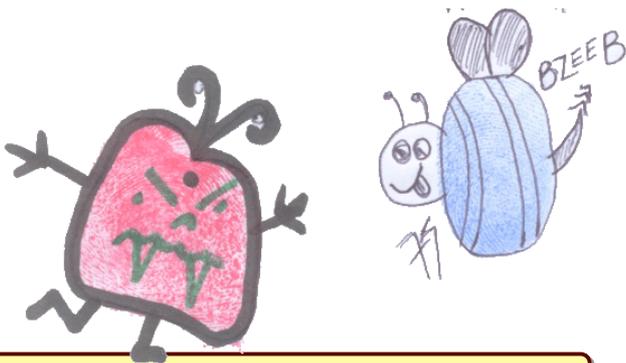


**KITCHEN GARDEN**  
Year 3 - Term 3 2006

**Nauru Curriculum Footpath**  
**Personal Pathways**  
 Living in a contemporary Nauruan community and preparing for its changes  
 Demonstrating confidence, commitment and accepting responsibility for decision making and problem solving  
 Taking care of health and self  
 Learning to learn through creatively using resources and learning strategies  
 Learning to work in new ways and creating new opportunities  
 Working with peers and others  
**Communication Pathways**  
 Mastering literacy including the primary language  
 Mastering numeracy  
 Communicate knowledge and argument to an audience  
**Community Pathways**  
 Fostering identity, belonging and unity  
 Respecting diversity and different ways of thinking  
 Thinking and acting as an agent of change in local communities  
**Environments and Technologies Pathways**  
 Applying scientific, mathematical and technological understandings  
 Understanding and sustaining environments  
 Creating and working with design and agricultural technologies

**Suggestions and ideas for students and teachers:**  
 Help children arrange guest speakers. Have them brainstorm (eg KWL, 5W and a H) and refine questions to ask the guest. Encourage children to learn to use follow up questions looking for more deeper information. Prompt or model this as needed.  
 If questions are in Nauruan, help students record the question in a way that will work for them. Writing questions on a large sheet of paper and putting it up for all to see may help.  
 Writing the gardening manual can begin early in the task and be refined as the students develop knowledge and experience.  
 The subject related activities help the students do the task. There are many other "task spin offs" that use the task to inspire students to develop other skills. **Creative writing:** My dream garden, If i were a ..., write an illustrated story for children that includes vegetables or plants. **Art:** create collages and art work from natural and man-made material. This can be particularly useful to contrast the curving form of nature with the straighter and angular forms of manufactured materials.  
 Help students be "little scientists" in their growing and data collection activities. The number of leaves on a plant increases rapidly as it grows. Drawing the branch skeleton of the plant helps explain this increase. **OPTION:** Leaf area for the whole plant increases even faster and is an excellent challenge for young scientists. Introduce the idea of area as the number of 1cm x 1cm squares needed to cover the leaf. Tracing the leaf onto graph paper or using a 1cm x 1cm grid on a transparency lets children count the squares. Connect to multiplication Approximate leaves as rectangles for quick estimates of area.  
 Approximate area = a bit less than the length x a bit less than the width children can measure the area of a new leaf from its first day to full size for a smaller area activity.  
 Encourage systematic investigation of growing conditions. Groups may work together to try different things such as growing in full sun or part shade. Try mulching some plants and not others. Encourage students to try as many things as they can think of. They should only change one thing for each plant so they can see what makes a difference.  
 Discuss efficient ways to record data so it can be used in the report directly rather than needing to be rewritten. Planning ahead is both efficient and an important skill.  
 Encourage students to use digital photos and computers where possible. Some of the displays could be in the computer room if printing is not possible.  
 The report should be simple enough for a Year 3 scientist to write. Help students with the overall layout as needed. Suggest useful graphs to use as needed. The Quality Features value organisation in the public material so let the students do that there. They value analysis and explanation in the report so help the students organise the report as much as you need to but let them explain what they have found.



**Quality features**  
*High Quality*

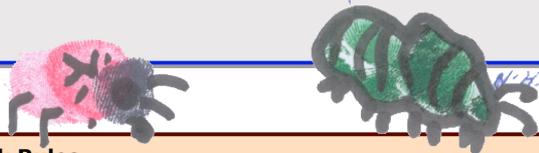
- Deep knowledge and use of verified information about Kitchen Gardens grown locally and globally.
- Well organized quality production of a user friendly pamphlet, posters, manual, models or other forms of public information.
- Informative data presentation with simple explained analysis and recommendations.

*Acceptable quality*

- Information that describes a local Kitchen Garden and indicates how to grow the plants, maintain the plot and use the product.
- Effective presentation of some collected data.
- Simple knowledge of the benefits of a Kitchen Garden for Nauruans.

**Task Rules**

Each group in a class is to choose a different audience for their pamphlets, posters or advertisement. They may choose different media.  
 Students work in small groups to develop the public information.  
 Students should investigate the vegetables grown by the community before the phosphate era to help decide what to try now.

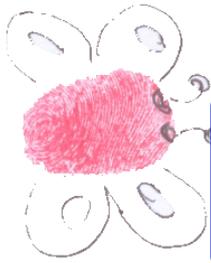


Year 3



**KITCHEN GARDEN**

Year 3 - Term 3 2006



**Students will:**

- a) identify and investigate the different types of fruit and vegetables that can be grown locally and globally in kitchen gardens.
- b) develop, monitor and maintain their own kitchen garden in groups. Group kitchen gardens will be displayed to an audience at regular intervals.
- c) use what they have learnt to give recommendations and tips for a healthy kitchen garden through pamphlets, posters or other suitable means.

Plan an excursion to look at productive garden plots around the island

Brainstorm different types of fruit and vegetables students know. Display as a list to be added to over time. Students search for food plants not on the list that might grow in Nauru. Add them to the list.

**Factual writing:** choose a fruit/vegetable to describe (looks like, smells like, feels like, sounds like when eaten, tastes like). Collect recipes for preparing the foods. Try preparing the foods at home or at school where possible.

**Art:** pencil drawing of chosen object. Use the best drawings in the products.

**Maths:** grouping (local/global), hefting - estimating weight, size... Students make up simple word problems for their friends to solve.

**Science & Geography:** Choose at least 3 different fruits or vegetables to grow in the group kitchen garden. At least one should produce food by the end of the term. Others may be long term food plants that continue the investigation after the formal task has ended. One plant should be a useful plant not usually grown on Nauru to see if ways can be found to grow it. Investigate places similar to Nauru's climate where it is grown. Different groups might try different things with this plant to find the best way to grow it.

Collect a variety seeds, seed pods and plant material from very common plants or weeds. Explore how they might be used creatively and to attract visitors to the information display.

**art:** collage of seeds, plant material and other objects

**music/movement:** dramatize plant growing  
**science:** plant life cycle label (seed, leaf, fruit, flower) - research chosen plant where they will grow best, how long it will take to grow, why choose to grow these plants ....

**maths:** estimating how tall plant will be after a specified time, appearance of first flower, fruit, etc

Investigate possible sites for kitchen garden (best growing conditions + setup of garden beds)

Plant seeds in the last week of term 2 so seedlings available in term 3

Use this knowledge and information to start a group kitchen garden.

Develop kitchen garden plots in groups  
\* clear area ready for planting  
\* prepare garden beds ready for seedlings

Fruit of knowledge

Children invite guest speakers: IDI, community committees, professionals to  
\* learn how to start a kitchen garden  
\* to share professional advice  
\* gain helpful recommendations and tips for 'beginners'.

Record developments in plant growth and any other visible changes at regular intervals e.g every 2nd week

**Maths/Science:** Record the number of seeds planted and the number that come up to calculate the germination rate. Graph of plant data (growth, number of leaves, leaf size, estimates of total leaf area).

**Maths/Art:** Study and record the symmetry in chosen plants.

Investigate flipping, sliding, rotating, shrinking expanding to see how the plant maximises the area of light on its leaves. Construct network diagrams of branches to investigate the structure.

Predict height, number of leaves etc 1,2,3 etc weeks ahead based on collected data. Test predictions to improve later predictions.

Estimate how much food the plant will produce, how big, long, heavy.

**Art:** illustrate records, photos of changes, collect images to use in presentations.

**Technical writing:** good garden design, handbook for growing vegetables, invent a gardening magazine, write and illustrate children's books to show children how to grow plants ....

Children will need to learn:  
\* graphs  
\* measuring  
\* recording  
\* estimating  
\* predicting

Children will need to learn:  
\* interviewing skills  
\* note-taking strategies  
\* developing good questions

**P** Write a simple report about:  
**r** reasons for choosing plants to grow  
**o** the successes and difficulties  
**d** germination, growth and food production data (where available)  
**u** comments on and possible explanations of interesting parts of the data  
**c** a summary of what was learnt about the structure of the plant and how this helps it  
**t** recommendations for further research into plants for kitchen gardens in Nauru

**P** Each group produces pamphlets, posters, simple gardening manual, models or similar material with researched recommendations and tips for a healthy kitchen garden. Select public centres to display material to help others to make a kitchen garden.

It is strongly recommended that teachers use teaching/learning strategies in year planner to support activities.  
eg: P.O.E in estimation (activity 2 / activity 4)

Year 3