Calendar

September: Seed meeting Trash clean up October: Remove non-overwintering plants Add leaves to garden beds Winterize hoses Plant bulbs Cover crops? November: December: January: February: Start indoor seeds or outdoor mini greenhouses March: Plant peas, lettuce Top off beds with compost Prune Raspberries 2025: Build raspberry trellis April: Plant hardy plants Plant sunflower seeds Plant other seeds 2025: Bottlecap Mural May: Plant MORE plants Set up summer weeding sign up genius 2025: purchase irrigation? 2025: Make good weed/bad weed signs 2025: Make good bug/bad bug signs June: July: August:

Soil Information

Beds pH levels

(as of 03/07/24)

Herb garden: 6.3

Western-most bed: 6.1 N end, 7.0 s end

Center bed: 5.7 n end, 5.4 s end Easter-most bed: 5.7 s end, 6.6 n end

Sunflower beds 5.4 - 6.0

Raspberries: 5-7 (west to east)

Around Roses: 5.0 (!)

Plant pH Preferences:

Peas: 6-7.5

Lettuce: 6-7

Tomatoes: 5.5-7.5

Cucumbers: 5.5-6.8

Peppers: 5.5-6.8

Beans: 5.5-6.8

Sunflowers: 6-7

Raspberries: 5.5-6.5

Roses: 6-7

Strawberries: 5.3-6.5

Basil	5.5 - 6.5
Chives	6.0 - 7.0
Fennel	5.0 - 6.0

Garlic	5.5 - 7.5
Ginger	6.0 - 8.0
Marjoram	6.0 - 8.0
Mint	7.0 - 8.0
Parsley	5.0 - 7.0
Peppermint	6.0 - 7.5
Rosemary	5.0 - 6.0
Sage	5.5 - 6.5
Spearmint	5.5 - 7.5
Thyme	5.5 - 7.0

Possible Curriculum Integration

Resource Websites:

https://kidsgardening.org/resources/create-sustain-a-program-connecting-the-garden-to-the-classroom-2/https://www.wholekidsfoundation.org/assets/documents/school-garden-lesson-plans.pdfhttps://biggreen.org/resources/?resource-categories%5B%5D=teaching-in-the-gardenhttps://biggreen.org/resources/ready-set-grow/https://rootsandshoots.org/resources/build-a-bee-hotel/

https://www.lifelab.org/school-garden-resources

http://illinoisfarmtoschool.org/wp-content/uploads/2019/03/UIExt-gardening-resources.pdf https://www.biggreenathome.org/eduweekly

https://www.nybg.org/content/uploads/2017/02/calendar.pdf

Weather – Weather has a great impact on the garden. Setting up a simple weather station to track rainfall and temperature and then comparing the data collected to the health and growth of your garden is a great way to make the measurements relevant. It also provides students with an understanding of some of the challenges of farming.

Ecosystems – A school garden provides a model ecosystem where students can observe and learn about the relationships between living (plants and animals) and nonliving (soil and water) elements. Watching beneficial insects

control garden pests, discussing how decomposers break down organic matter in a compost pile, observing pollinators at work, or tracking the flow of rain water runoff into a rain garden serve as models for understanding how larger ecosystems function.

Act out a story – As a class, read a book with a garden storyline. Link the book to the garden by performing the same tasks as the book's characters or growing the same plants mentioned in the book. The Junior Master Gardener Program and the American Horticultural Society have created an excellent list of plant-, garden- and ecology-themed fiction for children through their <u>Growing Good Kids - Excellence in Children's Literature Awards Program</u>.

Number and operations

- Plant lettuce seeds in a flat or pot, carefully keeping track of the number planted. Count the number of seedlings as they emerge. Use these two numbers to calculate the germination rate (number of seedlings divided by number of seeds planted, multiplied by 100).
- Ask students to estimate the number of seeds in a tomato, then slice it open and count the number of seeds
 actually present. Compute the difference between the estimate and actual number of seeds using subtraction.
- Collect five to ten flowers from the same plant in your garden. Count the number of petals on each flower and create a chart to display your results. Repeat with other types of flowers in the garden. What do the results say about the characteristics of plants?
- Measure the height of a group of plants and determine the mean, median, and mode.

Measurement

- Calculate serving sizes of common fruits and vegetables using measuring cups.
- Make a recipe using harvest from the garden requiring different measuring techniques.
- Measure the height of garden plants using standard (inches and centimeters) and nonstandard (such as pencil lengths or hand widths) measuring techniques. Chart, compare, and discuss your results.
- Plant bean seeds and let them grow for a few weeks. Remove from the soil and carefully wash soil away from
 the roots. Measure part of the root system. Estimate the percentage of total roots you measured and then
 estimate the length of the entire root system on that plant. After estimating, measure the rest of the roots and
 compare to your length estimate.
- Participate in the <u>Journey North Tulip Project</u>. Track the appearance of tulip bulbs in your schoolyard and share the data with other students and teachers participating throughout the country.

Calculating area: How much mulch? (raised bed dimensions for area, assuming 2 inch layer)

Measuring (heights of different plants)

Rain gauge

Insects (worms, flies, bees, pollinators, butterflies, earwigs, pill bugs, ladybugs, grasshoppers)

Scout Badge Opportunities:

Girls Scouts

Daisies

Journey: Think Like a Citizen Scientist

Journey: Welcome to the Daisy Flower Garden

Math in Nature 1, 2, & 3

Outdoor Art Maker



Journey: Think Like a Citizen Scientist

In this Journey, you will:

- 1. Find out how scientists use the scientific method to investigate the world
- and make discoveries.

 2. Do hands-on activities to learn how to make observations and collect
- data.

 3. Plan a Take Action project that helps others. If you're a Girl Scout volunteer, go to Volunteer Toolkit for complete meeting plans and activity instructions.

Learn more about how to earn your Take Action Award — and help your community — with the Girl Scout Take Action Guide.



Math in Nature 2: Numbers in Nature

- Explore how to measure the size and amount of objects in nature.
 Create your own unit of measure for nature, too!
 1. Search for shadows
 2. Sort nature, abserts

- Sort natural objects
 Make your own unit of measure
 When you've earned this badge, you will know about shadows, measurement, sorting, and estimating.



Journey: Welcome to the Daisy Flower Garden

- Explore the world of gardening—plant a mini-garden, learn about composting, find out how ladybugs help flowers, take a field trip to a public garden, or talk to a beekeeper.
 Plan a Take Action project, such as planting vegetables in a community garden or flowers at a nearby hospital.
 Earn 3 leadership awards: Watering Can Award, Golden Honey Bee Award, and Amazing Daisy Award. If you're a Gilf Scout volunteer, go to Volunteer Toolkit for complete meeting plans and activity instructions.

Learn more about how to earn your Take Action Award — and help your community — with the Girl Scout Take Action Guide.



Math in Nature 3: Design with Nature

- Observe and use what you know about the outdoors to make and do things in nature.

 1. Count with birds

 2. Identify parts of nature

 3. Make a map
 When you've earned this badge, you will know how to use math to identify and sort things in nature. You'll also know how to create a map.



Bugs

Journey: Think Like a Citizen Scientist

Math in Nature 1, 2, & 3 Outdoor Adventurer **Outdoor Art Creator**

Senses

Grant Opportunities:

https://dnr.illinois.gov/education/grants/grantsshag.html

https://www.ftpf.org/apply

https://rootsandshoots.org/take-action/find-funding/

https://kidsgardening.org/grant-opportunities/

https://corporate.lowes.com/our-responsibilities/lowes-foundation

https://agclassroom.org/teacher/grants/

https://gardenclub.org/awards-and-grants



Math in Nature 1: Shapes in Nature

Identify shapes and patterns in natural objects, like rainbows, flowers, and leaves.

1. Search for shapes in nature

2. Find and make patterns

- 3. Create art inspired by nature When you've earned this badge, you will know how to identify shapes and patterns in nature. You'll also know how to create your own.

https://scottsmiraclegro.com/responsibility/foundation/enhancement/

https://www.wholekidsfoundation.org/programs/school-gardens-grant

https://wildones.org/seeds-for-education/?ebf423&ebf423

Grow a Row for Beyond Hunger: https://www.gobeyondhunger.org/sites/default/files/resources/grow-row-how.pdf