

Harvest Time



Objective Learners will be able to determine when the proper time is to harvest a wide variety of fresh produce.

Background The plant life cycle begins with a seed and then progresses from root to sprout, to leaves, to stems, flowers, fruit, ending with mature seeds. This life cycle can be used as a guide to harvesting produce at its peak flavor. If the produce you are harvesting is from the leaves or stems of a plant, it is best to harvest them at the beginning of the cycle, before the flowers, fruit and seeds form. For example, kale is sweetest before it begins to flower. However if the produce is a fruit or seed, it will be harvested near the end of its life, later in the season. Mature fruits like tomatoes are at peak flavor when they have had a chance to ripen. Seeds must be mature and plump before they reach their peak.

Any produce that is a root, leaf or stem loses flavor and tenderness after the plant blooms and sets seeds. At that stage, the plant expends its energy forming the reproductive organs of flowers, fruit and seeds, so the rest of the plant suffers. If you are not planning on harvesting the flowers, fruit or seeds, it is best to remove them at the flowering stage, so that the leaves or roots will be viable longer. If the plant has reached the fruiting and seed stage, the leaves are often very bitter or tough. It is best to remove those plants and replant with a new crop.

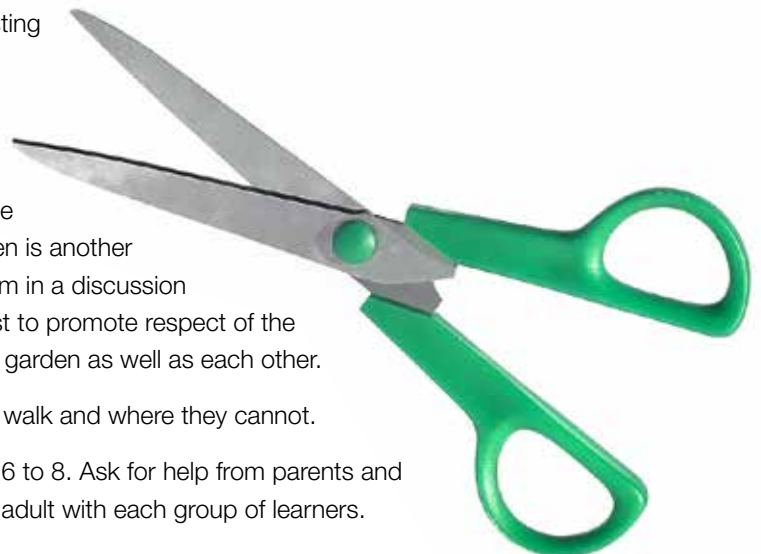
Many plants can be eaten at different stages. For example beet greens can be harvested when the plants are small and the greens are still tender. Often gardeners will thin the beets at that time and eat the greens. Beet roots can be harvested after the roots have had a chance to form but before the plant sets blossoms or seeds. Caution, do not eat any leaves from plants in the nightshade family: peppers, potatoes, tomatoes, tomatillos and chiles. These leaves have compounds that may be poisonous to humans in large doses.

Materials Clean plastic basket for harvesting
Scissors
Small Trowels


Preparation Before going outside, describe the garden rules to the learners. Explain that the garden is another kind of classroom. Engage them in a discussion about what rules would be best to promote respect of the living plants and animals in the garden as well as each other.

Clearly explain where they can walk and where they cannot.

Divide the class into groups of 6 to 8. Ask for help from parents and volunteers so that there is one adult with each group of learners.



Activity

1. Send each group to a different garden plot.
2. Have them observe the plants. What plant life stages do they observe? Which plants have flowers? Which have fruits? Which have seeds?
3. Use the **Harvest Time Chart** to determine which plants may be ready for harvest. Use the scissors to harvest green  and the trowels to harvest root vegetables.
4. Remove any flowers or seeds that are on root vegetables or greens.



Harvest Time Chart

PART OF PLANT TO HARVEST	TOO SOON	TIME TO HARVEST	TOO LATE
Root	Leaves are small, root is thin. If thinning is needed, use young plants as greens.	Root is well formed. Root is showing above ground.	Plant is flowering or has seeds.
Leaf	Can always eat leaves, even as micro greens	Leaves are numerous, healthy and tender.	Plant is flowering or has seeds.
Stem	Stem is too thin.	Stem is formed but still tender.	Stem has lots of leaves, flowers or seeds.
Flower	Not formed	Depends, for broccoli should be buds	Flowers are fully opened or gone to seed.
Fruit	Hard or green	Yields slightly to the touch	Fruit is very soft, fallen on the ground or fermented.
Seed	Seed pod immature, seeds not fully formed	Seed pod is plumb and dried.	Seed pod has burst open or seeds have been eaten.