

Daily Lesson Plan (DLP)

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| Topic. Plot your Plants. | | Day: 2 |
| Grade: 4-5 | Lesson Name: Where will each plant be placed within the beds? | Time :(60 Mins.) |

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| Topic | Where will each plant be placed within the beds? | | |
| Weekly key words | Soil, netting the shade, USDA zone, seaweed, etc. | | |
| Seating plan | <input type="checkbox"/> Individual | <input type="checkbox"/> Pairs | Group of 4 |
| Skill development | <input checked="" type="checkbox"/> Reading <input type="checkbox"/> Reflection <input type="checkbox"/> Other (Specify) | <input checked="" type="checkbox"/> Writing <input type="checkbox"/> Illustration | <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Presentation <input type="checkbox"/> Collaboration <input type="checkbox"/> Observation <input type="checkbox"/> Research |

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| Objectives: ➤ The students will be able to: | ➤ Develop knowledge about some more techniques to place plants within the garden beds |
| Teaching Resources: | Multimedia/projector, laptop, YouTube, writing board, notebook, piece of paper, pen/pencil, plants, worksheet, journal |
| Teaching Learning Strategies | |
| Introduction: 5 mins. Start the lesson by asking the students to recall and share the topic they have previously discussed in the classroom. Listen to their responses and give feedback. Methodology: (20 mins.) The teacher will discuss some more basics of where to place plants within the beds: When to Plant: There are several factors to consider when deciding when to plant your garden. First is the type of plant you're putting in. Some plants, including lettuce and broccoli, can tolerate cool weather. Others, such as basil and tomatoes, are likely to be damaged or killed by temperatures lower than 40 degrees. Refer to <u>Vegetable Encyclopedia</u> to determine the best time to plant each crop. | |

Other important considerations are frost dates and soil temperature. In planting zones 3 to 6, the primary gardening season falls between the first and last frost dates. Cold-sensitive plants must not go into the garden until all danger of frost has passed. This typically falls somewhere between March and May, depending on your growing zone. If you don't know your growing zone, check the [USDA zone map](#).

If you garden in zones 8-10, it may be heat — not frost — that determines your planting dates. Warm-climate gardeners often plant in the fall rather than the spring, to avoid midsummer heat. Others gear up for two planting periods each year: early fall and late winter.

Soil temperature is also an important planting-time consideration. Most plants thrive in a moderate soil temperature of 60 to 70 degrees F. Some, such as peas and spinach, will germinate well and grow just fine in cool (45 degrees F.) soil. Others, such as eggplant and melons, will not germinate, nor will they grow properly unless the soil is above 60 degrees F. The Vegetable Encyclopedia has planting recommendations for each crop.

Some vegetables, including tomatoes, peppers, squash and corn, are typically planted just once each growing season. Other crops, such as salad greens, roots crops, peas and beans, can be planted and harvested early, and then be planted again later in the season for a second harvest.

Once the seeds have been planted, the area should be watered thoroughly, to a depth of several inches. The soil should be kept consistently moist until the seeds germinate and the young plants have established their first sets of true leaves. Most seeds have a hard coating that must be softened for a period of several days before the seedling inside can emerge. If the soil dries out during this time, the process will be interrupted and you may need to reseed. Covering newly planted areas with garden fabric (or [shade netting](#) in the summer) helps keep the top layer of soil consistently moist. This cover can be removed once the seedlings are up and the plants are established.

If possible, young seedlings should be transplanted into the garden when the weather is calm, cool and drizzly. Tender seedlings will suffer if they're planted out on a sunny, hot or windy day. If the weather doesn't cooperate, water your new seedlings thoroughly after planting and then cover them with garden fabric for several days. The plants need time to establish new roots before they are able to extract moisture and nutrients from the soil. If you do not cover them with garden fabric, you may want to find another way to shield them from the sun and drying wind. Be sure to water these new plants every day or two for the first couple weeks.

In general, plants in borders are arranged with tall plants (taller than 2 to 3 feet) placed in the back, mid-size plants (10 inches to 2 to 3 feet tall) in the middle, and short plants (less than 10 inches) in the front of the bed. It is best to use groupings or drifts of plants for a natural feel. Look at the border planting plan below. Tall plants are in brown, medium-tall plants are in blue, medium-short plants are in teal, and short plants are in dark green. Note that the plants are grouped rather than in rows.

The other thing to consider when planning your plant placement is that it is often best to use groupings of at least 3 of the same plant together. One plant alone often does not have enough impact, where a grouping of 3, 5, 7 or more will have good impact.

Odd numbers tend to look better than even numbers. This is especially true of smaller plants where groups are necessary to have impact. Short plants can be used in long narrow plantings to create borders on the edge of a bed.

There is an exception to the plant 3 or more plants rule. In general, if a plant is large enough, think shrubs or large perennials, it can hold it's own without being grouped with other plants. Usually, only back of the border plants can stand alone. Scroll back up to see photos of borders.

Island beds work on the same principles as borders, but rather than having the taller plants in the back. The taller plants are in the middle of the bed or centered on the anchor plant. In the design below, the bright blue dot is the anchor, the brown are the tall plants, the pink are the medium plants, and the dark blue are the short plants.

Activity: (30 mins.) (Group Work)

Make groups of 5-6 students and assign them to search for companion plants that can be planted and where they can be placed within the beds for planting more within short time period. Ask them to note down their findings sin their journals. Make sure to provide laptops or PCs with good internet.

Note: make sure to identify your growing region first.

Wrap up (5mins.): Wind up the lesson by asking the students randomly to share their findings.

Home Assessment:

The students will do the worksheet as homework.

Worksheet

Lesson Evaluation:

- Teacher was able to accomplish all aspects of the lesson well ☐
- Teacher was not able to do warm up activity ☐,
- develop lesson plan well ☐,
- do the learning activity ☐,
- do wrap up ☐,
- accomplish lesson objective ☐,
- manage time well ☐,
- manage class well ☐

Worksheet Day

Name: _____

Class: _____

Topic: Plot the Plants

Subject: Science

- **Enlist five such vegetables which are likely to be damaged or killed by temperature lower than 40 degrees.**
