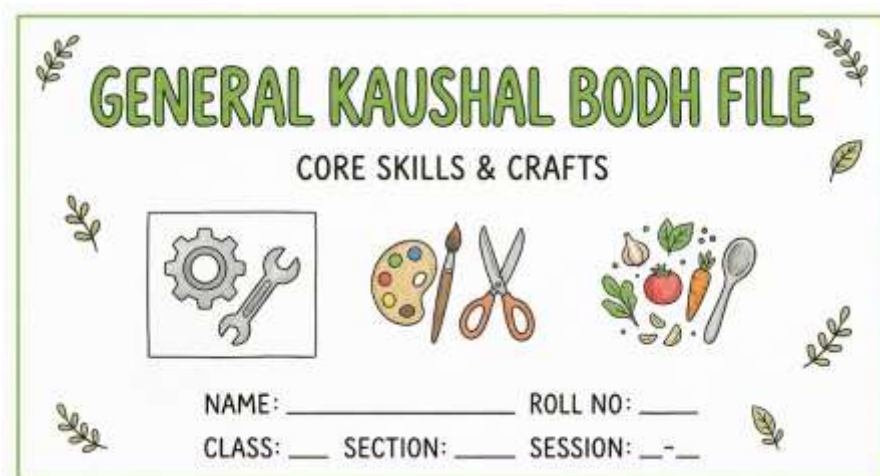


Kaushal Bodh Project File – Class 8

Module I: Microgreens Cultivation

COVER PAGE: TO BE DESIGNED BY STUDENT (Reference picture attached)



(Students can paste or draw pictures of trays, sprouting seeds, watering cans, or harvested microgreens. Borders of tiny leaves or sprouts can be added for decoration.)

PAGE 2- STUDENT PORTFOLIO:

BGS Vijnatham School

MY PORTFOLIO

Name: _____

Step & Section: _____

PORTFOLIO TYPE: ACADEMIC

- Welcome to my portfolio: I am a _____ (adjective) student who is passionate about _____ (science/ maths/ music/ dance/ technology/ writing/ poetry etc.)
- My goal is to pursue a career in: _____ (teaching/ engineering/ architecture/ medicine/ law/ etc.)
- My strengths/ skills are: _____ (problem solving, working in team, coding, designing, photography, debating, leadership etc.)
- Leading role: _____ (e.g., class monitor, group leader, project head)
- Extra-curricular activities: _____ (sports, arts, clubs, competitions)
- My favourite hobby is: _____ (painting, reading, singing, dancing, etc.)
- My favourite sport is: _____ (Badminton, Football, Cricket, etc.)

- **Merits/ Certificates/ Awards:** _____ (Scholar badge, achiever award, participation in events, etc.)

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PAGE 4- 1. About the Activity

The Microgreens activity involves growing edible young plants using cocopeat, cotton, or tissue paper in disposable boxes. Seeds such as mustard, methi, chia, grams, flax seeds, and moong beans are used. Microgreens are harvested within 7–10 days and are highly nutritious.

What are Microgreens? Microgreens are tiny edible plants harvested at the stage when the first true leaves appear. They are smaller than baby greens but larger than sprouts. Despite their size, they are packed with vitamins, minerals, and antioxidants, making them a “superfood.” They are widely used in salads, sandwiches, and garnishing dishes.

Relation with Hydroponics: Microgreens cultivation is closely related to hydroponics, a modern farming technique where plants are grown without soil, using nutrient-rich water or alternative mediums like cocopeat and cotton. In this activity, students practice a simplified form of hydroponics by growing seeds in cocopeat or tissue paper instead of soil. This teaches them how plants can thrive in controlled environments, conserving space and resources, and promoting sustainable urban farming.

(Space for drawing/pasting: “Microgreens

2. Learning Objectives

- To understand the nutritional importance of microgreens.
- To learn simple methods of growing edible plants indoors.
- To develop practical skills in seed germination and care.
- To promote sustainable food practices and healthy living.

3. What I Learned

- Seeds can germinate without soil using cocopeat or cotton.
- Proper moisture and light are essential for growth.

- Microgreens are harvested at the cotyledon stage.
- Growing food at home is easy, quick, and eco-friendly.

4. Skills I Developed

- Gardening skills – preparing medium, sowing, watering.
- Observation skills – monitoring germination and growth.
- Time management – daily care and timely harvesting.
- Nutritional awareness – understanding health benefits of microgreens.
- Environmental sensitivity – practicing sustainable food habits.

5. Process Followed

Activity Name: Microgreens Cultivation

Materials Required:

- Cocopeat, cotton, or tissue paper
- Disposable plastic boxes or trays
- Seeds (mustard/methi, chia, grams, flax seeds, moong beans) **NOTE: Mention the seeds which you have really used in the activity**
- Water spray bottle

Pre-Preparations (as per Kaushal Bodh book):

- Collect seeds of different varieties.
- Soak seeds (like moong, grams, methi) overnight for faster germination.
- Prepare trays/boxes with cocopeat or cotton/tissue paper.
- Arrange water spray bottles for regular misting.

You can paste or draw picture of soaked seeds

Steps Followed:

1. Spread cocopeat or cotton/tissue paper evenly in trays/boxes.
2. Sprinkle-soaked seeds uniformly over the medium.
3. Spray water lightly to moisten the surface.
4. Cover the tray with a lid or cloth for 1–2 days to allow germination.
5. Place trays in indirect sunlight after germination.
6. Spray water daily to maintain moisture.
7. Observe growth and record changes.
8. Harvest microgreens after 7–10 days by cutting above the root level.

(Space for drawing/pasting: “Steps of sowing and germination”)

Observation:

Date of Start of the Activity	Materials Used	Number of Trays Prepared	Number of Days Required for Sprouting	Number of Days Required for Emergence of Initial Pair of Leaves	Date of Harvest

6. Challenges Faced

- Uneven germination in some seeds.
- Excess water caused fungal growth.
- Maintaining humidity was difficult.
- Harvesting required careful handling to avoid damage.

7. Self-Reflection

1. What are the advantages and disadvantages of growing microgreens using hydroponics?

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2. Have you used the microgreens? How did you use them (raw salad or as a garnish)?

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3. Can this method be applied to all crops? What are the probable limitations of microgreen production?

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This activity taught me that food can be grown easily at home with minimal resources. I realized the importance of nutrition and sustainable practices. I felt proud to harvest fresh microgreens and share them with my family. The experience made me more responsible and health-conscious.

(Space for drawing/pasting: “Harvested microgreens”)