

Curriculum Connections Overview:

Wastewater



Metro Vancouver's K-12 School and Youth Leadership Programs align strongly with the BC curriculum and provide support and resources for teachers, students, and youth leaders to explore sustainability concepts and topics. Find out more at metrovancover.org/school-programs.

Science

Big Ideas

Content

GRADE 2	Water sources, including local watersheds	<ul style="list-style-type: none"> Water sources, including local watersheds Water conservation The water cycle Local First Peoples knowledge of water: water cycles, conservation, connection to other systems
GRADE 3	Wind, water, and ice change the shape of the land	<ul style="list-style-type: none"> Major local landforms Local First Peoples knowledge of local landforms Observable changes in the local environment caused by erosion and deposition by wind, water, and ice
GRADE 4	All living things sense and respond to their environment	<ul style="list-style-type: none"> Biomes as large regions with similar environmental features
GRADE 5	Solutions are homogeneous mixtures	<ul style="list-style-type: none"> Solutions and solubility First Peoples concept of interconnectedness in the environment
GRADE 6	Everyday materials are often mixtures	<ul style="list-style-type: none"> Heterogenous mixtures Mixtures: separated using a difference in component properties, local First Peoples knowledge of separation and extraction techniques
SCIENCE 9	The biosphere, geosphere, hydrosphere, and atmosphere are interconnected, as matter cycles and energy flows through them	<ul style="list-style-type: none"> Matter cycles within biotic and abiotic components of ecosystems Sustainability of systems First Peoples' knowledge of interconnectedness and sustainability
ENVIRONMENTAL SCIENCE 11	<p>Complex roles and relationships contribute to diversity of ecosystems</p> <p>Changing ecosystems are maintained by natural processes</p> <p>Human practices affect the sustainability of ecosystems</p>	<ul style="list-style-type: none"> Abiotic characteristics: aquatic, atmospheric, edaphic Matter cycles through living organisms Human actions and their impact on ecosystems Resource stewardship
ENVIRONMENTAL SCIENCE 12	<p>Human actions affect the quality of water and its ability to sustain life</p> <p>Human activities cause changes in the global climate system</p> <p>Living sustainably supports the well-being of self, community, and Earth</p>	<ul style="list-style-type: none"> Water quality parameters and bioindicators Availability and water use impacts Global water security: laws and regulation, conservation of water Changes to climate systems Impacts of global warming Mitigation and adaptations Personal choices and sustainable living Global environmental ethics, policy, and law

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Social Studies

Big Ideas

Content

GRADE 1	<p>We shape the local environment and the local environment shapes who we are and how we live</p> <p>Healthy communities recognize and respect diversity of individuals and care for the local environment</p>	<ul style="list-style-type: none"> • Characteristics of the local community that provide organization and meet the needs of the community • Relationships between a community and its environment • Natural and human-made features of the local environment
GRADE 2	<p>Local actions have global consequences, and global actions have local consequences</p>	<ul style="list-style-type: none"> • How people's needs and wants are met in communities • Relationships between people and environment in different communities • Diverse features of the environment in other parts of Canada and the world • Rights and responsibilities of individuals regionally and globally • Rights and responsibilities of regional governments
GRADE 5	<p>Natural resources continue to shape the economy and identity of different regions of Canada</p>	<ul style="list-style-type: none"> • Resources and economic development in different regions of Canada
GRADE 7	<p>Geographic conditions shaped the emergence of civilizations</p>	<ul style="list-style-type: none"> • Human responses to particular geographic challenges and opportunities, including climate, landforms, and natural resources • Scientific, philosophical and technological developments
SOCIAL STUDIES 10	<p>The development of political institutions is influenced by economic, social, ideological, and geographic factors</p>	<ul style="list-style-type: none"> • Environmental, political, and economic policies
HUMAN GEOGRAPHY 12	<p>Demographic patterns and population distribution are influenced by physical features and natural resources</p> <p>Human activities change landscapes in a variety of ways</p> <p>A geographic region can encompass a variety of physical features and human interactions</p>	<ul style="list-style-type: none"> • Relationships between cultural traits, use of physical space, and impacts on the environment • Relationship between First Peoples and the environment • Global agricultural practices • Industrialization, trade and natural resource demands • Factors behind increased urbanization and its influence on societies and the environment • Relationships between natural resources and patterns of population settlement and economic development
URBAN STUDIES 12	<p>Decision making in urban and regional planning requires balancing political, economic, social, and environmental factors</p> <p>Urban planning decisions and other government policies can dramatically affect the overall quality of life in cities</p>	<ul style="list-style-type: none"> • Functions of local and regional government • Urban planning and urban design • Decision making in the planning of cities and regions • Contemporary issues in urban studies