

Grade 6 Science and Technology–Understanding Life Systems: Biodiversity Unit Curriculum and Assessment Plan

What is Your Eco-Footprint?

Unit/Strand: Biodiversity		Focus for Learning:
Fundamental Concepts Systems and Interactions Sustainability and Stewardship	Big Ideas Biodiversity includes diversity of individuals, species, and ecosystems. (<i>Overall Expectations 2, & 3</i>) Classification of the components within a diverse system is a beginning point for understanding the interrelationships among the components. (<i>Overall expectations 2 & 3</i>) Because all living things are connected, maintaining diversity is critical to the health of the planet. (<i>Overall expectations 1 and 3</i>) Humans make choices that can have an impact on biodiversity. (<i>Overall Expectations 1</i>)	Title/Description of Culminating Activity: Students will work together to investigate and record the ways in which the actions of humans have an impact on biodiversity while identifying the positives choices over which they have control. Essential Skills: • Non fiction writing • Identification skills/Classification skills • Physical Participation • Group Work
Enabling and/or Assessment Tasks		
Learning Habits: Group Work Problem Solving Cooperation	Title: Independent Learning Diagnostic/Formative: D/F Write/Say/Do: W/S/D	Curriculum Outcomes/Standards DEMONSTRATING • 1.2 assess the benefits that human societies derive from biodiversity (e.g., thousands of products such as food, clothing, medicine, and building materials come from plants and animals) and the problems that occur when biodiversity is diminished (e.g., monocultures are more vulnerable to pests and diseases) • 3.5 describe interrelationships within species (e.g., wolves travel in packs to defend their territory, raise their cubs, and hunt large prey), between species (e.g., the brightly-coloured anemone fish protects its eggs by laying them among the poisonous tentacles of the sea anemone, and in return the fish's bright colours attract prey for the anemone to eat; birds and bees take sustenance from plants and carry pollen between plants), and between species and their environment (e.g., algae and water lilies compete for sunlight in a pond), and explain how these interrelationships sustain biodiversity • 3.6 identify everyday products that come from a diversity of organisms (e.g., traditional pain relievers are derived from the bark of the white willow tree; tofu is made from soybeans; silk is made from silkworm cocoons; nutritional supplements, shampoos, toothpastes, and deodorants contain pollen collected by bees)
Learning Habits: Independent Work Problem Solving Cooperation	Title: Group Dynamics and Experiential Learning Diagnostic/Formative: F/D Write/Say/Do: W/S/D	Curriculum Outcomes/Standards: DEMONSTRATING • 1.1 analyse a local issue related to biodiversity (e.g., the effects of human activities on urban biodiversity, flooding of traditional Aboriginal hunting and gathering areas as a result of dam construction), taking different points of view into consideration (e.g., the points of view of members of the local community, business owners, people concerned about the environment, mine owners, local First Nations, Métis, Inuit), propose action that can be taken to preserve biodiversity, and act on the proposal • 2.1 follow established safety procedures for outdoor activities and field work (e.g., stay with a partner when exploring habitats; wash hands after exploring a habitat)
Learning Habits: Group Work Problem Solving Cooperation	Title: RAFT-Summative Task Diagnostic/Formative: D/F Write/Say/Do: W/S/D	Curriculum Outcomes/Standards: DEMONSTRATING • 2.5 use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes (e.g., use a graphic organizer to show comparisons between organisms in various communities)

