Winter Birds Curricular Connections - Grade 6

Subject Area	Curriculum Connections	Notes
Mathematics	D1.1 describe the difference between discrete and continuous data, and provide examples of each D1.2 collect qualitative data and discrete and continuous quantitative data to answer questions of interest about a population, and organize the sets of data as appropriate, including using intervals D1.3 select from among a variety of graphs, including histograms and broken-line graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graphs D1.4 create an infographic about a data set, representing the data in appropriate ways, including in tables, histograms, and broken-line graphs, and incorporating any other relevant information that helps to tell a story about the data D1.5 determine the range as a measure of spread and the measures of central tendency for various data sets, and use this information to compare two or more data sets D1.6 analyse different sets of data presented in various ways, including in histograms and broken-line graphs and in misleading graphs, by asking and answering questions about the data, challenging preconceived notions, and drawing conclusions, then make convincing arguments and informed decisions	For the winter bird count, students will be submitting data regarding how many birds of different species were seen, how long they were searching for birds, and where they saw the birds. Lots of data analysis and graphing possibilities.
Language	 read and demonstrate an understanding of a variety of literary, graphic, and informational 	

	texts, using a range of strategies to construct meaning;	
Social Studies	B1.3 explain why some environmental issues are of international importance and require the participation of other regions of the world, along with that of Canada, if they are to be effectively addressed	Because birds migrate without any consideration for borders, international agreements (like the Migratory Bird Act) that protect birds must be agreed upon by many different countries.
Science	1.1 analyse a local issue related to biodiversity, taking different points of view into consideration, and propose action that can be taken to preserve biodiversity, and act on the proposal 1.2 assess the benefits that human societies derive from biodiversity (e.g., thousands of products such as food, clothing, medicine, and building materials come from plants and animals) and the problems that occur when biodiversity is diminished 2.2 investigate the organisms found in a specific habitat and classify them according to a classification system 2.3 use scientific inquiry/research skills (see page 15) to compare the characteristics of organisms within the plant or animal kingdoms 2.4 use appropriate science and technology vocabulary, including classification, biodiversity, natural community, interrelationships, vertebrate, invertebrate, stability, characteristics, and organism, in oral and written communication 3.1 identify and describe the distinguishing characteristics of different groups of plants and animals and use these characteristics to further classify various kinds of plants and animals 3.2 demonstrate an understanding of biodiversity	Because birds inhabit every ecosystem on earth, they indicate to us where issues are. Even locally, we can use data to identify environmental problems. For example, in our region, all of the birds that eat flying insects are in decline, a result of habitat loss and widespread pesticide use. Birds provide an easy platform to introduce classification systems. Students can suggest different means of classifying birds based on physical characteristics, behaviour, food, preferred habitat, geographical location, DNA etc. Lots of possibilities.

as the variety of life on earth, including variety within each species of plant and animal, among species of plants and animals in communities, and among communities and the physical landscapes that support them

- 3.3 describe ways in which biodiversity within species is important for maintaining the resilience of those species
- 3.4 describe ways in which biodiversity within and among communities is important for maintaining the resilience of these communities
- 3.5 describe interrelationships within species (e.g., wolves travel in packs to defend their territory, raise their cubs, and hunt large prey), between species, and explain how these interrelationships sustain biodiversity
- 3.7 explain how invasive species reduce biodiversity in local environments