

Growing vegetables from food scraps

Subject(s): Social Sciences, Healthy Living

Year(s): 3-4

Learning intention(s):

Students explore and learn how to plant vegetables from food waste.

Mapping to curriculum:

Strand

- Social Studies – Resources and Environment
- Healthy Living – Personal and Community Health
- Use and Management of resources
- Civic Pride

Learning outcome(s):

- Investigate the resources they use in their homes and schools and advocate its management
- Appraise respect and care for the classroom environment and materials
- Investigate the resources available in home, schools and their community and discuss ways to preserve and conserve them
- Justify healthy choices that promote the wise use of resources

Lesson Instructions

(adapted from Victorian Schools Garden Program, 2021)

Materials

- Potting mix or garden soil
- Empty containers – pots, bowls, cups, or jars
- Food scraps (such as spring onion/shallots, lettuce)
- Paper towel
- Reused plastic bag

Activity

1. The teacher introduces the topic by discussing the importance of using resources wisely and sustainably, both at home and in schools.
 - a. Explain the importance of growing vegetables for healthy eating and conduct a class discussion about the importance of resource management, conservation, recycling, reuse and environmental sustainability.
 - b. Use some of the statements below to facilitate the discussion:
 - i. It is important to use resources wisely to promote conservation and reduce waste to landfills
 - ii. Explain the concept of reuse, reduce and recycle. Give examples of what can be done at home or at school to promote and apply the 3Rs concept.
 - iii. In this activity, students will learn about reusing kitchen scraps to grow food or vegetables.

- iv. Start a class discussion by asking students to share their experiences of planting food at home.
 - v. Commonly eaten vegetables such as spring onion and lettuce scraps, pumpkin, tomato or corn seeds can be used to grow new food.
 - vi. Some food scraps like pumpkin seeds, corn seeds and tomato seeds need to be dried before planting while others like spring onion (shallots) and lettuces can be planted directly in the ground or put in water to grow roots before planting.
 - vii. You can grow a garden using old food scraps from your kitchen and thus save money while also reducing waste and limit food packaging.
 - viii. You can grow the old food (in seed or scrap form) in pots or in small garden beds.
2. After the class discussion, students are divided into small groups of 2-3 students. Each group chooses a food scrap to work with. Encourage them to select a food plant or scrap that they are familiar with or that they enjoy.
 3. The teacher asks each group to bring a sample of food scraps or waste from home. These can be shallots, lettuce, old tomato or cucumber or corn.
 4. In class, the students discuss how they will use the food scraps or seeds to grow new plants. The teacher emphasises the differences between planting from scraps and from seeds. Planting from scraps and or seeds need careful planning and preparation, such as putting stems in water to grow roots or to thoroughly dry seeds before planting in soil.
 5. Each group brings their selected plant/scrap to class. They place soil or water in the empty containers and then decide which plants would grow well in water or soil. The spring onions and lettuce can be grown from stem, which is placed in the water while pumpkin, corn, and/or tomato seeds can be planted directly in soil or after being dried.
 6. Observation – After soaking/drying and then planting the scraps, the students are to observe their plants over a period of 4 to 8 weeks and record the changes observed. The observations can be about the number of sprouts, leaves, length of the growing plant, any wilting of leaves.
 7. Recording changes – Students record changes observed after every four to seven days in their exercise books, using a record sheet (see example below.)
 8. Reporting – At the end of 2 to 4 weeks, each group presents their observations to the whole class and also bring their growing plants to display in the classroom.



Observation Sheet		
Group Members: What we planted:		Date Planted:
Week	What you did	Observations
1		
2		
3		
4		
5		
6		
7		
8		