

Borage Garden



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SCHOOLS

Leading, Educating, Acknowledging and Fostering
Healthy Green Schools for All

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Overview: Using borage and other herbs, students experiment with the idea that plants require sunlight and water to grow. Students can also investigate the various uses of borage. Most of the plant is edible. Borage tastes like a very strong cucumber and is often used in salads. The flowers and leaves are edible, but are best enjoyed when the plant is still young.

Targeted Grade: 2

Materials needed: Borage (and other herb) seeds or plants from local nursery and an area in which to plant.

| NGSS Standard(s) | CT Social Studies Standards |
|---|--|
| <p>2-LS4-1. Observation of plants and animals to compare diversity in different habitats</p> <p>2-LS2-1 Plants need sunlight and water.</p> | <p>GEO 2.6. Characteristics of a place/region</p> |
| Common Core Math Standard(s) | Common Core ELA Standard(s) |
| <p>MP.4 Modeling</p> <p>2.MD.1-4. Measurements</p> <p>2.MD.9-10. Graphing</p> | <p>W.2.7. Shared Research</p> <p>W.2.8. Gather information</p> |

Standards-Based Curricular Connections: Borage can support your curricular goals in many ways including, but not limited to, the example below:

- **2-LS4-1:** Make observation of plants and animals to compare the diversity of life in different habitats.
 - Students could make observations about the plant as it grows, comparisons on leaf sizes or plant height (drawing an outline, or making measurements and create graphs (2.MD.1-4 and 9-10)
 - Students could observe for other plants and animals living in the same area
 - Students can use texts to identify plants and animals, to research information about the garden, and then write about their findings (W.2.7-8)
- **2-LS2-1:** Plan and conduct an investigation to determine if plants need sunlight and water to grow.

- Students could conduct an experiment in which borage (or other herb) seeds are planted outside in a garden area and inside away from sunlight.
- Students could vary the amount of light and water that different plants receive, make observations, and communicate about their findings.

Science & Engineering Practices: Planning & Carrying Out Investigations

Crosscutting Concepts: Cause & Effect

Other Potential Connections: The following list provides a general overview of other possible uses for Borage. Check your NGSS and CCSS standards documents to explore how these suggestions may assist in achieving your grade-specific curricular goals. WCAIS Magnet School in Danbury uses gardens as a part of their International Studies curriculum by studying herbs grown in other countries, and also by learning how gardening in general can better the world. Borage is one herb that is used worldwide.

International Studies-- Students research different ways to prepare borage in different countries. Students can explore which environmental and cultural characteristics make it different. Students can create a Venn diagram to compare and contrast borage usage techniques. (GEO 2.6)

Technology- Students can use various applications: Pages, Kidspiration, Pixie, etc. to create brochures and posters discussing the uses of their plants.

Extra benefits-- Borage may be used as a pollinator, which will assist in more positive growth for other garden plants nearby.

Engagement and Community Involvement--

-Students can share their brochures with local farm stands, nurseries, greenhouses...

-Students could set up an "herb store" and sell borage (and other herbs) to parents during dismissal time.

Additional Resources on Borage:

<http://en.wikipedia.org/wiki/Borage>

<http://gardening.about.com/od/herbsspecificplants1/p/Borage.htm>

<http://theherbgardener.blogspot.com/2011/06/what-is-borage-and-how-do-you-grow-it.html>

<http://www.wikihow.com/Grow-Borage>

This photo was taken by Lori Woodruff, and is of a borage plant grown by WCAIS students. This plant was such a success, you may notice a large garden spider that has taken up residence in the center of the photo. Borage can also be used as a home!



These suggestions are examples only, and may require adaptation. Check your grade-specific standards to determine whether or not the suggestions provided meet your individual curricular needs.

For more information, contact ctgreenleaf@ctgreenschools.org

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