Winter Birds Curricular Connections - Grade 1

Subject Area	Curriculum Connections	Notes
Mathematics	D1.1 sort sets of data about people or things according to one attribute, and describe rules used for sorting D1.2 collect data through observations, experiments, and interviews to answer questions of interest that focus on a single piece of information; record the data using methods of their choice; and organize the data in tally tables D1.3 display sets of data, using one-to-one correspondence, in concrete graphs and pictographs with proper sources, titles, and labels D1.4 order categories of data from greatest to least frequency for various data sets displayed in tally tables, concrete graphs, and pictographs D1.5 analyse different sets of data presented in various ways, including in tally tables, concrete graphs, and pictographs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions	See Topic 5 in the WRDSB Long Range Plans - Adapt the sample problems suggested to include birds - Use the physical characteristics of birds (e.g., colour, size, shape, beak, etc.) to sort by attributes - Use the graphs generated by @outdoor_ed on Twitter or check in with the WRDSB Outdoor Education site to analyse the Winter Bird data the Outdoor Education Specialists will be curating
Language	- read and demonstrate an understanding of a variety of literary, graphic, and informational texts, using a range of strategies to construct meaning; Writing - generate, gather, and organize ideas and information to write for an intended purpose and audience;	 oral communication skills are fundamental to the development of literacy and essential for thinking and learning to develop their oral communication skills, students need numerous opportunities to listen and talk about a range of subjects, topics, and experiences such as exploring "Winter Birds" pairing the exploration of Winter Birds with graphics and words (such as the pre-made bird identification sheets found on the WRDSB Outdoor Education website) with real life experiences, helps students to read information in context and

- draft and revise their writing, using a variety of informational, literary, and graphic forms and stylistic elements appropriate for the purpose and audience;
- use editing, proofreading, and publishing skills and strategies, and knowledge of language conventions, to correct errors, refine expression, and present their work effectively;

grasp the ideas that are communicated through text/graphic

- to become good writers, students need frequent opportunities to write for various purposes and audiences such as writing observations by **drawing and labeling a picture** of a bird or by **using different adjectives** to describe the bird's characteristics to a peer, teacher, or family member
- linking science and/social studies to media literacy could allow students the opportunity to demonstrate their knowledge about living things/physical characteristics by creating media texts like **creating a PSA** (poster, infographic, news clip, iMovie, etc.) showing the bird's role in the natural and built environment of their community

Social Studies

A2.3 analyse and construct simple maps as part of their investigations into places that are significant to them or to their family

A2.4 interpret and analyse information relevant to their investigations, using a variety of tools

A2.6 communicate the results of their inquiries, using appropriate vocabulary

B1.3 create a plan that outlines some specific ways in which they can responsibly interact with the built and/or natural environment in the local community, and describe how their actions might enhance the features of the local environment

B2.4 interpret and analyse information and data relevant to their investigations, using a variety of tools

B2.5 evaluate evidence and draw conclusions about some aspects of the interrelationship between people and natural and built features of their local community, and some of the effects of this interrelationship

- brainstorm why birds are important to have in a natural area or community.
- provide provocations for the students that would help them to consider the different types of birds that would be found in natural areas versus built areas. E.g., The birds found in Laurel Creek versus the birds in downtown Cambridge or Kitchener. Why would there be a difference?
- print a map of your current school neighbourhood, bird watch and plot the types of birds the students find. What do they notice? What do they wonder?
- by having rich and varied opportunities to experience and explore their natural and built community, children can begin to value and appreciate their immediate world and will hopefully generalize this knowledge to other situations and places.

	B3.1 identify some of the natural and built features of their community	
Science	Grade 1 1.1 identify personal action that they themselves can take to help maintain a healthy environment for living things, including humans 1.2 describe changes or problems that could result from the loss of some kinds of living things that are part of everyday life 2.2 investigate and compare the basic needs of humans and other living things, including the need for air, water, food, warmth, and space, using a variety of methods and resources 2.3 investigate and compare the physical characteristics of a variety of plants and animals, including humans 3.2 identify the physical characteristics (e.g., size, shape, colour, common parts) of a variety of plants and animals 3.4 describe the characteristics of a healthy environment, including clean air and water and nutritious food, and explain why it is important for all living things to have a healthy Environment 3.5 describe how showing care and respect for all living things helps to maintain a healthy environment (e.g., leaving all living things in their natural environment; feeding birds during cold winter months 3.6 identify what living things provide for other living things (e.g., trees produce the oxygen that	- create a homemade bird feeder for your classroom to hang is a visible spot for your students or on the school yard and keep track of, or observe the types of birds that access the feeder during the cold winter months. - have students be environmental stewards or ambassadors and take turns filling the feeder - choose a species of bird that is common to your school geographic region - use this bird as the base of anchor charts - research the types of birds that are found in the geographic area of your school - find these bird calls online. Do the bird calls change depending on the season? What do you notice? What do you wonder? - link science provocations to math and literacy (see above) - compare the basic needs of a common bird in your school's geographic area with the basic needs of humans - make a visual representation or 3D model

other living things breathe; plants such as tomatoes and apple trees and animals such as cows and fish provide food for humans and for other animals; a tree stump provides a home for a chipmunk; porcupines chew off the tips of hemlock limbs, providing food for deer in winter 3.7 describe how the things plants and animals use to meet their needs are changed by their use and are returned to the environment in different forms	