

# Connections and Activity Suggestions



## Social Studies

### TOPICS AND IDEAS:

- ✓ Geography and People
- ✓ People in History
- ✓ Kids Can Make a Difference

# Social Studies



# Connections and Activity Suggestions



## Activity 1

# Geography and People

### **SUGGESTED CONNECTIONS:**

Key Activity 4, *Reporting your Data* (page 19)

Mathematics Activity 4, *Latitude and Longitude* (page 59)

### **CONCEPTS AND SKILLS DEVELOPED THROUGH PLANTWATCH:**

- Use latitude and longitude to calculate the Global Address of your community (see Mathematics Activity 4, *Latitude and Longitude: How to Calculate Your Global Address*, Connections - Math, page 59).
  - Select a native plant from the PlantWatch species, and list all the provinces/states where it is found, using the plant distribution maps found by entering the plant's latin name at this website: <http://plants.usda.gov>
  - From which areas in Canada has flowering been reported? Log on to [www.plantwatch.ca](http://www.plantwatch.ca) under "Submit Observations" and download data by clicking on the purple floppy disk icon on the top right hand side of the screen.)
  - Locate other PlantWatch sites for your chosen plant species on a large map.
  - Make an outline map for the above use. Make an overhead transparency of the map of your students' choice. Project the map onto a large sheet of paper. Have the students trace the outline of the map and any other desired features onto the paper.
- Interpret the geographical features which could affect the flowering dates. For example, mountains and higher altitudes are cooler and, thus, flowering is later in these areas. Large lakes warm slowly in spring and keep local areas cool, leading to later flowering. Large towns produce a "heat island" effect: the sun's heat absorbed by roofs, asphalt roads and concrete sidewalks and the furnace heat or air conditioning exhaust from buildings, produce an environment warmer than the surrounding countryside.

For interesting maps of phenology data, see [www.naturescalendar.org.uk/map/](http://www.naturescalendar.org.uk/map/) from the 'Nature's Calendar' program in Britain.

Also see [www.ncdc.noaa.gov/paleo/phenology.html](http://www.ncdc.noaa.gov/paleo/phenology.html); under "other sources" click "map of the first leaf date", to see a map of modelled first leaf timing for common purple lilac across North America.

Journey North is a student program in North America that tracks blooming time of tulips, leaf out on trees, etc. Learn more about their phenology program and see click on maps at [www.learner.org/jnorth/pde/News.html](http://www.learner.org/jnorth/pde/News.html)

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## Activity 2

# People in History

### **SUGGESTED CONNECTIONS:**

Key Activity 3, *Locating and Tagging the Plants* (page 13)

Science Activity 1, *Plants and Ecology: All my Relations* (page 31)

Science Activity 4, *Forests: Discussion and Investigation* (page 41)

### **CONCEPTS AND SKILLS DEVELOPED THROUGH PLANTWATCH:**

1. First Nations People made extensive use of native plants. Plants supplied these people with food, fuel, fiber, clothing, shelter, utensils, transportation and medicine. First Nations People knew a lot about the plants in their environment. They knew which plants were safe to eat and which were toxic, what part of a plant could be used as medicine, and what part could be used as food. They crushed plant parts and made dyes to decorate personal articles. Seeds were sewn onto clothes or made into necklaces, and perfumes and oils were made from plants. They used all the edible fruits, and cloudberry were said to be the 'best fruit' of all! In the north, white dryad was used to recognize the correct time for hunting expeditions: when the seeds started to untwist, it was time to get caribou skins for summer clothing.

Have students research plants that were or are important to the First Nations People.
2. Early settlers made use of native plants. Many settlers became "root and herb doctors" who used First Nations Peoples' remedies to cure ailments. They wrote out their medicine mixes in recipe books and passed them on to their children and grandchildren. Settlers also used many native plants as food sources, such as saskatoon berries. The berries were collected and made into jams, pies, and other foods, or were eaten straight from the bushes. Labrador tea leaves were brewed into a relaxing beverage. In the east, early boat builders used the wood from Larch trees to make the keel, as it was strong and resisted rot. Early settlers introduced dandelion as a spring vegetable, and protected the plants from hares and ground squirrels with chicken wire. In Ontario, some settlers showed local First Nations People how to make a tasty 'coffee' beverage from dandelion roots.
3. Native plants are still used today by many people. Saskatoon berries are used in a variety of recipes and wild strawberries continue to be popular across Canada. The wood from poplar trees is now being used by forestry companies to make pulp, waferboard and chopsticks.



# Kids Can Make a Difference

### SUGGESTED CONNECTIONS:

Science Activity 3, *Reading About Climate Change* (page 35)

### CONCEPTS AND SKILLS DEVELOPED THROUGH PLANTWATCH:

- If you are using the PlantWatch program in conjunction with a study of Climate Change (see Science Activity 3, *Reading About Climate Change*, Connections - Science, page 35), provide students with information about government policies that will help control the level of emissions of the greenhouse gases that are contributing to climate change.
- Scientists agree that even if all greenhouse gas emissions were greatly reduced, some additional degree of climate change is unavoidable. We will all need to adapt to these changes.

Describe the concept of adaptation to climate change to students. Ask students what kinds of adaptation might be necessary where they live. Ask students what kinds of adaptation might be necessary for communities in the Far North or in tropical areas. Discuss possible positive and negative impacts in those areas.

The adaptation 101 section of this website has some useful background. [www.adaptation.nrcan.gc.ca/101/index\\_e.php](http://www.adaptation.nrcan.gc.ca/101/index_e.php)

- Information on what the Canadian government is doing to regulate and reduce emissions can be found on the website [www.ecoaction.gc.ca/index-eng.cfm](http://www.ecoaction.gc.ca/index-eng.cfm). Information on what students can do to reduce greenhouse gas emissions and combat global warming are available from the Environment Canada website [www.ec.gc.ca/education/default.asp?lang=En&n=050049D2-1](http://www.ec.gc.ca/education/default.asp?lang=En&n=050049D2-1)

Have students discuss what they can do at their homes and schools to reduce greenhouse gas emissions.

There are many websites available to teachers to address the subject of climate change. (see Science Activity 3, *Reading About Climate Change*, Connections - Science, page 35 for a list of websites)

