

Daily Lesson Plan (DLP)

Topic: Research species of plants that can be grown in your zone		Day :1
Grade: 4-5	Lesson Name: Research species of plants that can be grown in your zone	Time :(60 Mins.)

Topic	What are the species that will grow in your zone?		
Weekly key words	Hardiness zones, climatic zone, perennial plants, annual plants, siberian kiwi, heat zone map, etc.		
Seating plan	<input type="checkbox"/> Individual <input type="checkbox"/> Pairs <input type="checkbox"/> Group of 4		
Skill development	<input checked="" type="checkbox"/> Reading <input checked="" type="checkbox"/> Writing <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Presentation <input type="checkbox"/> Reflection <input type="checkbox"/> Illustration <input type="checkbox"/> Collaboration <input type="checkbox"/> Observation <input type="checkbox"/> Research <input type="checkbox"/> Other (Specify)		

Objectives: ➤ The students will be able to:	➤ Learn and develop knowledge about growing from seed to harvest ➤ Learn the growing stages of tomatoes ➤ Observe different stage from seed to harvest
Teaching Resources:	Multimedia/projector, laptop, YouTube, writing board, notebook, piece of paper, pen/pencil, harvest chart time, worksheet
Teaching Learning Strategies	
<p>Introduction: 5 mins.</p> <p>Icebreaker Activity: Invite a gardener or a farmer to the classroom to describe how he prepares the soil, plants, and harvests a crop. From seed to harvest share all the steps of growing cycle of plants/crops.</p> <p>Methodology: 10 mins.</p> <p>Open the following link to show video of growing tomato from seed to harvest to the students, using a projector, multimedia, or a laptop. https://youtu.be/Nc_gHJBDfxk</p> <p>Group Work:</p> <p>Make each group of 4 students and encourage them to discuss the content shown in the video. (10 mins.)</p> <p>The teacher will explain from seed to harvest in detail. 15 min.</p> <p>What does Seed to Harvest Mean?</p> <p>Seed to harvest is a concept encompasses growing plants, particularly edible plants, from seed until maturity, the harvesting of the fruit or vegetables, and the saving of seed from those plants for future planting. The seed to harvest concept is circular: a grower buys seeds, plants them, cares for and nurtures the plants that grow, harvest the fruit or vegetables that result, and then collects seeds for the next year's planting. Seed to harvest planting is more time intensive, as growers must start seed early in the year, often during the final weeks of winter, in order to achieve the optimal size for transplantation.</p> <p>Maximum Yield Explains Seed to Harvest:</p> <p>Planting crops, vegetables, and fruits is as ancient as humanity itself. Growers have many option when it comes to how they obtain the plants they want to grow. Many chooses to grow plants and crops using greenhouses or DIY methods. But it is costlier than other process.</p>	

Careful tending of plants intended for seed harvesting is important. The goal is not just to keep plants apparently healthy, but to ensure optimal nutrition, water, and light for seed development. Healthy seeds are essential to replanting efforts the following year.

When a farmer grows his crops he must decide how and when to till (prepare the soil and make a good seedbed) his fields. In addition, care must be taken to harvest and clean seeds correctly. Some seeds are “dry”, and these can be winnowed from the husk or pod after drying and maturing. Wet seeds, such as those of tomatoes, must be washed and cleaned to remove the gel surrounding them.

Once dry and clean, seeds need to be packaged correctly to ensure safety during storage and optimum conditions to keep them fresh for the coming year when they will be replanted and the process begins once more.

Activity: (15 mins.) (Group Work)

Make groups of 7-8 students.

1. Send each group to a different garden plot.
2. Have them observe the plants seeds (dried beans, lentils, sunflower, sesame).
3. What plant seeds life stages do they observe? Which plants have flowers?
4. Use the Harvest Time Chart on the following page to determine which seeds may be ready for harvest.
5. Remove seeds that are on root vegetables or greens.

Harvest Time Chart

Part of plant	Examples	Too soon	Time to harvest	Too late
Seeds	Dried beans and lentils, sunflower, sesame	Seed pods immature, seed pod not fully matured	Seed pod is plump and dried.	Seed pods have burst open or seeds have been eaten.

Wrap up (5mins.): Wind up the lesson by asking the students randomly to share their observations of seed stages.

Home Assessment:

The students will do the worksheet as homework.

Worksheet (Day1)

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 1

Name: _____

Class: _____

Topic: Gardening

Subject: Science

➤ Label the bean seed using words from the given word bank.

bean seed (dicot), epicotyl, hypocotyl, seed coat, radicle, cotyledon

