### LIFE SCIENCE: DIVERSITY OF LIFE

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Indicators</th>
<th>Project WET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DL 6.1</strong> Recognize, describe, and appreciate the diversity of living things in local and other ecosystems, and explore related careers.</td>
<td>a) State the characteristics that define all living things (e.g., are made up of one or more cells, require energy for life processes, and have the ability to reproduce).</td>
<td>69 The Life Box (m)</td>
</tr>
<tr>
<td></td>
<td>d) Document the diversity of living things in different terrestrial and aquatic habitats (e.g., grasslands, forests, tundra, deserts, rivers, ponds, and oceans) using print, video, and/or online resources.</td>
<td>421 Water Quality? Ask the Bugs! (m)</td>
</tr>
<tr>
<td></td>
<td>f) Illustrate the diversity of living things on Earth by constructing a visual representation (e.g., poster, mobile, slide show, and web page) showing examples from each kingdom of the five kingdom taxonomic model: monera, protists, fungi, plants, and animals.</td>
<td>515 Make-a-Mural (m)</td>
</tr>
<tr>
<td><strong>DL 6.2</strong> Examine how humans organize understanding of the diversity of living things.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DL 6.3</strong> Analyze the characteristics and behaviours of vertebrates (i.e., mammals, birds, reptiles, amphibians, and fish) and invertebrates.</td>
<td>c) Compare and represent characteristics and behaviours (e.g., body shape, body description, method of respiration, methods of reproduction, method of movement, and method of feeding) of student-selected examples of invertebrates (e.g., arthropods, annelids, cnidarids, echinoderms, molluscs, and nematodes).</td>
<td>343 Macroinvertebrate Mayhem 421 Water Quality? Ask the Bugs! (m)</td>
</tr>
<tr>
<td><strong>DL 6.4</strong> Examine and describe structures and behaviours that help:</td>
<td>b) Show interest and curiosity in learning about living organisms’ adaptations to different environments by journaling, participating in a nature walk, or sharing science-related information about adaptations (gathered from print or video resources or personal experience) with classmates.</td>
<td>73 Ocean Habitats 263 Invaders! (m)</td>
</tr>
<tr>
<td>• individual living organisms survive in their environments in the short term</td>
<td>c) Describe examples of structures and behaviours, including seasonal changes, which help living things survive in their environments during the life-time of the organism.</td>
<td>73 Ocean Habitats (m) 263 Invaders! (m)</td>
</tr>
<tr>
<td>• species of living organisms adapt to their environments in the long term.</td>
<td>d) Describe examples of adaptations to structures and behaviours (e.g., flippers, webbed feet, night-time vision, wide wings, camouflage colouring, migration, and hibernation) that have enabled living things to adapt to their environments in the long term.</td>
<td>73 Ocean Habitats (m)</td>
</tr>
<tr>
<td></td>
<td>f) Suggest reasons why specific living organisms have or might become endangered or extinct.</td>
<td>263 Invaders! (m)</td>
</tr>
</tbody>
</table>
i) Research the advantages of particular structures or behaviours of living organisms that have been adapted to suit different environments (e.g., how different bird beaks are best suited to obtain different types of food, how different types of foot structure are best suited for different environments).

b) Observe and represent, using words and diagrams, characteristics of micro-organisms obtained from student- or teacher-collected water samples (e.g., bottled water, tap water, rain barrel, pond, creek, slough, and river water).

c) Explain how micro-organisms meet their basic needs, including moving around and obtaining food, water, and oxygen.

g) Discuss positive and negative impacts of micro-organisms for humans (e.g., food production and spoilage, fermentation, pasteurization, water and sewage treatment, human digestion, composting, disease spread and prevention, and biological warfare).

---

### Physical Science: Electricity

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Project WET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EL 6.1</strong> Assess personal, societal, economic, and environmental impacts of electricity use in Saskatchewan and propose actions to reduce those impacts.</td>
<td>373 Cold Cash in the Icebox</td>
</tr>
<tr>
<td>a) Provide examples of the types of energy sources used to provide heat and light to homes in the past and describe ways in which electricity-based technologies have changed the way people work, live, and interact with the environment in Saskatchewan.</td>
<td>469 Water Audit (m)</td>
</tr>
<tr>
<td>d) Identify factors that affect electrical consumption at home, school, and in the workplace and propose methods of decreasing electrical energy consumption that can help to conserve natural resources and protect the environment.</td>
<td></td>
</tr>
</tbody>
</table>

**EL 6.2** Investigate the characteristics of static electric charges, conductors, insulators, switches, and electromagnetism.  

**EL 6.3** Explain and model the properties of simple series and parallel circuits.  

---
## Physical Science: Flight

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Project WET</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL6.1 Examine the connections between human fascination with flight and technologies and careers based on the scientific principles of flight.</td>
<td></td>
</tr>
<tr>
<td>FL6.2 Investigate how the forces of thrust, drag, lift, and gravity act on living things and constructed devices that fly through the air.</td>
<td></td>
</tr>
<tr>
<td>FL6.3 Design a working prototype of a flying object that meets specified performance criteria.</td>
<td></td>
</tr>
</tbody>
</table>

## Earth and Space Science: Our Solar System

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Project WET</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS6.1 Research and represent the physical characteristics of the major components of the solar system, including the sun, planets, moons, asteroids, and comets.</td>
<td></td>
</tr>
<tr>
<td>SS6.2 Assess the efficacy of various methods of representing and interpreting astronomical phenomena including phases, eclipses, and seasons.</td>
<td></td>
</tr>
<tr>
<td>SS6.3 Evaluate past, current, and possible future contributions of space exploration programs including space probes and human spaceflight, which support living and working in the inner solar system.</td>
<td></td>
</tr>
</tbody>
</table>

* End Notes (all tables)  **bold:** very strong correlation of activity with outcome/indicator  (e): include activity extension  (m): minor modification may be required of activity  (number; e.g., 2): relevant step in activity procedure