

# 5<sup>th</sup> grade Spring Planting Instructions- Onions, Leeks, Basil

## Contact Information

**Ellen Kinoshita**

Planting Co-Chair

[e24shin@yahoo.com](mailto:e24shin@yahoo.com)

(949)584-3002

**Ed Silverman**

Planting Co-Chair

[edsilverman@hotmail.com](mailto:edsilverman@hotmail.com)

(626)905-7648

**Teena Spindler**

UC Master Gardener

[teena.spindler@gmail.com](mailto:teena.spindler@gmail.com)

**Joanne Byrd**

UC Master Gardener

[jbannon@msn.com](mailto:jbannon@msn.com)

## Planter Garden Master Job Description

- Educate children on the life cycle of plants (seed, seedling, flower, vegetable/fruit, to seed again)
- Educate children on what plants need to grow (water, sun, air, soil)
- Teach students how to plant seeds, care for seedlings (water, thinning plants, pull weeds from root)
- Teach students how to wash/prepare produce to take home, give to teacher or for the produce stand to sell
- Label bed with type and variety of produce being grown (use masking tape on garden sign)
- Planter GMs are responsible for all aspects of bed maintenance
- Work with Lead GM to have students taste test vegetables grown
- Children will rotate about 2-3 times during the school year

## Planting Notes

### Basil & Leek Seeds

**SUPPLIES** (set out before students arrive): seed packets, gloves, square foot gardening (SFG) templates (crop type printed on template), 1 bag of potting soil, watering cans with rosettes

- Before your first to the garden, read your seed packet thoroughly and refer to it throughout the season. **We recommend you keep seed packets as they have important information on germination, thinning seedlings, days to harvest, etc...**
- Before kids come out to the garden, smooth down the soil with a leaf rake – pull back irrigation hose if necessary and place back in bed
- Greet kids, ask about their garden experience (what did they plant, how did it do, did they get to eat it, did it get sold, etc)
- Explain what a seed is: a baby plant sleeping inside the seed covering (a mini root, stem and leaves are actually inside the seed)

- Explain what a seed needs to 'wake up': ask the kids what they think it needs; answers are soil (which is plant food), sun, water, air
- Explain the *SFG or row planting concept*: SFG a lot of plants in a small space; show them the template, explain how to place it (inner row first); drop 2-3 seeds in each hole; move template to next space by flipping over.
- Classes PLANT ½ OF BED PER VISIT so more children have planting experience. Remember to start from inner row.
- Line kids up; have them make one hand into a 'cup', place appropriate number of seeds in 'cup', go one at a time to bed and place 2-3 seeds in template openings.
- Kids return to end of the line when finished. GM LIGHTLY SPRINKLES potting soil over seeds to depth indicated on seed packet.
- Kids water the seed-bed with watering can that has a rosette (use this type so seeds are not displaced.)
- **Keep soil moist until seeds have germinated and seedling is established; 2 to 21 days (refer to seed packet for germination times).**

#### THINGS TO CONSIDER

- Seeds must be kept moist until they germinate, depending on the weather, this may require a morning and an afternoon watering
- If seeds do not germinate within expected germination time, re-seed – discuss with children why seeds did not grow
- Its helpful to label bed with variety of produce being grown

### **Onions Sets & Leeks (Transplants go into Bed B, Seeds in Raised Beds)– Bed B, see map for assigned rows.**

- Plant onion sets (bulbs) 1 inch deep, with 4 to 5 inches between each plant. Water well and keep soil moist. When onions start to mature, the tops become yellow and begin to fall over. At that point, bend the tops down or even stomp on them to speed the final ripening process.
- Plant leek seedlings in Bed B or in your assigned raised bed. Carefully separate roots of the seedlings and plant 4-6 inches apart. Plant deep enough to allow the soil comes up to the base of the first green leaf. Water well. Water leeks as needed until plants are established. After that, plants require an inch of water a week, either through rainfall or irrigation. Inconsistent moisture yields tough stems.

## Growing Notes

- Soil – For planter beds, keep soil at  $\frac{3}{4}$  bin height (use Kellogg Harvest Supreme or Amend by red work benches near barn)
- Use snail bait if you see snails (in shake cans in red barn on the shelves to the right)
- Once plants produce their second set of true leaves, **start thinning**. You can try the pencil method with children – wrapping the stem of the plant around the pencil and gently pull up. Refer to seed packet for appropriate spacing. You may have children use ruler or their finger widths, whichever is easiest. You may have children eat mini carrots or small lettuce/kale leaves that have been thinned.
- Once plants are established, have children mulch with straw, Kellogg mulch, or loose mulch near red barn. Make sure they mulch around plants, making sure it does not touch plant stem. This helps keep weeds at bay and help keep the soil moist
- To make is easier, work with other class GMs and set up a watering schedule

## Planting Strawberry Plants

- Fifth Grade will not be planting strawberries in the spring, but the planters will be expected to contribute to the harvesting of red berries and the trimming of runners.

### How the Garden Beds are Prepped – Plasticulture

- Black plastic is placed over beds. This method is called plasticulture and will improve weed, help conserve soil moisture, and keep the fruit clean.
- Begin to build the beds by loosening the soil with a rototiller or shovels and mix in soil amendments.
- Beds should be 3 feet wide and 6 to 8 inches high. If making more than one bed, place them at least 3 feet apart.
- Put soaker hose (or drip tape) down the middle of each bed on the surface of the soil. If the soil is dry moisten at least one day before planting.
- Spread black plastic tightly over the bed. The tighter the plastic is, the better the soil will warm during the winter, allowing for more root and plant growth. Anchor the plastic by burying the edges using wire staples or by rolling the excess plastic tightly around poles, pipes, or 2 x 4s. Rocks or bricks may also be used
- Measure and mark planting holes in the plastic. The plants should be set in a staggered pattern, approximately 12 inches apart in rows that are 12 inches apart . An easy way to
- mark is just to press a dimple into the plastic and cut a hole using a bulb planter.

## Planting

- Water your plants in thoroughly before planting. Using a bulb planter, narrow trowel, or any flat blade about 2 inches wide, make holes that are about 4 inches deep in the soil below your cuts in the plastic. Press the plants into the holes, and pull the soil tight to them as best you can, so the soil is level with the crowns. The soil of the plug plants should be slightly below the soil in your strawberry bed.

- Water immediately after planting through the holes in the plastic with a sprinkling can, applying 4 to 8 ounces to each plant.

## Growing Notes

- Keep plants watered daily for the next week to make sure they become established and start growing. The old leaves will eventually die and new ones will begin to form in about a week to 10 days. Avoid letting the plants wilt.
- Monitor soil moisture (finger method) at the base of the plant. Manually water as needed, the auto-irrigation system should take care of watering needs for established plants.
- As established plants grow, the plants will produce runners. To improve fruit size, cut runners off as soon as they appear.
- Remove weeds as needed.

In early spring, plants will begin to grow and flower. Watch the strawberries change color and pick when the berries are ripe. Remove any fruit that is damaged, overripe, or moldy to reduce the spread of disease. GMs may want to harvest outside class garden days to encourage growth.

## Harvesting and Taste Testing

- We encourage you to have children harvest and sample vegetables they have grown during garden time. Jennifer Whyte will contact you if she would like to harvest some produce from your beds. We also encourage you to have children give harvested produce to their teachers.

### 5<sup>th</sup> Grade Planting Timeline

WHEN	WHO	WHAT
January	GMs Students	<b>RAKE DOWN</b> bed before children come out. Continue to tend to strawberry plants <b>PLANT ½ BED</b> with leek/onion seeds,
February	Students GMs	<b>THIN, HARVEST, WEED, MULCH &amp; THEN PLANT</b> other ½ of bed with herb and leek seeds <b>SPRINKLE SNAIL BAIT</b> only if you see snails
March	Students  GMs	<b>THIN, HARVEST, WEED, MULCH &amp; THEN PLANT to fill in Gaps with Basil seeds.</b> <b>Trim Strawberry runners</b> <b>SPRINKLE SNAIL BAIT</b> only if you see snails
April	Students  GMs	<b>THIN, HARVEST, WEED, MULCH</b> <b>Trim Strawberry runners, harvest ripe fruit</b> <b>SPRINKLE SNAIL BAIT</b> only if you see snails

May

Students  
GMs

**REMOVE ALL PLANTS AND WEEDS BY THE ROOT FROM YOUR BED**  
**WASH/PREPARE PRODUCE** for Thursday produce sales (talk with Jennifer)  
**REMOVE CLASS SIGN AND STORE IN SHED FOR SUMMER**