



AREA BEST LINKED TO

City of Kawartha Lakes, County of Haliburton and District Municipality of Muskoka.



OBJECTIVES

- Increase students' awareness of the many ways we use water, both directly and indirectly.
- Explore, through research and discussion, how water is used in different sectors.



CURRICULUM LINKS

Grade Four:

Arts:

- D1.1: Create two- and three-dimensional works of art that express feelings and ideas inspired by their interests and experiences
- D1.3: Use elements of design in art works to communicate ideas, messages, and understandings

Science:

- 1.1: Analyse the positive and negative impacts of human interactions with natural habitats and communities (e.g., human dependence on natural materials), taking different perspectives into account (e.g., the perspectives of a housing developer, a family in need of housing, an ecologist)

Grade Six:

Arts:

- D1.1: Create two-dimensional, three-dimensional, and multimedia art works that explore feelings, ideas, and issues from a variety of points of view



MATERIALS

- Chart paper or mural paper (1 piece per group)
- Markers (1 package per group)
- Old magazines
- Scissors (class set)
- Glue sticks (class set)
- Resources for student research (books, encyclopedias, internet access, etc.)



BACKGROUND INFORMATION

During this activity, students will be thinking about and discussing the many ways that we use water in our society. Often when we think about this, we think of every day personal uses, such as drinking and washing. In reality we use water directly and indirectly for just about everything we do, from brushing our teeth to putting gasoline in our vehicles to turning on a light.

To broaden students' awareness of the topic, water use within four or five major sectors of society will be discussed: residential, commercial, industrial and agriculture (transportation can be used as a fifth sector if required to make group size manageable).

Related HMCWF Activity Centres:

- Doing the Laundry, How Much Water Does It Take?
- Just Dam It!, Three Times A Day



DISCUSSION, RESEARCH AND CONSTRUCTION

This activity contains three main components: class discussion, research and mural construction, and presentations. All three components can be completed all at once (i.e. over the course of an afternoon) or broken up over a longer period of time to fit your schedule.

DISCUSSION

Engage class in a discussion about how they use water. Start with a broad opening question. Expect answers relating to personal consumption and sanitation (drinking, cooking, showering, etc.) Then broaden the discussion to include water use in manufacturing goods and services we use everyday (e.g. gasoline, electricity). See chart below for questions to encourage discussion and brainstorming.

Opening Questions	Expanding Questions
<ul style="list-style-type: none"> • How have you used water today/how do you use water everyday? • How does your family use water? • How does our school use water? 	<ul style="list-style-type: none"> • How did you get to school today? How was water used in this process? • What did you eat for breakfast/lunch today? How was water used to make/grow that food? • Look around the classroom – how is water used to make the items you use here?

Guide the discussion to cover water uses in the sectors you have chosen to explore. Examples are provided below to facilitate this part of the discussion.

Sector	Water Use Examples
Residential (E.g. private homes, apartment buildings)	<ul style="list-style-type: none"> • Personal sanitation • Consumption • Cleaning • Gardens and lawns (irrigation) • Hydro-electricity
Commercial (E.g. office building, shopping mall)	<ul style="list-style-type: none"> • Landscaping/decoration (i.e. fountains) • Hydro-electricity • Consumption • Cleaning
Industrial (E.g. Factory)	<ul style="list-style-type: none"> • Manufacturing • Cooling (of machines, etc.) • Hydro-electricity • Consumption • Cleaning
Agriculture (E.g. farms – crop and livestock)	<ul style="list-style-type: none"> • Crop irrigation • Livestock watering (drinking) • Cleaning • Hydro-electricity
Transportation (E.g. personal transport and public transit)	<ul style="list-style-type: none"> • Cleaning • Fuel manufacturing • Transportation method (i.e. ferry, canoe) • Hydro-electricity

RESEARCH & MURAL CONSTRUCTION

- Split class into 4 or 5 groups; assign each group a sector to research.
- Provide designated class time for groups to research their sector. Encourage the use of different types of research materials. Students may incorporate personal experience.
- Provide designated class time for groups to assemble/create their mural. Students may draw and collage images to represent water use in their sector.

PRESENTATIONS

- Hang murals on the blackboard, or in a location clearly visible for the whole class.
- Have each group take turns standing up to present their mural. Ask them to explain how their drawings/collage relate to how water is used in their sector.
- Ask each group to name a use of water in their sector that they were unaware of before they did their research.
- Encourage questions from the other groups and class discussion about each sector as the groups present.
- Continue to display the murals around the classroom as a reminder of the many ways that we use water in our society.



RESOURCES/REFERENCES

- Environment Canada's Water Webpage:
<http://www.ec.gc.ca/eau-water/>
- The Atlas of Canada – Water Consumption:
<http://atlas.nrcan.gc.ca/site/english/maps/freshwater/consumption/1>



FEEDBACK

We appreciate your feedback! Please let us know...

- Did this activity continue the learning your students engaged in at the Water Festival?
- What curriculum requirements did this activity satisfy?
- Was the activity easy to facilitate to your class?
- Did students have fun and learn something new about water?
- Please send photos of your class using these activities!

Please send comments and photos to: iheaven@outtolearn.ca