



Cross Curriculum Plan VEGETABLES

MATHEMATICS

- Measure the growth of different plants and integrate decimals, fractions and ordering.
- Venn diagrams—compare vegetables that have edible parts that grow above the ground, below the ground or both (such as spring onions, radish, beetroot).
- Calculate the mean, mode and median of weekly plant growth. Extend to include weather/temperature.
- Graphing - picture/line/bar/pie
- Calendars - seasons for growing different vegetables/ fruits. Extend to discuss seasons in other countries.
- Explore food miles. Eg. In science, research the environmental impact of purchasing locally grown sugar snap peas compared to those imported from China.

SCIENCE

Investigate Scientifically & Life and Living

- Refer to Investigate Science chart
- Investigate how water conservation products work - composts, mulch, water saving crystals, wetting agents, coir, peat.
- Investigate the ideal soil for growing vegetables.
- Research the elements that vegetables need to survive/thrive.
- Content based on Year Level for content area of Life and Living.
- Investigate water loss through plant leaves.
- Investigate how the roots of vegetables work. Include tubers, bulbs and crowns.
- Observe the process for seed germination.
- Test the pH of the school garden.
- Investigate the impact of root rot diseases such as dieback and phytophthora. Undertake a simple experiment to identify rhizoctonia (a root rot disease) in the soil.
- Test the validity of 'companion planting'. Are any of these 'old wives tales'?
- Beneficial insects. Research beneficial insects and prepare a simple food chain.

HEALTH AND PHYSICAL EDUCATION

- Healthy recipes using vegetables and fruit.
- Design a "veggie face" sandwich.
- Write healthy menus.
- Draw a healthy plate of food.
- Use plants to experiment with the senses - taste, touch, smell, sight.
- Investigate types of exercise involved in gardening - "30 minutes of gardening equals 30 minutes of walking".
- Not all parts of vegetables are edible such as rhubarb leaves. Research plants that are poisonous (also for pets). Design a poster to educate parents/pet owners.

TECHNOLOGY AND ENTERPRISE

- Design a portable vegetable growing pot.
- Design vegetable patch that conserves water.
- Design a scarecrow.
- Design a climbing frame for beans, peas, pumpkins and cucumbers.
- Design a better snail trap.

LANGUAGES OTHER THAN ENGLISH

- Translate recipes into English and then complete to test for accuracy.
- Research common vegetable names used in another language.
- Invite a chef/cook with ESL to the classroom as a guest speaker.

ENGLISH

Reading and Writing

- Reading for information from plant labels. Identify the icons. Write own labels for vegetables.
- Read for information using Smarty Plant information sheets, garden magazines and books.
- Skimming and scanning.
- Writing letters - to local organisations for donations/ suggestions/ guest speakers.
- Exposition Writing - e.g. "Vegetables are the best food for us!"
"Healthy foods should be the only foods sold at the canteen."
- Procedures e.g - recipes, garden activities or garden tasks.
 - How to make a water wise garden.
 - How to build a scarecrow.
 - How to plant a pot of vegetables.
- Adjectives - use for writing a description of various vegetables/ fruits.
- Poetry - writing of a variety of poems e.g. Haiku, acrostics, shape etc

Speaking and Listening

- Oral presentation of one of the Design activities
- Oral presentation of research activity from SOSE - Interesting facts of a vegetable (Eg. Where it is grown; climate conditions; mapping; uses of the vegetable; nationalities/cuisines it is associated with; nutritional values)
- Guest speakers or panel. questioning and listening to responses.
- Oral presentation: 'What does it mean to eat a rainbow?'
- Debate: Brussel sprouts are great!
- Debate: Talking to plants will help them to grow.

STUDIES OF SOCIETY AND ENVIRONMENT

- Different farming/growing practices for vegetables/fruits—organic, commercial, permaculture, hydroponic, aquaponics, market garden, companion planting
- Mapping
- Seasons
- Benefits of teaching vegetable growing skills to people in Third World Countries.
- Australian bush food, especially in Aboriginal and Torres Strait Islander cultures.
- Changes in vegetables through the last two hundred years—eg. Carrots were purple but now more commonly green.
- Community gardens—how do these impact on the local community.
- How did home gardeners contribute to the WWI and WWII war effort?

THE ARTS

Performing Arts

- Veggie Orchestra. Make musical instruments using vegetables: wind instruments from zucchini, carrots and potatoes; watermelon and pumpkin drums; maracas; cauliflower conch.

Visual Arts

- Vegetable/ fruit prints.
- Free hand/still draw vegetables (Line and light).
- Looking for "Artists" known for vegetable thematic art.



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Smarty Plants is interested in hearing from teachers with feedback or suggestions on this curriculum plan so that we can improve it for others to benefit.