ONLINE PROGRAM CURRICULAR CONNECTIONS

Meet Your Nature Neighbours

(Grades 4-8)

You may know your human neighbours, but do you know which birds live in your local area? Which bugs? Do you know the names of the plants growing on the sidewalk? Do you want to? If you do, then this is the program for you!

First, you'll join an FRDC educator on Zoom for 1 hour to learn how to set up and conduct a biological survey of your neighbourhood. A survey creates a list of all the species that live in an area. Second, you'll go out on your own to conduct the survey. Third, you'll share your findings with the other workshop participants through a invite-only video message board.

A survey can be as simple or as complex as you want it to be, so all ages and levels of experience are welcome. You don't need any prior knowledge; this workshop will give you all the tools you need to conduct a successful survey!

Grade	Subject	Curricular Area	Features
K	Science	Big Ideas	• Plants and animals have observable features.
		Curricular Competencies	• Demonstrate curiosity and a sense of wonder about the world • Make exploratory observations using their senses • Experience and interpret the local environment • Discuss observations
		Content	• basic needs of plants and animals • adaptations of local plants and animals
1	Science	Big Ideas	• Living things have features and behaviours that help them survive in their environment.
		Curricular Competencies	• Demonstrate curiosity and a sense of wonder about the world • Make and record observations • Experience and interpret the local environment • Compare observations with those of others
		Content	• classification of living and non-living things • names of local plants and animals • structural features of living things in the local environment • behavioural adaptations of animals in the local environment
2	Science	Big Ideas	• Living things have life cycles adapted to their environment.

Fraser River DISCOVERY CENTRE

		Curricular Competencies	• Demonstrate curiosity and a sense of wonder about the world • Make and record observations • Experience and interpret the local environment • Compare observations with those of others
3	Science	Big Ideas	• Living things are diverse, can be grouped, and interact in their ecosystems.
		Curricular Competencies	• Demonstrate curiosity about the natural world • Suggest ways to plan and conduct an inquiry to find answers to their questions • Safely use appropriate tools to make observations and measurements, using formal measurements and digital technology as appropriate • Make observations about living and non-living things in the local environment • Collect simple data • Experience and interpret the local environment
		Content	• biodiversity in the local environment
4	Science	Big Ideas	• All living things sense and respond to their environment.
		Curricular Competencies	• Demonstrate curiosity about the natural world • Suggest ways to plan and conduct an inquiry to find answers to their questions • Safely use appropriate tools to make observations and measurements, using formal measurements and digital technology as appropriate • Make observations about living and non-living things in the local environment • Collect simple data • Experience and interpret the local environment
		Content	• Sensing and responding: other animals
5	Science	Big Ideas	• Multicellular organisms have organ systems that enable them to survive and interact within their environment.
		Curricular Competencies	• Demonstrate a sustained curiosity about a scientific topic or problem of personal interest • Observe, measure, and record data, using appropriate tools, including digital technologies • Experience and interpret the local environment
6	Science	Big Ideas	• Multicellular organisms rely on internal systems to survive, reproduce, and interact with their environment.
		Curricular Competencies	• Demonstrate a sustained curiosity about a scientific topic or problem of personal interest • Make observations in familiar or unfamiliar contexts

			• Observe, measure, and record data, using appropriate tools, including digital technologies
7	Science	Big Ideas	• Evolution by natural selection provides an explanation for the diversity and survival of living things.
		Curricular Competencies	• Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest • Make observations aimed at identifying their own questions about the natural world • Observe, measure, and record data (qualitative and quantitative), using equipment, including digital technologies, with accuracy and precision
		Content	• organisms have evolved over time • survival needs • natural selection
8	Science	Curricular Competencies	• Make observations aimed at identifying their own questions about the natural world • Observe, measure, and record data (qualitative and quantitative), using equipment, including digital technologies, with accuracy and precision • Experience and interpret the local environment
		Content	• characteristics of life
9	Science	Curricular Competencies	• Make observations aimed at identifying their own questions, including increasingly complex ones, about the natural world • Select and use appropriate equipment, including digital technologies, to systematically and accurately collect and record data • Seek and analyze patterns, trends, and connections in data, including describing relationships between variables (dependent and independent) and identifying inconsistencies
10	Science	Curricular Competencies	• Make observations aimed at identifying their own questions, including increasingly complex ones, about the natural world • Collaboratively and individually plan, select, and use appropriate investigation methods, including field work and lab experiments, to collect reliable data (qualitative and quantitative) • Select and use appropriate equipment, including digital technologies, to systematically and accurately collect and record data • Experience and interpret the local environment
		Content	• mechanisms for the diversity of life:

			○ mutation and its impact on evolution ○ natural selection and artificial selection
11	Science (Life)	Big Ideas	• Organisms are grouped based on common characteristics.
		Curricular Competencies	• Make observations aimed at identifying their own questions, including increasingly abstract ones, about the natural world • Collaboratively and individually plan, select, and use appropriate investigation methods, including field work and lab experiments, to collect reliable data (qualitative and quantitative) • Experience and interpret the local environment
		Content	• taxonomic principles for classifying organisms
12	Science (Life)	Big Ideas	• Biodiversity is dependent on the complex interactions and processes between biotic and abiotic factors. • All members of a species have common characteristics that evolve over time.
		Curricular Competencies	• Make observations aimed at identifying their own questions, including increasingly abstract ones, about the natural world • Collaboratively and individually plan, select, and use appropriate investigation methods, including field work and lab experiments, to collect reliable data (qualitative and quantitative) • Experience and interpret the local environment
		Content	• taxonomic principles for classifying organisms