

IPM 2024 EDUCATION BOOKLET KINDERGARTEN TO HIGH SCHOOL

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Science Curriculum

Science - Grade 1

- *Living things grow, take in food to create energy, make waste, and reproduce.
- *Plants and animals, including people, are living things.
- *Living things have basic needs (air, water, food and shelter) that are met from the environment.
- *Different kinds of living things behave in different ways.
- *All living things are important and should be treated with care and respect.

Science- Grade 2

- *Animals have distinct characteristics.
- *There are similarities and differences among different kinds of animals.
- *Humans need to protect animals and the places where they live.

Science- Grade 3

- *Plants have distinct characteristics.
- *There are similarities and differences among various types of plants.
- *Plants are the primary source of food for humans.
- *Humans need to protect plants and their habitats.
- *Plants are important to the planet.

Science- Grade 4

- *Soil is made up of living and non-living things.
- *The composition, characteristics, and condition of soil determine its capacity to sustain life.
- *Soil is an essential source of life and nutrients for many things.
- *Living things, including humans, interact with soils and can cause positive or negative changes.



Science- Grade 5

- *Energy sources are either renewable or non-renewable.
- *Energy can neither be created nor destroyed, but it can be transformed.
- *Choices about using energy and resources have both immediate and long-term impacts.
- *Conservation is one way of reducing the impacts of using energy and resources.

Science- Grade 6

- *Because all living things are connected, maintaining diversity is critical to the health of the planet.
- *Humans make choices that can have an impact on biodiversity.
- *Electrical energy can be transformed into other forms of energy.
- *Other forms of energy can be transformed into electrical energy.
- *Electrical energy plays a significant role in society, and its production has an impact on the environment.
- *Society must find ways to minimize the impact of energy production on the environment.



Science- Grade 7

- *Ecosystems are made up of biotic (living) and abiotic (non-living) elements, which depend on each other to survive.
- *Ecosystems are in a constant state of change. The changes may be caused by nature or by human intervention.
- *Human activities have the potential to alter the environment. Humans must be aware of these impacts and try to control them.

Science- Grade 8

- *Water is crucial to life on Earth.
- *Water systems influence climate and weather patterns.
- *Water is an important resource that needs to be managed sustainably.



Environmental Education

The International Plowing Match and Rural Expo (IPM) offers educational experiences for students at every entry level and in a vast array of subject areas. Primarily it can be used to address the environmental education requirements established by the Ontario Ministry of Education. This vision for environmental education in Ontario is enunciated in Shaping Our Schools, Shaping Our Future:

"Ontario's education system will prepare students with the knowledge, skills, perspectives, and practices they need to be environmentally responsible citizens. Students will understand our fundamental connections to each other and to the world around us through our relationship to food, water, energy, air, and land, and our interaction with all living things. The education system will provide opportunities within the classroom and community for students to engage in actions that deepen this understanding." (Shaping Our Schools, Shaping Our Future, p.4)

Environment education is education about the environment, for the environment, and in the environment that promotes an understanding of, rich and active experience in, and an appreciation for the dynamic interactions of:

- *the Earth's physical and biological systems;
- *the dependency of our social and economic systems on these natural systems;
- *the scientific and human dimensions of environmental issues;
- *the positive and negative consequences, both intended and unintended, of the interactions between human created and natural systems (Shaping Our Schools, Shaping our Future, p.6)



Social Studies/History/Geography

This curriculum is an inquiry process using Critical Thinking Skills. It develops students' understanding of who they are, where they came from, where they belong and how they contribute to the society in which they live.

Goals of Social Studies:

- *Developing a sense of who I am, and who we are
- *Where have I come from? What makes me belong? Where are we now? How can I contribute to society?

Goals of History

- *Developing a sense of time
- *Who are we? Who came before us? How have we changed?

Goals of Geography

- *Developing a sense of place
- *What is where, why, there and why care?

"Community partners are an important resource for a school's social studies, history and geography program. Various partners can provide valuable support and enrichment for student learning. These partners may include conservation authorities; provincial and national parks; service providers such as fire departments and social service agencies; non-governmental organizations; museums and historical societies; First Nations, Metis, and Inuit friendship centres; veteran groups; cultural centres and other community organizations; and businesses". (Social Studies document, page 17)



Social Studies -Grade 1

*Describe some of the ways in which people's roles, relationships, and responsibilities relate to who they are and what their situation is, and how and why changes in circumstances might affect people's roles, relationships and responsibilities as well as their sense of self.

*Describe some aspects of the interrelationship between people and the natural and built features of their community, with a focus on how the features and services in the community meet people's needs.

Social Studies - Grade 2

*Describe some similarities and differences in the ways in which people in two or more communities in different parts of the world meet their needs and have adapted to the locations, climate, and physical features of their regions.

Social Studies - Grade 3

- *Compare ways of life among some specific groups in Canada around the beginning of the nineteenth century and describe some of the changes between that era and the present day.
- *Identify some of the communities in Canada around the beginning of the nineteenth century and describe their relationship to the land and to each other.
- *Demonstrate an understanding of some key aspects of the interrelationship between the natural environment, land use, employment opportunities, and the development of municipal regions in Ontario.
- *Describe major landform regions and types of land use in Ontario and some of the ways in which land use in various Ontario municipalities addresses human needs and wants, including the need for jobs.

Social Studies - Grade 6

*Assess contributions to Canadian identity made by various groups and by various features of Canadian communities and regions.

