



How to Use this Curriculum Connections Document

The **General Information** section contains

- the name, description, and location (URL) of the game/activity/topic page.
- the plug-in needed to properly experience the page. A plug-in is free downloadable software — such as Flash — that expands the ability of your browser, (e.g. to play games, to hear sound.)
- the file size of the game or file which indicates how long it will take to download onto your computer. (NB: Download size applies only to games or printable PDFs)

The **Curriculum Connections** section (primary, junior and intermediate), provides the actual curriculum links. These are shown as abbreviated versions of specific learning expectations. The strands, represented by two letter codes, to which the expectations belong are listed as well. The **Subject Areas & Strands** guide clarifying what strands the codes correspond to can be found at the end of this document. This guide does not include all of the strands or subject areas of the Ontario elementary curriculum – only those that correspond to the EcoKids material.

The **Extensions** section provides suggestions for additional activities and discussion topics to supplement the materials being used. When presented, the extensions can often be linked to “Health and Physical Education”, “Arts” and the use of technology.

For more information on the Ontario elementary curriculum, visit the link provided at the top right hand corner of each page or <http://www.edu.gov.on.ca/eng/document/curricul/elemcurric.html>.

Questions or comments regarding this document?

We'd love to hear from you. Please contact Sophia Chan-Combrink, EcoKids Program Manager, Earth Day Canada, 503 – 111 Peter Street, Toronto, Ontario, M5V 2H1, tel: 416.599.1991 x 104, fax: 416.599.3100, ecokids@earthday.ca.

Please go to the next page for curriculum connections for this game/activity/topic page.



General Information

Game/Activity/Topic: How Energy Efficient Are You?

Description: This interactive activity allows students to explore a house to reveal energy-saving tips for each area of the home.

Plug-ins Required: Flash

File Size: 129kb

URL: http://www.ecokids.ca/pub/eco_info/topics/energy/energy_efficient/index.cfm

Legend: St = Strand (please go to the end of this document for a list of all the relevant strand abbreviations)

| Curriculum Connections: PRIMARY | | | | | | | | | | |
|---------------------------------|----------------------|--|----|------------------------------------|----|--|----|-----------------------|---|-----------------------------|
| Grade | ST | Science & Technology | ST | Social Studies | ST | Language | ST | Mathematics | | |
| 1 | MM | Reuse and recycle | CW | Transportation methods | RD | Period, comma | PS | NN | Numbers 0 to 100 | |
| | SM | Man-made structures | | | RD | Instructions | | MS | Half hours, hours, days, weeks, seasons | |
| | SM | Parts of a system | | | RD | Lists | | | | |
| | EC | Sources and forms of energy | | | RD | Short pieces | | | | |
| | ES | House features and designs for the seasons | | | OV | Sketches | | | | |
| | | | | | OV | Media messages | | | | |
| | | | | | OV | Conventions of media | | | | |
| 2 | EC | Electrical power source | | | RD | Period, comma, question mark | PS | NN | Numbers 0 to 100 | |
| | | | | | RD | Contractions | | MS | Record results of measurements in international standard units (SI) | |
| | | | | | RD | Bold type | | | | |
| | | | | | RD | Graphics | | MS | SI of time – second, minute | |
| | | | | | RD | Lists | | MS | SI of temperature - C° | |
| | | | | | RD | Instructions | | | | |
| | | | | | RD | Short pieces | | | | |
| | | | | | RD | Interactive programme | | | | |
| | | | | | OV | Sketches | | | | |
| | | | | | OV | Media messages | | | | |
| OV | Conventions of media | | | | | | | | | |
| 3 | EC | Forms of energy and devices for movement | CW | Human interaction with environment | RD | Period, comma, question mark, exclamation mark | PS | NN | Numbers 0 to 100 | |
| | | Systems and their parts | | CW | | Use of natural environment | | MS | Record results of measurements in international standard units (SI) | |
| | | | | | | RD | | Contractions | | |
| | | | | | | RD | | Facts and fiction | MS | SI of time – second, minute |
| | | | | | | RD | | Bold type | MS | SI of temperature - C° |
| | | | | | | RD | | Graphics | MS | SI of capacity – litre |
| | | | | | | RD | | Lists | | |
| | | | | | | RD | | Short pieces | | |
| | | | | | | RD | | Instructions | | |
| | | | | | | RD | | Interactive programme | | |
| | | | | | | OV | | Sketches | | |
| | | | | | | OV | | Media messages | | |
| | | | | | | OV | | Conventions of media | | |



Curriculum Connections

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| Curriculum Connections: JUNIOR | | | | | | | | |
|--------------------------------|--|--|----|----------------|----|--|----|---|
| Grade | ST | Science & Technology | ST | Social Studies | ST | Language | ST | Mathematics |
| 4 | LS | Human impact on natural world | | | RD | Period, comma, question mark, exclamation mark | NN | Numbers 0 to 100 |
| | MM | Mechanical systems | | | RD | Contractions | MS | Record results of measurements in international standard units (SI) |
| | SM | Bicycle mechanisms | | | RD | Facts and fiction | | |
| | EC | Natural and artificial light sources | | | RD | Lists | MS | SI of time – second, minute |
| | EC | Characteristics of light | | | RD | Graphics | MS | SI of temperature - C° |
| | EC | Light and heat | | | RD | Specialized vocabulary | MS | SI of capacity – litre |
| | ES | Fossils | | | RD | Bold type | PS | Problem solving strategies |
| | | | | | RD | Short pieces | | |
| | | | | | RD | Instructions | | |
| | | | | | RD | Interactive programme | | |
| 5 | | | | | OV | Sketches | | |
| | | | | | OV | Media messages | | |
| | | | | | OV | Conventions of media | | |
| | MM | Thermometer and heat | | | RD | Period, comma, question mark, exclamation mark | NN | Numbers 0 to 100 |
| | MM | Product sources | | | RD | Contractions | MS | Record results of measurements in international standard units (SI) |
| | SM | Mechanical systems | | | RD | Specialized vocabulary | MS | SI of time – second, minute |
| | SM | System modifications | | | RD | Bold type | MS | SI of temperature - C° |
| | EC | Sources | | | RD | Graphics | MS | SI of capacity – litre |
| | EC | Electrical production | | | RD | Facts and fiction | PS | Problem solving strategies |
| | EC | Changes in the form of energy | | | RD | Lists | | |
| | EC | Consequences of using natural resources on natural and man-made environments | | | RD | Short pieces | | |
| | EC | Effect of technological innovations on the use of natural resources | | | RD | Instructions | | |
| | EC | Energy efficiency | | | RD | Interactive programme | | |
| | EC | Energy transfer and human use | | | OV | Sketches | | |
| | EC | Switches and controls | | | OV | Media messages | | |
| | EC | Motors and generators | | | OV | Conventions of media | | |
| | EC | Design features for energy efficiency | | | | | | |
| | EC | Consumption factors | | | | | | |
| EC | Renewable and nonrenewable sources of energy | | | | | | | |
| EC | Ways energy is stored and transferred | | | | | | | |
| EC | Changes in the form of energy | | | | | | | |
| ES | Air movement indoors | | | | | | | |



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| Grade | ST | Science & Technology | ST | Social Studies | ST | Language | ST | Mathematics | | | | | |
|-------|----|------------------------------------|----------------------|--------------------|----|--|----|-------------------|----|------------------------|----|---|-----------------------|
| 6 | LS | Fossils and geology | CW | Canadian lifestyle | RD | Period, comma, question mark, exclamation mark | NN | Numbers 0 to 100 | | | | | |
| | MM | Gases | | | | | | | RD | Contractions | MS | Record results of measurements in international standard units (SI) | |
| | MM | Flight | | | | | | | | | | | RD |
| | EC | Forms of electrical energy | | | | RD | | Bold type | MS | SI of temperature - C° | | | |
| | EC | Conductivity of solids and liquids | | | | | | | | | | RD | Graphics |
| | EC | Chemical to electrical energy | | | | RD | | Facts and fiction | | | | | |
| | EC | Electricity production | | | | | | | RD | Lists | | RD | Interactive programme |
| | EC | Consumption factors of electricity | | | | RD | | Instructions | | | | | |
| | EC | Reduction of use plan | | | | | | | RD | Short pieces | | | |
| | | RD | Conventions of media | OV | | | | | | | | | |

Legend: St = Strand (please go to the end of this document for a list of all the relevant strand abbreviations)

Curriculum Connections: INTERMEDIATE

| Grade | ST | Science & Technology | ST | Social Studies | ST | Language | ST | Mathematics | | | | | | | | | | |
|-------|----|-------------------------------------|----|----------------|----------------------|--|----|---|----|-----------------------|----|--------------|----|---|----|----------------------|----|----------------------------|
| 7 | LS | Carbon cycling | TI | Place/location | RD | Period, comma, question mark, exclamation mark | NN | Numbers 0 to 100 | | | | | | | | | | |
| | LS | Impact of technology on environment | | | | | | | TI | Region | RD | Contractions | MS | Record results of measurements in international standard units (SI) | | | | |
| | EC | Forms of energy | | | | | | | | | | | | | TI | Interactions | RD | Specialized vocabulary |
| | EC | Measuring temperature | | | | TI | | Movement | RD | Bold type | | MS | | SI of temperature - C° | | | | |
| | EC | Energy conservation | | | | | | | | | | | | | NR | Environments | | |
| | EC | Heat transfer in a system | | | | NR | | Renewable, non-renewable and flow resources | RD | Graphics | | | | | | | PS | Problem solving strategies |
| | ES | Geothermal energy | | | | | | | | | | NR | | Mining | RD | Lists | | |
| | | | | | | NR | | Solar, wind, water | RD | Short pieces | | | | | | | | |
| | | | | | | | | | | | | NR | | Impact of technology on natural resources | RD | Instructions | OV | Pictures |
| | | | | | | NR | | Sustainable development | RD | Interactive programme | | | | | | | | |
| | | | | | | | | | | | NR | | OV | Sketches | OV | Conventions of media | | |
| | | | | | | | | | OV | Pictures | | | | | | | | |
| | | | | | | | | | | | | | OV | Media messages | | | | |
| | | | | OV | Conventions of media | | | | | | | | | | | | | |



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| Grade | ST | Science & Technology | ST | Social Studies | ST | Language | ST | Mathematics |
|-------|----|--|----|------------------------------------|----------------------|--|----|---|
| 8 | SM | Mechanical efficiency | HG | Urbanization | RD | Period, comma, question mark, exclamation mark, dash, ellipsis | NN | Numbers 0 to 100 |
| | EC | Energy transfer in systems | | Factors | | | NN | Percents |
| | ES | Temperature change and convection currents | HG | Developing and developed countries | | | NN | Numbers 0 to 100 |
| | ES | Human water use | | | RD | Contractions | MS | Record results of measurements in international standard units (SI) |
| | ES | Water usage processes | | | RD | Specialized vocabulary | | |
| | | | | | RD | Bold type | MS | SI of time – second, minute |
| | | | | | RD | Graphics | | |
| | | | | | RD | Facts and fiction | MS | SI of temperature - C° |
| | | | | | RD | Short pieces | | |
| | | | | | RD | Lists | MS | SI of capacity – litre |
| | | | | | RD | Instructions | PS | Problem solving strategies |
| | | | | | RD | Interactive programme | | |
| | | | | | OV | Sketches | | |
| | | | | OV | Media messages | | | |
| | | | | OV | Conventions of media | | | |

| EXTENSIONS |
|--|
| <ul style="list-style-type: none"> None |



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Subject Areas & Strands

Science and Technology

| | | |
|----------|-----------|---|
| Strands: | LS | Life System |
| | MM | Matter and Materials |
| | EC | Energy and Control |
| | SM | Structures and Mechanisms |
| | ST | Science and Technology Skills of Inquiry, Design, and Communication |
| | ES | Earth and Space Systems |

Social Sciences & Geography

| | | |
|----------|-----------|--|
| Strands: | CW | Canada and World Connections (Grades 1-6) |
| | SI | Social Studies Inquiry/Research and Communications Skills (Grades 1-6) |
| | TI | Themes of Inquiry (Grade 7) |
| | MG | Mapping Skills (Grades 1-8) |
| | PG | Patterns in Physical Geography (Grade 7) |
| | NR | Natural Resources (Grade 7) |
| | HG | Patterns in Human Geography (Grade 8) |
| | EM | Economic Systems |
| | GI | Geographic Inquiry/Research and Communications Skills (Grades 7-8) |
| | MI | Migration |

Mathematics

| | | |
|----------|-----------|---------------------------------|
| Strands: | NN | Number Sense and Numeration |
| | MS | Measurement |
| | GS | Geometry and Spatial Sense |
| | PA | Patterning and Algebra |
| | DM | Data Management and Probability |
| | PS | Problem Solving |

Language

| | | |
|----------|-----------|-------------------------------|
| Strands: | WR | Writing |
| | RD | Reading |
| | RS | Research Skills |
| | OV | Oral and Visual Communication |