

## DCS unit outlines

Unit outlines have been developed for the following course units:

Grade 2	<b>Science</b>	Air and Water	
Grade 3	<b>Science</b>	Heating and Cooling	
Grade 4	<b>Science</b>	Forms of Energy Electricity and Magnetism	
Grade 5	<b>Science</b>	Heat Resources	
Grade 6	<b>Science</b>	Ecosystems Earth's Climate	
Grade 7	<b>Science</b>	Renewable Resources in Sask. Resource Use	
Grade 8	<b>Science</b>	Energy Resources in Saskatchewan	
Grade 9	<b>Science</b>	Risks and Limits The Atmosphere	
Grade 10	<b>Science</b>	Life Science: Physical Science: Physical Science: Earth and Space Science:	Sustainability of Ecosystems Motion in our World Chemical Reactions Weather Dynamics
Grade 12	<b>Physics</b>	Electricity	Electric Power and Energy
Grade 11	<b>Biology</b>	Ecological Organization	
Grade 1	<b>Social Studies</b>	Interdependence	Conserving Resources
Grade 2	<b>Social Studies</b>	Interdependence	Communities Meet Needs & Wants
Grade 4	<b>Social Studies</b>	Interdependence Decision Making	Resources and Industry Making Decisions for Change
Grade 5	<b>Social Studies</b>	Interdependence	Canadian Resources and Industry
Grade 6	<b>Social Studies</b>	Interdependence	Links: People and the Environment
Grade 7	<b>Social Studies</b>	Location	Climate and Climate Change Human-Environmental Interaction and Relationships
Grade 8	<b>Social Studies</b>	Citizenship	Decision Making in a Democracy
Grade 9	<b>Social Studies</b>	Causality	Paradigms Environmental and Technological Change
Grade 11	<b>Social Studies</b>	Environment	

Grade 8	<b>Health</b>	Protecting the Environment and the Health of People	Making an Informed Decision
<b>Practical and Applied Arts</b>			
Grade 10, 11, 12	<b>Communications</b>	Electrical and Electronics	Residential Lighting
Grade 10, 12	<b>Design (Construct / Fabricate)</b>	Clothing and Textiles and Fashion	Redesign, Restore, or Recycle
Grade 10, 11, 12	<b>Design (Construct / Fabricate)</b>	Construction and Carpentry	Insulation and Installation
Grade 10, 11	<b>Design (Construct / Fabricate)</b>	Design Studies	Human Environments
Grade 12	<b>Design (Construct / Fabricate)</b>	Housing	Energy-Efficient Housing Housing of the Future
Grade 12	<b>Design (Construct / Fabricate)</b>	Interior Design	Openings, Windows, Window Treatments, and Doors Furniture and Appliances
Grade 11,	<b>Care and Hospitality</b>	Life Transitions	Community Issues and Ethics
Grade 12	<b>Care and Hospitality</b>	Life Transitions	Independent Living
Grade 11, 12	<b>Forestry</b>	Management and Conservation Issues in Forestry	
Grade 11, 12, 13	<b>Wildlife Management</b>	Wildlife and Ecosystems The Value of Wildlife	
Grade 10, 11, 12	<b>Energy and Mines</b>	Sustainability	

### Grade 2 Science

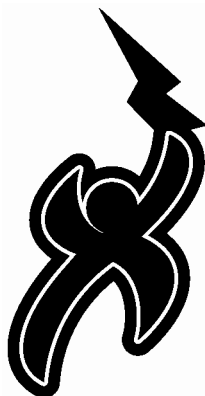
Unit	Curriculum Objective	DCS and Additional Resources
Air and Water	1.3 Describe the water cycle	<b>DCS FIT</b> <ul style="list-style-type: none"> <li>• A simplified adaptation of Clean Green Lifestyle Campaign (<i>Program Manual</i>, Waste Campaign ⑤).</li> <li>• Water in My Life (Water Activity ①)</li> <li>• Water Go-Around (Water Activity ⑤)</li> <li>• Rainmaker (Water Activity ③)</li> <li>• Water and Plant Life (Water Activity ④)</li> </ul> <b>ADDITIONAL RESOURCES</b> <ul style="list-style-type: none"> <li>• Project Wild, page 371</li> <li>• Project Wild, page 368</li> </ul>
	1.5 Explain that virtually all living things require air and water	
	2.1 Identify some ways in which air and water can become polluted.	
	2.2 Describe some ways in which polluted air and water can be harmful	
	2.3 Suggest some things that can be done to keep air and water from becoming polluted.	

### Grade 3 Science

Unit	Curriculum Objective	DCS and Additional Resources
Heating and Cooling	1.1 Describe how other forms of energy can be converted into heat energy.	<b>DCS FIT</b> <ul style="list-style-type: none"> <li>• Steam Energy (Energy Activity ④)</li> <li>• Energy Origins (Energy Activity ⑥)</li> <li>• Conserve a Cube (Energy Activity ⑫)</li> <li>• Keeping the Chill Out (Energy Activity ③)</li> <li>• Water, Hot and Cold (Energy Activity ⑤)</li> <li>• Rainmaker (Water Activity ③)</li> </ul> <b>ADDITIONAL RESOURCES</b> <ul style="list-style-type: none"> <li>• Green Teacher (Issue 32), page 16</li> <li>• SaskPower Energy and Our Environment Workbook</li> </ul>
	1.3 Observe how heat can be transferred from one object to another.	
	1.4 Experiment with aiding and inhibiting heat transfer.	
	1.5 Contrast the concept of heat with the term “cold”.	

**Grade 4 Science**

Unit	Curriculum Objective	DCS and Additional Resources
<b>Forms of Energy</b>	2.3 Explore the production and use of different forms of energy.	<p><b>DCS FIT</b></p> <ul style="list-style-type: none"> <li>• Steam Energy (Energy Activity ④)</li> <li>• Learning Basic Energy Concepts (Energy Activity ⑨)</li> <li>• Energy Origins (Energy Activity ⑥)</li> <li>• Heating Homes in the Past (Energy Activity ⑪)</li> </ul> <p><b>ADDITIONAL RESOURCES</b></p> <ul style="list-style-type: none"> <li>• Science Curriculum Guide Activity #8, page 413</li> <li>• Junior Energy, pages 12-20, 31, 32, 59, 62, 67, 78, 89, 90, 113</li> <li>• Green Teacher (Issue 32) pages 12 and 19</li> <li>• SaskPower Energy and Our Environment Workbook</li> </ul>
<b>Electricity and Magnetism</b>	1.4 Explain that energy use causes demands on resources and on the environment.	<p><b>DCS FIT</b></p> <ul style="list-style-type: none"> <li>• Energy Origins (Energy Activity ⑥)</li> <li>• Student energy audits and lifestyle campaigns (<i>Program Manual</i>)</li> </ul> <p><b>ADDITIONAL RESOURCES</b></p> <ul style="list-style-type: none"> <li>• Science Curriculum Guide Activity #2, page 432.1</li> <li>• Science Curriculum Guide Activity #10 page 432.5</li> <li>• Junior Energy, pages 61, 69</li> <li>• SaskPower Energy and Our Environment Workbook</li> </ul>
	1.5 Suggest ways in which energy can be conserved.	<p><b>DCS FIT</b></p> <ul style="list-style-type: none"> <li>• Energy Origins (Energy Activity ⑥)</li> <li>• Student energy audits and lifestyle campaigns (<i>Program Manual</i>)</li> </ul> <p><b>ADDITIONAL RESOURCES</b></p> <ul style="list-style-type: none"> <li>• Science Curriculum Guide Activity #2, page 432.1</li> <li>• Science Curriculum Guide Activity #10 page 432.5</li> <li>• Junior Energy, pages 61, 69</li> <li>• SaskPower Energy and Our Environment Workbook</li> </ul>



Grade 5 Science

Unit	Curriculum Objective	DCS and Additional Resources
Heat	2.2 Identify methods of heat conservation in buildings.	<p><b>DCS FIT</b></p> <ul style="list-style-type: none"> <li>• Student energy technical audit (<i>Program Manual</i>).</li> <li>• Heat loss prevention through weather stripping/caulking.</li> </ul> <p><b>ADDITIONAL RESOURCES</b></p> <ul style="list-style-type: none"> <li>• Science Curriculum Guide, Activity #6, page 507; Activity #9, page 508</li> <li>• Junior Energy, pages 45-55, 68, 71, 91</li> <li>• Green Teacher (Issue 32), page 19</li> </ul>
Resources	1.3 Distinguish between resources used to produce energy and those used to produce goods.	<p><b>DCS FIT</b></p> <ul style="list-style-type: none"> <li>• Energy Origins (Energy Activity ⑥)</li> <li>• The Recycling Loop (Waste Activity ③)</li> </ul> <p><b>ADDITIONAL RESOURCES</b></p> <ul style="list-style-type: none"> <li>• Junior Energy, pages 43, 45, 54, 63-68, 70, 81-87, 90, 91, 99-113</li> <li>• Science Curriculum Guide, Activities #4,7, pages 521-522</li> </ul> <p>SaskPower Energy and Our Environment Workbook</p>
	1.4 Recognize the global concern for air, soil and water.	
	2.2 Identify water pollutants and their sources.	<p><b>DCS FIT</b></p> <ul style="list-style-type: none"> <li>• How Important is Water? (Water Activity ⑨)</li> <li>• Safe Water (Water Activity ⑦)</li> <li>• Safe Water for Wildlife (Water Activity ⑧)</li> <li>• Whiter Clothes and Cleaner Windows (Water Activity ⑫)</li> </ul> <p><b>ADDITIONAL RESOURCES</b></p> <ul style="list-style-type: none"> <li>• Project Wild, page 337</li> <li>• Science Curriculum Guide, Activities #2,3,5,6, pages 520-552</li> </ul>

**Grade 6 Science**

Unit	Curriculum Objective	DCS and Additional Resources
<b>Ecosystems</b>	3.2 Investigate the impact that humans have on ecosystems.	<b>DCS FIT</b> <ul style="list-style-type: none"> <li>• How Important is Water? (Water Activity ⑨)</li> <li>• Planning Uses for a Local Water Source (Water Activity ⑩)</li> <li>• Safe Water for Wildlife (Water Activity ⑧)</li> <li>• Whiter Clothes and Cleaner Windows (Water Activity ⑫)</li> <li>• Let's Talk Alternatives (Waste Activity ①)</li> </ul> <b>ADDITIONAL RESOURCES</b> <ul style="list-style-type: none"> <li>• Project Wild, pages 48, 230, 313.</li> <li>• Science Curriculum Guide, Activities #6,7,8, page 625</li> <li>• Science Curriculum Guide, Activity #11, page 627</li> <li>• Green Teacher (Issue 48)</li> </ul>
	3.3 Recognize the role that humans play in protecting or destroying ecosystems.	
	3.4 Demonstrate actions that will ensure the health of local ecosystems.	
	5.1 Examine the impact of technological change on the local ecosystem.	
<b>Earth's Climate</b>	3.3 Evaluate theories of climatic change.	<b>DCS FIT</b> <ul style="list-style-type: none"> <li>• none</li> </ul> <b>ADDITIONAL RESOURCES</b> <ul style="list-style-type: none"> <li>• Green Teacher (Issue 51)</li> <li>• Wind of Change Climate Change Poster</li> <li>• SaskPower Energy and Our Environment Workbook</li> <li>• A Change in Our Climate: What's Going On in Our Greenhouse Science</li> </ul>

