

SPEC School Gardens Program Links to New BC Curriculum

Area of Learning: SCIENCE

BIG IDEA

Kindergarten - Plants and animals have observable features

- Daily and seasonal changes affect all living things.

Grade 1 - Living things have features and behaviours that help them survive in their environment.

Grade 2 - Living things have life cycles adapted to their environment.

Grade 3 - Living things are diverse, can be grouped, and interact in their ecosystems.

Grade 4 - All living things sense and respond to their environment.

- The motions of Earth and the moon cause observable patterns that affect living and non-living systems.

Grade 5 - Multicellular organisms have organ systems that enable them to survive and interact within their environment.

- Earth materials change as they move through the rock cycle and can be used as natural resources.

- How do we interact with water, rocks, minerals, soils, and plants?

- How can Earth be considered a closed material system?

- How can we act as stewards of our environment?

Grade 6 - Multicellular organisms rely on internal systems to survive, reproduce, and interact with their environment.

Grade 7 - Evolution by natural selection provides an explanation for the diversity and survival of living things.

CURRICULUM COMPETENCIES

Kindergarten

Questioning and predicting

- Demonstrate curiosity and a sense of wonder about the world
- Observe objects and events in familiar contexts
- Ask simple questions about familiar objects and events

Planning and conducting

- Make exploratory observations using their senses
- Safely manipulate materials

Processing and analyzing data and information

- Experience and interpret the local environment
- Recognize First Peoples stories (including oral and written narratives), songs, and art, as

ways to share knowledge

- Discuss observations

Applying and innovating

- Take part in caring for self, family, classroom and school through personal approaches
- Transfer and apply learning to new situations
- Generate and introduce new or refined ideas when problem solving

Communicating

- Share observations and ideas orally

Grade 1

Questioning and predicting

- Demonstrate curiosity and a sense of wonder about the world
- Observe objects and events in familiar contexts
- Ask questions about familiar objects and events
- Make simple predictions about familiar objects and events

Planning and conducting

- Safely manipulate materials to test ideas and predictions

Processing and analyzing data and information

- Experience and interpret the local environment
- Recognize First Peoples stories (including oral and written narratives), songs, and art, as ways to share knowledge

Evaluating

- Compare observations with those of others
- Consider some environmental consequences of their actions

Applying and innovating

- Take part in caring for self, family, classroom and school through personal approaches
- Transfer and apply learning to new situations

Grade 2

Questioning and predicting

- Demonstrate curiosity and a sense of wonder about the world
- Observe objects and events in familiar contexts
- Ask questions about familiar objects and events
- Make simple predictions about familiar objects and events

Planning and conducting

- Safely manipulate materials to test ideas and predictions

Processing and analyzing data and information

- Experience and interpret the local environment
- Recognize First Peoples stories (including oral and written narratives), songs, and art, as ways to share knowledge

Evaluating

- Compare observations with those of others
- Consider some environmental consequences of their actions

Applying and innovating

- Take part in caring for self, family, classroom and school through personal approaches
- Transfer and apply learning to new situations

Grade 3

Questioning and predicting

- Demonstrate curiosity and a sense of wonder about the world
- Observe objects and events in familiar contexts
- Identify questions about familiar objects and events that can be investigated scientifically
- Make predictions based on prior knowledge

Planning and conducting

- Make observations about living and non-living things in the local environment

Processing and analyzing data and information

- Experience and interpret the local environment
- Identify First Peoples perspectives and knowledge as sources of information

Evaluating

- Make simple inferences based on their results and prior knowledge
- Identify some simple environmental implications of their and others' actions

Applying and innovating

- Contribute to care for self, others, school, and neighbourhood through personal or collaborative approaches
- Transfer and apply learning to new situations

Grade 4

Questioning and predicting

- Demonstrate curiosity about the natural world
- Observe objects and events in familiar contexts
- Identify questions about familiar objects and events that can be investigated scientifically
- Make predictions based on prior knowledge

Planning and conducting

- Make observations about living and non-living things in the local environment

Processing and analyzing data and information

- Experience and interpret the local environment
- Identify First Peoples perspectives and knowledge as sources of information

Evaluating

- Make simple inferences based on their results and prior knowledge
- Identify some simple environmental implications of their and others' actions

Applying and innovating

- Contribute to care for self, others, school, and neighbourhood through individual or collaborative approaches
- Transfer and apply learning to new situations

Grade 5

Processing and analyzing data and information

- Experience and interpret the local environment
- Identify First Peoples perspectives and knowledge as sources of information
- Identify patterns and connections in data
- Demonstrate an openness to new ideas and consideration of alternatives

Applying and innovating

- Contribute to care for self, others, and community through personal or collaborative approaches
- Transfer and apply learning to new situations

Grade 6

Processing and analyzing data and information

- Experience and interpret the local environment
- Identify First Peoples perspectives and knowledge as sources of information
- Identify patterns and connections in data
- Demonstrate an openness to new ideas and consideration of alternatives

Applying and innovating

- Contribute to care for self, others, and community through personal or collaborative approaches
- Transfer and apply learning to new situations

Grade 7

Processing and analyzing data and information

- Experience and interpret the local environment
- Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information

Applying and innovating

- Contribute to care for self, others, community, and world through personal or collaborative approaches
- Transfer and apply learning to new situations

CONTENT

Kindergarten

- basic needs of plants and animals
- adaptations of local plants and animals
- local First Peoples uses of plants and animals
- weather changes
- seasonal changes
- living things make changes to accommodate daily and seasonal cycles
- First Peoples knowledge of seasonal changes

Grade 1

- 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
- the knowledge of First Peoples
 - local First Peoples knowledge of the local landscape, plants and animals
 - local First Peoples understanding and use of seasonal rounds
- local patterns that occur on Earth and in the sky

Grade 2

- First Peoples use of their knowledge of life cycles
- water conservation

Grade 3

- biodiversity in the local environment
- the knowledge of local First Peoples of ecosystems
- energy is needed for life

Grade 4

- sensing and responding: plants
- local changes caused by Earth's axis, rotation, and orbit

Grade 5

- First Peoples concepts of interconnectedness in the environment: everything in the environment is one/connected (e.g., sun, sky, plants and animals) and we have a responsibility to care for them
- the nature of sustainable practices around BC's resources
- First Peoples knowledge of sustainable practices

Grade 7

- organisms have evolved over time

- survival needs
- natural selection
- climate change - recent impacts of humans

Credit: Prepared by Nikoo Boroumand for SPEC