



Brightwater Site

Science with Elizabeth

Grade 7 Science

Life Science – Interactions within Ecosystems (IE)

IE7.1 Relate key aspects of Indigenous knowledge to their understanding of ecosystems.

IE7.2 Observe, illustrate, and analyze living organisms within local ecosystems as part of interconnected food webs, populations, and communities.

IE7.4 Analyze how ecosystems change in response to natural and human influences, and propose actions to reduce the impact of human behaviour on a specific ecosystem.

d. Identify and refine questions and problems related to the effects of natural or human influences on a particular ecosystem.

f. Propose a course of action or defend a given position on a local ecological issue or problem related to natural or human influences on a particular ecosystem, taking into account scientific, societal, technological, and environmental factors.

Heat and Temperature

HT7.1 Assess the impact of past and current heating and cooling technologies related to food, clothing, and shelter on self, society, and the environment.

c. Analyze the impact of the design and function of a heating- or cooling-related technology on self and society.

d. Compare, in qualitative terms, the heat capacities of some common materials, including water, and explain how heat capacity influences choices of materials used in the development of technologies related to clothing, food, and shelter.

e. Evaluate the efficiency of different types of home insulation (e.g., sod, straw bales, fibreglass, cellulose, mineral wool, polystyrene, and polyurethane foam) with respect to criteria such as R-value, cost, and resistance to water and air infiltration.

Inquiry Question: (via student lead discovery hike and fire building): What do animals and people need to stay warm in the winter? What does fire need to function? What is the difference between the classroom in school and this outdoor classroom? What are the impacts of one on the other? What is a healthy, functioning ecosystem? How do animals adapt to the Saskatchewan climate?