enable the habitat to support the growth of many different plants and animals. 5.3.P.D.1 Observe and record change over time and cycles of change that affect living things (e.g., use baby photographs to discuss human change and growth, observe and photograph tree growth and leaf changes throughout the year, monitor the life cycle of a plant).
Materials and Resources	Books, video/DVD's, internet resources
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