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| **Unit Topic: Fresh is Best!**  | **Length of Unit: 6 Weeks** | **Year Level: 2** |
| **CONTEXT****School:** This unit has been designed with consideration to suit the demographic, economic situation and locations of most schools. Throughout the implementation of this unit, classrooms will be required to have internet access, computers available for student uses and a projector screen or smart board. However, this unit is entirely adaptable to suit the needs and requirements of each school and students within the classroom, upon the teacher’s discretion. **Students:** This unit plan has been designed using the Australian Curriculum: Design and Technologies. Content descriptions are intended for the Foundation to Year Two age ranges, however this unit will place a direct focus on **Year Two** students. It is essential that students attain and grasp this knowledge within these early stages of schooling as the technological environment is forever-evolving. **Staff:** Staff teaching this unit are strongly advised to read the ‘background readings’ section of the website. This has been compiled to ensure educators understanding of each topic is sufficient to teach their students. It also minimises the chance for miscommunications or misconceptions that students may be exposed to. The integrated websites within the ‘background readings’ have been chosen as they contain resources, fact sheets and pre-made lesson plans available for teachers.  |
| **Stage 1 – Desired results**  |
| At the beginning of the unit, students will learn about various food groups, including Aboriginal bush foods. Students will explore the five food groups using online and offline resources to practice their skills and master their knowledge. Students will be asked to create a ‘healthy lunchbox’ to demonstrate their understanding (formative assessment). Continuing throughout the unit, students will be exposed to ways in which they can safely practice a range of technical skills for preparing food in a healthy environment. Students will then examine products that are produced by plants and animals and investigate how certain products can be used to successfully create suitable gardens. They will use this knowledge to design, make and model their own constructed environment – a sustainable garden which contains all the requirements to support life. This is part of student’s summative assessment. By the end of the unit, students should be able to name the five food groups and link various foods with each group. They should also be able to describe how animals produce products to be consumed or used. Students will be given a summative assessment task in which they use software to design an environment which includes healthy food choices from two separate food groups.  |
|  **Students will know that… (Constructing Knowledge objectives/SELECTED content descriptors from the syllabus)** * **Knowledge and Understanding:** Explore how plants and animals are grown for food, clothing and shelter and how food is selected and prepared for healthy eating [**(ACTDEK003)**](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDEK003)
 | **Students will be able to… (Transforming objectives / SELECTED content descriptors from the syllabus)*** **Process and Production Skills (Assigned Content Description):** Use materials, components, tools, equipment and techniques to safely make designed solutions [**(ACTDEP007)**](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDEP007)
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| **The aspects of the curriculum that has been integrated into this unit plan are as follows:** **The Cross-Curriculum Priorities integrated include:*** Sustainability​
* Aboriginal and Torres Strait Islander Histories and Cultures

**The General Capabilities integrated include:** * Intercultural Understanding
* Literacy
* Ethical Understanding
* Critical and Creative Thinking
* Information and Communication Technology (ICT)

​**The Key Ideas integrated include:*** Safety - Food Safety
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| **Stage 2 – Assessment evidence**  |
| **Assessment Tasks** | **Criteria (from the syllabus)** |
| **Formative: Build your own healthy lunchbox***Task Name: Healthy Lunch, Healthy Bunch* Students are to design and model a healthy lunch box using technology. Using students’ knowledge of the five food groups, they will be given a ‘lunchbox’ template in which they have to fill with items from **at least** two different food groups, which they can bring to school. They must find images using the ‘Google Image’ search function and place each item into the template. They will then have to explain why they have chosen each item.  | **Year 2 Technologies standard elaborations: Applying, Making Connection, Working With, Exploring, Becoming Aware.** **Task Name: Healthy Lunch, Healthy Bunch*** **Knowledge and Understanding: Technologies and Society**
* **Process and Production Skills Dimension: Investigating**
* **Process and Production Skills Dimension: Generating and Evaluating**
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|  **Summative: Design and create a sustainable garden with healthy food choices** *Task Name: Are you being sustainable?*Students are to combine their knowledge of the five healthy food groups and sustainability to design, create and model a sustainable garden using the ‘Paint’ application on computers. Students will have to use **critical and creative thinking** skills to consider the different impacts the materials they choose will have on their environment. They must incorporate all elements to support life. Students will then present their chosen design to the class and explain why their gardens are sustainable and which food groups they chose.  | **Year 2 Technologies standard elaborations: Applying, Making Connection, Working With, Exploring, Becoming Aware.** **Task Name: Are you being sustainable?*** **Knowledge and Understanding: Technologies and Society**
* **Process and Production Skills Dimension: Investigating**
* **Process and Production Skills Dimension: Generating and Evaluating**
* **Process and Production Skills Dimension: Planning, Collaborating and Managing**
* **Process and Production Skills Dimension: Communicating**
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| **Stage 3 – Learning plan** |
| **Learning Experience 1** | **Length: 2 Weeks**  | **Topic: Fresh is Best!** |
| **ACTIVITY (S):** **What will the students learn?** | **TEACHING STRATEGIES aligned to activities:****What will the teachers do?** | **General Capabilities Focus: Written in terms of what teachers will do** | Resources |
| **ICT** | **Optional Other** |
| **2 Lessons**Students will investigate the five food groups: 1. Fruits
2. Vegetables
3. Grains
4. Dairy
5. Protein

Students will then investigate traditional Aboriginal bush foods and make comparisons. **Cross Curriculum Priority: Aboriginal and Torres Strait Islander Histories and Cultures.**  | Teachers will introduce students to the five food groups using YouTube clips which explain the importance of each category and maintaining a healthy diet. Students will identify foods in their workbooks that belong in each food group and complete activities in online and offline environments. **\*Differentiation\* - Students with lower abilities may use pre-cut pictures, models and drawings of food groups they wish to categorise. Students with higher abilities may categorise each food group and then create a healthy recipe using these ingredients.** Teachers will then allow students to investigate traditional Aboriginal bush foods through multilingual picture stories and class dialogue (refer to background readings section of website). Students can complete a Venn Diagram to identify foods that are the same or different.  | Teachers will use the projector and interactive white board (IWB) to introduce the concept of food groups which will initiate class dialogue. Teachers will also allow students to use the touch interface to categorise foods to reinforce understanding. Teachers can find a reading of a picture story and display technologically if a paper version is unavailable (optional).  | Intercultural Understanding (ACARA, 2015) –Teachers will allow students to compare their own knowledge and experiences with those of others, learning to recognise commonalities, acknowledging differences between their lives and recognising the need to engage in critical reflection about such differences, seeking to understand them | * Interactive White Board
* YouTube clips
* Interactive games
* Internet
* Technological version of picture story or paper version if applicable
* Venn Diagram template
* Projector
* Projector Screen
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| **1 Lesson** Students will examine products produce from plants and animals.Students will then investigate how these products can be used to successfully create sustainable gardens **Sustainability Cross-Curriculum Priority.** | Teachers will introduce students to foods produced by plants and animals using YouTube clips and picture stories. Books which include farm animals such as cows, sheep and chickens and this will be used to display the information. Teachers will then investigate different plants that produce products – such as fruits and vegetables. Teachers will focus on fruits and vegetables such as melons, pumpkins and tomatoes in which the seeds contained in the fruits can be taken and replanted. Students will draw this cycle into their workbooks (seed, grows stem, matures, flowers, produces fruit – see background readings of website). **\*Differentiation\* - Lower ability students may use Play Doh to construct their cycles. Higher ability students may like to write a recount underneath their diagram and explain what happens to the seed and so on.**   | Teachers will use the projector and interactive white board (IWB) to introduce the concept of foods produced by plants and animals which will initiate class dialogue. Teachers will use web-based images and YouTube clips to investigate the cycles of plants and vegetables from seedlings to fully-grown products.  | Literacy (ACARA, 2014) – Teachers will ensure that students understand the increasingly specialised vocabulary and spelling of new words such as products, produce, seedlings and cycles  | * Computers
* Internet
* Interactive White Board
* Projector
* Projector Screen
* YouTube clips
* Picture story
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| **Learning Experience 2** | **Length: 2 Weeks**  | **Topic: Master Chef**  |
| **ACTIVITY (S):** **What will the students learn?** | **TEACHING STRATEGIES aligned to activities:****What will the teachers do?** | **General Capabilities Focus: Written in terms of what teachers will do** | Resources |
| **ICT** | **Optional Other** |
| **2 Lessons**Students will now become exposed to different technologies that help prepare healthy food. They will also explore the technical skills needed for preparing food safely. **Food Safety: Key Idea.**  | Teacher will introduce students to the technologies that help prepare healthy food. As an additional activity, a chef may come into the classroom and show students the skills and technologies they use to prepare food and show students how to do cook safely. They may also prepare a healthy meal for students and discuss the reasons why the ingredients are good food choices. Furthermore, the teacher will explore with students the advances in technology which aid in preparing food and keeping it fresh.  | Teacher may bring in various technologies that are used to help prepare food and to keep it fresh. The teacher can use an interactive whiteboard and display various images of the evolving technologies. The guest speaker may also purposefully use different forms of technology.  |   | * Internet
* Computer
* Projector
* Projector Screen
* Guest speaker
* Various technologies that help prepare food (if applicable)
* Images that demonstrate the evolution of technology
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| **1 Lesson**Students will be starting their formative assessment tasks within this lesson.  | The teacher will go through students tasks step-by-step. They will also make students aware of the success criteria and what is expected of them within the task. The teacher will require students to use technology to find images of different food groups to construct their digital school lunchboxes containing **at least** two of the food groups. **\*Differentiation \* - Students with higher abilities may like to find foods in all of the food groups. Students with lower abilities may work with a teacher aide to help access the internet and use the computer system.**   | The teacher will show students how to safely and ethically search for images and how to save each picture. The teacher may also divert students to websites which have a healthy eating and food group focus.  | Ethical Understanding (ACARA, 2016) –The teacher will ensure students understand the values, rights and responsibilities that is expected of them while on the internet.  | * Internet
* Computer or laptop for each student
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| **Learning Experience 3** | **Length: 2 Weeks**  | **Topic: Better Homes and Gardens!** |
| **ACTIVITY (S):** **What will the students learn?** | **TEACHING STRATEGIES aligned to activities:****What will the teachers do?** | **General Capabilities Focus: Written in terms of what teachers will do** | Resources |
| **ICT** | **Optional Other** |
| **2 Lessons**Students will explore what it means to have a sustainable environment and examine what all gardens need to be sustainable and support growth of plants. **Sustainability Cross-Curriculum Priority.**  | The teacher will introduce students to the concept of sustainability by viewing YouTube clips and considering various ‘Fact Sheets’ that are present on the Young People’s Trust for the Environment website (refer to background reading section of the website). The teacher will also examine with students what gardens need to become sustainable and the characteristics of a garden bed. Students will draw a diagram in their workbooks. **\*Differentiation – higher ability students’ may like to design a poster along with their diagrams explaining the requirements of gardens to be sustainable.** The teacher will also take the class outside with a checklist to judge whether the school’s gardens are sustainable.  | The teacher will use ICT to introduce the concept to students. YouTube videos and online fact sheets are used to reinforce students learning.  | Critical and Creative Thinking (ACARA, 2016) – The teacher poses questions for students like – is this garden in the school sustainable? Students will have to identify and clarify information and ideas.  | * Computer
* Internet
* Fact sheets
* Sustainability checklist
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| **3 Lessons**Students will complete their final summative assessment task. Students will be designing, creating and modelling a sustainable garden using the ‘Paint’ application on school computers. They mist integrate healthy food choices. Students will present their assessment pieces to the class. **Sustainability: Cross-Curriculum Priority.**  | The teacher will go through students tasks step-by-step. They will also make students aware of the success criteria (refer to task sheet and rubric on website) and what is expected of them within the task. Within the first lesson, students will be shown how to use paint and will be given time to practice the skills. Within the second lesson, the teacher will require students to complete the summative task and create their sustainable garden. The teacher may link students to websites which will enable them to complete this task. **\*Differentiation\* - Students with very low reading levels may have a teacher or teacher aide read the task sheet to them individually and check understanding of the task.** Within the third lesson, students will present their gardens to the class.  | The teacher will allow students to use a personal laptop or computer to complete this summative assessment task.  | Information and Communication Technology (ICT) (ACARA, 2016) -**Investigating with ICT** – Students will be locating, generating and accessing information for their assessment task**Creating with ICT** – Students will be generating ideas and plans to create their solutions  | * Student’s personal computer
* Assessment task sheet
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