

Daily Lesson Plan (DLP)

Topic: Research your growing zone		Day :1
Grade: 4-5	Lesson Name: Research your growing zone	Time :(60 Mins.)

Topic	What plants can damage each other if plants closely?		
Weekly key words	Combining plants, nutrients, rob, soil, onions and beans, mass extinction, 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 about the plants that cannot be planted together ➤ Learn some combinations of plants that cannot be planted together ➤ Know the damages if some plants are planted together
Teaching Resources:	Multimedia/projector, laptop, YouTube, writing board, notebook, piece of paper, pen/pencil
Teaching Learning Strategies	
<p>Introduction: 05 mins.</p> <p>Icebreaker Activity: Ask the students to work in pairs, draw themselves as a vegetable and introduce themselves as vegetable to their partner. After describing to each other, the students would find their twin vegetables and share the pictures. Take their responses and give feedback.</p> <p>Methodology: 20 mins.</p> <p>The teacher will talk about the companion planting and its importance.</p> <p>Starting gardening require use of tools. The selection of right tools for doing a variety of work in garden is very essential for a success.</p> <p>Open the following link to show the video to the students, using a projector, multimedia, or a laptop.</p> <p>https://youtu.be/nDCbIQ0yMgw</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 discuss to highlight the damages caused by combined planting, as some plants/vegetables cannot be planted together.</p> <p>Some plants compete for nutrients or space or attract damaging insects and fungi. Here are some incomplete plant combinations. A garden is like a community. Some members of the community live quietly and peacefully with each other, and others demand their own space. Some members even tend to rob valuable nutrients from their nearby neighboring plants and damage it. Therefore, make sure do such combine planting which coexist happily and don't damage other plants.</p> <p>The teacher will mention and explain some of the few plants that don't play well with each other.</p> <p>1. Beans and Onions:</p> <p>Beans are considered allopathic plants, which means they produce biochemical that can hinder the growth of another plant. Beans don't go well with a member of the onion family, such as onion, leek, chives, and garlic.</p> <p>2. Tomatoes and Corn:</p> <p>Tomatoes and corn compete with each other for soil nutrients if planted closely. Tomato hornworms and certain types of fungi love corn and tomatoes, so separating the two prevents the mass extinction of both. Tomato also doesn't go well with cabbage and potatoes.</p> <p>3. Potatoes and sunflower:</p> <p>Potato is a vegetable that grows deep while sunflower grows high. Therefore, they don't get along because sunflower contain a poisonous ingredient that hinders potatoes from growing fully.</p>	

4. Eggplant and Fennel:

Eggplant is a member of the nightshade family while fennel produces chemicals that slows nightshade growth. That's why growing them together is a destructive idea for both crops.

There are some other vegetables that are not useful to plant together. Such as *asparagus and fennel, cucumber and rosemary, lettuce and garlic, pumpkins and summer squash, celery and carrots*, and many others.

Activity: (30 mins.) (Group Work)

<https://youtu.be/hQnvdkoSUGc>

Design your own school garden, and add it to the site all around the school garden area.

Divide the class into groups of 3-4 students. Have each group assigned to cultivate potato with its combining plant, observe, and note down the findings of the resulting effects. They will note down the observations in the given table given to each group. By the end of the activity, the students will be able to identify which plants can grow well with potato and which are not meant to be planted together and what kind of damage such combine planting causes.

- 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.
- Ask for help from parents and volunteers so that ideally there is one adult with each group of learners. 1. Each group will
- Gather the class together again and have each group present their findings to the entire class, along with their observations.

Vegetables/Plants	Combining plants				Findings
	Group 1	Group 2	Group 3	Group 4	
Potato	Sunflower	spinach	corns	beans	Do they grow well? Are there any damage to the combining plant? If yes, what are those? explain in detail.

Wrap up (5mins.): Wind up the lesson by asking the students randomly to assess their understanding of the topic.

Home Assessment:

The students will revise the topic 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

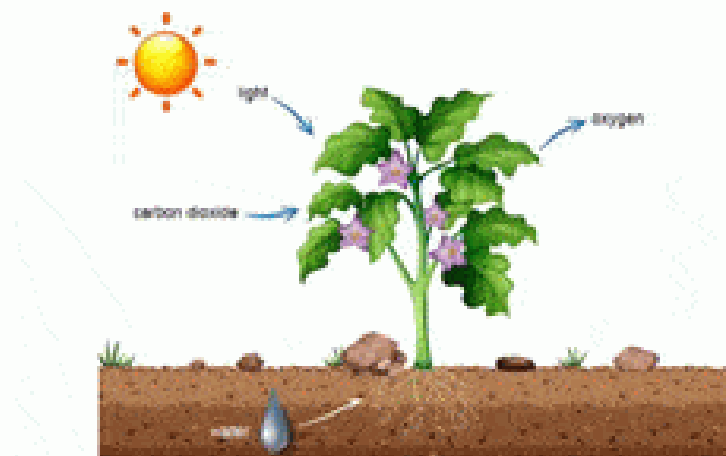
Fill in the blanks.

light

air

water

oxygen



Photosynthesis creates food for plants:

Plants use _____ from the sun.

Plants use carbon dioxide from the _____.

Plants use _____ from the soil.

Plants grow and give out _____.