GRADE 3

See the Preface for important information on the organization of the following material.

The Arts (2009)

A. DANCE

A1. Creating and Presenting

A1.1 imitate movements found in their natural environment in a variety of ways and incorporate them into a dance phrase *(e.g., modify the movements of animals, snow falling to the ground, ice melting, plants growing; connect a series of insect-like movements together to make a phrase)*
Teacher prompt: "How would the quality of your movements change if you were first moving like a bee and then moving like a butterfly [erratic, gliding]? Would your movements change to sharp and sudden, or smooth and slow? Would your path be direct and gliding or indirect and meandering?"

A1.2 use dance as a language to represent ideas from diverse literature sources, with a focus on time and energy *(e.g., … respond to a story about insects by depicting the sustained lifting and pulling actions of ants versus the sustained floating actions of butterflies)*
Teacher prompts: … "Which combination of elements will you choose from the time and energy chart to portray the rest of the insect characters in the story?"

A1.3 create dance phrases using a variety of pattern forms *(e.g., create dances with distinct, self-contained sections that share movement qualities using AB form, ABA form, or ABBA form; demonstrate a pattern physically by making "A" a soft and fluid section and "B" a fast and percussive section)*
Teacher prompt: "How would you show the water cycle using a pattern in dance? Which pattern form can you use to convey your idea?"

B. DRAMA

B1. Creating and Presenting

B1.2 demonstrate an understanding of how the element of time and place can support the development of role *(e.g., present tableaux, with transitions and thought tracking, that show differences between urban and rural settings and/or lifestyles to convey information about the characters)*

D. VISUAL ARTS

D1. Creating and Presenting

D1.1 create two- and three-dimensional works of art that express personal feelings and ideas inspired by the environment or that have the community as their subject *(e.g., make a symmetrical sculpture of an insect or a flower, using natural materials such as wood, pebbles, dry seed pods, feathers; draw a picture depicting a solution to the problem of litter in their community; make a painting of nature, focusing on a feature of personal interest or meaning to themselves)*

Teacher prompt: "Let's look at how artist Andy Goldsworthy uses natural materials in his art. How can you use the textures and shapes of sticks, leaves, or stones to express your ideas about the natural environment?"

D1.3 use elements of design in art works to communicate ideas, messages, and understandings *(e.g., use asymmetrical cut-paper composite shapes to depict a Canadian landscape, with a clear foreground, middle ground, and background; …)*

Teacher prompts: "When creating a sense of space in your landscape, should you create the foreground, middle ground, or background first? Why?" … "Why do you think Tom Thomson chose to paint a windswept tree in *The Jack Pine* instead of a symmetrical tree? How can you use asymmetry in your own art work?"

D1.4 use a variety of materials, tools, and techniques to respond to design challenges *(e.g.,* …

- mixed media: *use wax crayons, oil pastels, paint resist, and materials of various textures [e.g., yarn, found objects] to depict a tree or plant above ground, and use the technique of elaboration to depict what is hidden below ground*
- painting: *create a watercolour or tempera painting of animals, using colour in a non-representational and expressive way*
- printmaking: *paint stencil prints in warm and cool colours, creating a simplified pattern inspired by a favourite fruit*
- sculpture: *use modelling clay to create organic forms that are inspired by nature, such as shells, seed pods, and water-worn stones, and that show some kind of metamorphosis or transformation into another form or figure)*

Teacher prompts: … "What do the roots of a tree or plant look like below the ground? How could you draw a plant and show its roots?" "How does the emotional impact or mood of your print change when it is printed in warm instead of cool colours?"

D2. Reflecting, Responding, and Analysing

D2.3 demonstrate an awareness of the meaning of signs and symbols encountered in their daily lives and in works of art *(e.g., fonts or logos that remind them of specific companies, messages, or moods; the meaning of animals such as the orca in Aboriginal clan symbols or the Inukshuk in Aboriginal art)*

French As a Second Language – French Immersion (2001)

Although no overall or specific expectations explicitly address environmental education, in each of the strands the learning context (e.g., a topic or thematic unit related to the environment) and/or learning materials (e.g., books, websites, media) could be used to foster in students the development of environmental understanding.

Health and Physical Education (1998)

HEALTHY LIVING
The first overall expectation, with its focus on healthy active living, may lend itself to environmental education as students connect healthy eating and living with a healthy environment.

ACTIVE PARTICIPATION
As students acquire living skills through physical activities (third overall expectation), they can develop an appreciation of the natural environment, gain an experiential knowledge of the environment, and develop the problem-solving skills necessary for an environmentally literate citizen.

Language (2006)

In each of the strands the learning context (e.g., a topic or thematic unit related to the environment) and/or learning materials (e.g., books, websites, media) could be used to foster in students the development of environmental understanding. Also, in each of the strands, there are some expectations that can provide opportunities for exploring environmental education – for example, expectations on making inferences, making connections, analysing and evaluating texts, developing a point of view, and doing research.

In the Reading strand, expectation 2.1 explicitly provides a context for environmental education, and some examples or teacher prompts in the rest of the following expectations also explicitly provide a context for environmental education.

ORAL COMMUNICATION

2.7 use a variety of appropriate visual aids (*e.g., overheads, diagrams, graphic organizers, charts, artefacts*) to support or enhance oral presentations (*e.g., use a large-size labelled diagram to illustrate an explanation of how soil erodes*)

READING

1.5 make inferences about texts using stated and implied ideas from the texts as evidence
Teacher prompts: … "Why do you think early settlers chose wood to build their homes? Is there any evidence in the text to explain this?"

1.6 extend understanding of texts by connecting the ideas in them to their own knowledge and experience, to other familiar texts, and to the world around them
Teacher prompts: … "Do you know of other reasons why trees are important besides the reasons mentioned in the book?"

2.1 identify and describe the characteristics of a variety of text forms, with a focus on literary texts such as a fable or adventure story (*e.g., plot development, characters, setting*), graphic texts such as a comic book (*e.g., speech bubbles, illustrations, captions*), and informational texts such as a nature magazine (*e.g., table of contents, diagrams, photographs, labels, captions*)

WRITING

2.1 write short texts using a variety of forms (*e.g., a personal or factual recount of events or experiences that includes photographs or drawings and captions; a report comparing transportation in urban and rural communities; a paragraph explaining how physical geography and natural resources affected the development of early settler communities; a letter from the point of view of a settler, describing how First Nations people have taught the settlers to adapt to their new environment; a familiar story told from a new perspective; a patterned poem using rhyme or repetition*)

MEDIA LITERACY

1.3 express personal opinions about ideas presented in media texts (*e.g., respond to the messages in a public service announcement about recycling;* …)

Mathematics (2005)

Although no overall or specific expectations explicitly address environmental education, in each of the strands the learning context could be used to foster in students the development of environmental understanding (e.g., problems relating to climate or waste management could be the focus of student learning). In addition, the mathematical processes (e.g., problem solving, connecting) address skills that can be used to support the development of environmental literacy.

DATA MANAGEMENT AND PROBABILITY

In this strand, the collecting of data could be extended to include environmental issues.

Native Languages (2001)

Although no overall or specific expectations explicitly address environmental education, in each of the strands the learning context (e.g., a topic or thematic unit related to the environment) and/or learning materials (e.g., books, websites, media) could be used to foster in students the development of environmental understanding. Learning about aspects of Native culture and communities may provide for students opportunities to make connections with local places.

Science and Technology (2007)

UNDERSTANDING LIFE SYSTEMS: GROWTH AND CHANGES IN PLANTS

1 assess ways in which plants have an impact on society and the environment, and ways in which human activity has an impact on plants and plant habitats

1.2 assess the impact of different human activities on plants, and list personal actions they can engage in to minimize harmful effects and enhance good effects

2 investigate similarities and differences in the characteristics of various plants, and ways in which the characteristics of plants relate to the environment in which they grow

2.4 investigate ways in which a variety of plants adapt and/or react to their environment, including changes in their environment, using a variety of methods (*e.g., read a variety of non-fiction texts; interview plant experts; view DVDs or CD-ROMs*)

2.7 use a variety of forms (*e.g., oral, written, graphic, multimedia*) to communicate with different audiences and for a variety of purposes (*e.g., make illustrated entries in a personal science journal to describe plant characteristics and adaptations to harsh environments*)

3 demonstrate an understanding that plants grow and change and have distinct characteristics

3.2 identify the major parts of plants, including root, stem, flower, stamen, pistil, leaf, seed, and fruit, and describe how each contributes to the plant's survival within the plant's environment (*e.g., the roots soak up food and water for the plant; the stem carries water and food to the rest of the plant; the leaves make food for the plant with help from the sun; the flowers grow fruit and seeds for new plants*)

3.7 describe the different ways in which plants are grown for food (*e.g., on farms, in orchards, greenhouses, home gardens*), and explain the advantages and disadvantages of locally grown and organically produced food, including environmental benefits

3.8 identify examples of environmental conditions that may threaten plant and animal survival (*e.g., extreme heat and cold; floods and/or droughts; changes in habitat because of human activities such as construction, use of gas-powered personal watercraft on lakes*)

UNDERSTANDING STRUCTURES AND MECHANISMS: STRONG AND STABLE STRUCTURES

1 assess the importance of form, function, strength, and stability in structures through time

1.1 assess effects of strong and stable structures on society and the environment (*e.g., reliable load-bearing structures are essential in all areas of life for shelter, transportation, and many other everyday purposes; strong and stable structures can endure for long periods of time and provide a historical record of other societies and cultures; strong and stable structures can be hard to dispose of when their usefulness is ended and may then have a negative effect on the environment*)

1.2 assess the environmental impact of structures built by various animals and those built by humans

UNDERSTANDING MATTER AND ENERGY: FORCES CAUSING MOVEMENT

1 assess the impact of various forces on society and the environment

1.1 assess the effects of the action of forces in nature (natural phenomena) on the natural and built environment, and identify ways in which human activities can reduce or enhance this impact

UNDERSTANDING EARTH AND SPACE SYSTEMS: SOILS IN THE ENVIRONMENT

1 assess the impact of soils on society and the environment, and of society and the environment on soils

1.1 assess the impact of soils on society and the environment, and suggest ways in which humans can enhance positive effects and/or lessen or prevent harmful effects

1.2 assess the impact of human action on soils, and suggest ways in which humans can affect soils positively and/or lessen or prevent harmful effects on soils

2 investigate the composition and characteristics of different soils

2.2 investigate the components of soil (*e.g., non-living things such as pebbles and decaying matter; living things such as organic matter, bacteria, earthworms, and insects*), the condition of soil (*e.g., wet, dry*), and additives found in soil (*e.g., pesticides, fertilizers, salt*), using a variety of soil samples (*e.g., sand, clay, loam*) from different local environments, and explain how the different amounts of these components in a soil sample determine how the soil can be used

2.4 investigate the process of composting, and explain some advantages and disadvantages of composting (*e.g., set up a pop-bottle composter in the classroom, and observe what happens over time*)

3 demonstrate an understanding of the composition of soils, the types of soils, and the relationship between soils and other living things

3.1 identify and describe the different types of soils (*e.g., Sandy soil is made up of minerals and tiny pieces of rock that have come from the erosion and weathering of rocks. It feels gritty and does not stick together well. Sandy soil drains easily and quickly after a rain and warms up quickly in the spring, but does not hold water and nutrients as well as clay soil, and is eroded more easily. Loamy soil is made up of sand, silt, and clay in relatively equal amounts. It sticks together better than sand but not as well as clay. Loamy soil holds water and nutrients well, and also drains well so that sufficient air can reach the roots. Clay soil is a very fine-grained soil that is plastic when wet but hard when dried. It feels slick and smooth. Clay soils have poor drainage and aeration.*)

3.2 identify additives that might be in soil but that cannot always be seen (*e.g., pesticides, fertilizers, salt*)

Social Studies (2004)

HERITAGE AND CITIZENSHIP: EARLY SETTLEMENTS IN UPPER CANADA

- use a variety of resources and tools to gather, process, and communicate information about interactions between new settlers and existing communities, including First Nation peoples, and the impact of factors such as heritage, natural resources, and climate on the development of early settler communities

In connection with the following expectation, students may compare aspects of life within an environmental context.

- compare aspects of life in early settler communities and present-day communities

CANADA AND WORLD CONNECTIONS: URBAN AND RURAL COMMUNITIES

The specific expectations clarify the connections between the following overall expectations and environmental education.

- identify and compare distinguishing features of urban and rural communities
- use a variety of resources and tools to gather, process, and communicate geographic information about urban and rural communities
- explain how communities interact with each other and the environment to meet human needs