RIVER SCHOOL PROGRAM CURRICULAR CONNECTIONS

BUILDING CLIMATE RESILIENCE: Salmon Sampling

(Grades 8-12)

Students will learn various sampling and tracking techniques used to study salmonids. Students will be focusing on the following questions: How does sampling help us make informed conservation decisions? What are some drawbacks from using these techniques? How do environmental conditions affect salmon growth? What can we do better to protect salmonid habitat in streams?

Grade	Subject	Curricular Area	Features
8	Science	Curricular Competences	• 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 • Make predictions about the findings of their inquiry • Observe, measure, and record data (qualitative and quantitative), using equipment, including digital technologies, with accuracy and precision • Experience and interpret the local environment • Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information • Communicate ideas, findings, and solutions to problems, using scientific language, representations, and digital technologies as appropriate • Consider social, ethical, and environmental implications of the findings from their own and others' investigations • Express and reflect on a variety of experiences and perspectives of place
		Content	• Characteristics of life
	Social Studies	Big Ideas	• Human and environmental factors shape changes in population and living standards
		Curricular Competencies	• Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and

			analyze ideas; and communicate findings and decisions. • Assess the significance of people, places, events, or developments at particular times and places • Explain different perspectives on past or present people, places, issues, or events, and compare the values, worldviews, and beliefs of human cultures and societies in different times and places • Make ethical judgements about past events, decisions, or actions, and assess the limitations of drawing direct lessons from the past
		Content	• Changes in populations and living standards
9	Science	Big Ideas	• The biosphere, geosphere, hydrosphere, and atmosphere are interconnected, as matter cycles and energy flows around them
		Curricular Competencies	• Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest • Assess risks and address ethical, cultural, and/or environmental issues associated with their proposed methods and those of others • Experience and interpret the local environment • Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information • Use knowledge of scientific concepts to draw conclusions that are consistent with evidence • Consider social, ethical, and environmental implications of the findings from their own and other's investigations • Express and reflect on a variety of experiences, perspectives, and worldviews through place
		Content	• Sustainability of systems • First Peoples knowledge of interconnectedness and sustainability

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	Social Studies	Big Ideas	• The physical environment influences the nature of political, social, and economic change
		Curricular Competences	• Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions • Assess how prevailing conditions and the actions of individuals or groups affect events, decisions, or developments.
		Content	• Physiographic features of Canada and geological processes • Local, regional, and global conflicts
10	Science	Big Ideas	• Energy is conserved, and its transformation can affect living things and the environment
		Curricular Competencies	• Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest • Assess risks and address ethical, cultural, and/or environmental issues associated with their proposed methods and those of others • Experience and interpret the local environment • Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information • Use knowledge of scientific concepts to draw conclusions that are consistent with evidence • Consider the changes in knowledge over time as tools and technologies have developed • Express and reflect on a variety of experiences, perspectives, and worldviews through place
		Content	• Mechanisms for the diversity of life
	Social Studies	Big Ideas	• Worldviews lead to different perspectives and ideas about development in Canadian society

		Curricular Competencies	• Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions. • Assess how underlying conditions and the actions of individuals or groups influence events, decisions, or developments, and analyze multiple consequences.
		Content	• Environmental, political, and economic policies
11	Environmental Science	Big Ideas	• Human practices affect the sustainability of ecosystems. • Complex roles and relationships contribute to diversity of ecosystems.
		Curricular Competences	• Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest • Assess risks and address ethical, cultural, and/or environmental issues associated with their proposed methods and those of others • Experience and interpret the local environment • Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information • Use knowledge of scientific concepts to draw conclusions that are consistent with evidence • Consider the changes in knowledge over time as tools and technologies have developed • Express and reflect on a variety of experiences, perspectives, and worldviews through place
		Content	• First Peoples ways of knowing and doing • Human actions and their impact on the ecosystem • First Peoples knowledge and other traditional ecological knowledge in sustaining biodiversity • Resource stewardship • Restoration practices

	Social Studies		
		Curricular Competences	• Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions. • Assess how underlying conditions and the actions of individuals or groups influence events, decisions, or developments, and analyze multiple consequences.
12	Environmental Science	Big Ideas	• Human actions affect the quality of water and its ability to sustain life • Human activities cause changes in the global climate system
		Curricular Competencies	• Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest • Assess risks and address ethical, cultural, and/or environmental issues associated with their proposed methods and those of others • Experience and interpret the local environment • Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information • Use knowledge of scientific concepts to draw conclusions that are consistent with evidence • Consider the changes in knowledge over time as tools and technologies have developed • Express and reflect on a variety of experiences, perspectives, and worldviews through place
		Content	• Land use and degradation • Availability and water use impacts • Changes to climate system
	Specialized Science 12	Big Ideas	• All members of a species have common characteristics that evolve over time • Climate change impacts biodiversity and ecosystem health.

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