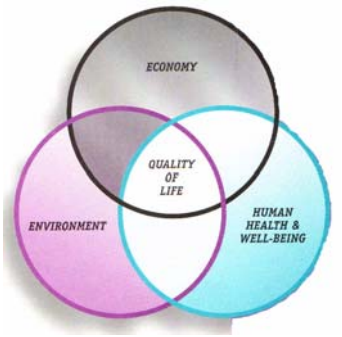

Grade 7 Science

Grades 5 to 8 Science: A Foundation for Implementation 2000

Student Learning Outcomes Related to Sustainable Development

Cluster 1: Interactions Within Ecosystems

7-1-05 Identify and describe positive and negative examples of human interventions that have an impact on ecological succession or the makeup of ecosystems.
Examples: positive protecting habitats, reintroducing species; negative-preventing natural fires, introducing non-indigenous species, draining wetland for agriculture or housing…

7-1-06 Identify environmental, social, and economic factors that should be considered in the management and preservation of ecosystems.
Examples: habitat preservation, recreation, employment, industrial growth, resource development…

7-1-07 Propose a course of action to protect the habitat of a particular organism within an ecosystem.
Examples; protect the nesting habitat of a given bird in a local wetland…

7-1-10 Analyze, using ecological pyramids, the implications of the loss of producers and consumers to the transfer of energy within an ecosystem.

7-1-11 Explain, using ecological pyramids, the potential for bioaccumulation within an ecosystem.

Cluster 2: Particle Theory of Matter

7-2-11 Recognize that heat energy is the most common by-product of energy transformations, and describe some examples.
Examples: thermal pollution, body heat, friction…

7-2-12 Identify different forms of energy that can be transformed into heat energy.
Include: mechanical, chemical, nuclear, electrical.

Cluster 4: Earth's Crust

7-4-07 Identify geologic resources that are present in Manitoba and Canada, and describe the processes involved in their location, extraction, processing, and recycling.
Include: fossil fuels, minerals.

7-4-08 Identify environmental impacts of geological resource extraction, and describe techniques used to address these.

7-4-09 Recognize that soil is a natural resource, and explain how the characteristics of soil determine its use.

7-4-10 Describe methods used to control soil erosion, and recognize the importance of soil conservation.
Examples: economically important to the agri-food industry, important for controlling the flow of water, necessary for plant growth…

7-4-11 Identify environmental, social, and economic factors that should be considered in making informed decisions about land use.