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| **Lesson content focus** | **Teaching and learning sequence week by week overview**  **60-minute lessons approximately** | **Resources** | **Differentiation will differ for unique student’s needs.**  **Some suggestions are listed.** |
| **Lesson 1**  Introduce the unit and assessment.  Introduce concept of sustainable practices. | -Explain, display maintain classroom school rules and behaviour expectations. Ask learners to share them.  -Engage learners by Introducing the design and technologies and understanding 5-week unit through explicit explanations and guided discussions of the **learning focus, aims, purposes** and the **assessment task.**  -Explain unit focus **learning content aims to students this being - to** develop knowledge and understandings of the importance of design and technology roles in society for sustainable and environmental current and future uses. Students will develop and apply understandings of the necessary materials and processes required to design and achieve a solution. Learning will culminate as they apply learnt process and design understandings to plan, design, and draw and explain a school food waste composting system.  **Explain learning unit purpose**  **-** To develop and enhance learners Design and Technologies knowledge and understandings and processes and production skills. This aims to future-proof learners with crucial digital technological knowledge and skills to prosper in society. Encourage and support application of this knowledge to successfully complete the assessment task. This will occur through real-world content related learning experiences and tasks.  -Articulate task **assessment** aims, purpose and task requirements by reading aloud and displaying on the interactive white-board (IWB). The culminating assessment task. Gauge student’s understandings, answer questions and clarify misconceptions.  -Provide all leaners an assessment task sheet to glue in books and ensure all parents/caregivers receive this task sheet by email.  Ascertain peer knowledge of what is sustainable recycling practices through peer -mediated think, pair share activity to discuss.  -Explicitly explain the materials that can be recycled. Promote an inquiry-based whole class discussion.  -Explicitly explain the processes, purposes that underpin how people fulfil roles/occupation to assist in sustainable practices. Deepen understandings through class discussions.  -Introduce learning clip on ways to recycling reusable materials. Prompt students to commence thinking about the importance of recycling, and composting. Play visual clip on food waste recycling.  -Use a digital poppet to visually display and create a mind-map. Prompt brain storming materials students could recycle at school.  -On completions encourage students to view and read all their recycling ideas that help promote sustainable practices in their environment.  -Encourage reflective thinking by requesting several students to volunteer and read each mind-map recycling idea.  **General Capabilities**  Literacy  Numeracy  Information and Communication Technology (ICT) Capability  Critical and Creative Thinking  Personal and Social Capability  Ethical Understanding  Intercultural Understanding  **Cross-Curriculum Priorities**  Sustainability | -Class school rules behaviour visual poster.  This should be displayed in your classroom; each school will have a different behaviour framework. If not available ask learners to verbalise them to you.  -Year 5 culminating assessment task  [Food Waste Recycling](https://www.youtube.com/watch?v=y8WGi5N_KXo)  <http://popplet.com/> | **Content-**  -Model reading or content material through multiple appropriate learning levels.  -Multi-levelled questioning  -Conferencing learners to deepen understandings  - Clear explicit content discussion through simplistic articulation of learning aims and purpose to create routine for aspersers’ learners, anxious and special needs learners and those requiring structure. This aids learners with behaviour management issues.  -Peer/small group active learning ensures content links to authentic real life experiences. This aids social learners, develops conceptualised learning and supports learners who prefer active learning modes.  -Content has variety and depth to suit learning levels.  -Partitioning learning into small manageable tasks for lower level or anxious learners.  -Multi-modal learning to support on-task behaviour, visual, auditory, learners.  -Researching options through digital or kinaesthetic modes.  **-Process**  -Use of multiple teaching practices and strategies to inclusively support all diverse learners.  -Monitor students continually and support those students who you observe need extra guidance through open-ended questioning.  -Tasks are well scaffolded and broken into small manageable task to maximise learning for low-level learners and behaviour issues.  -Independent and peer-mediated learning and tasks to support differing levels of needs, students with limited vison, special needs and requirements.  -Promoting autonomy through independent thinking activities to consider own learning needs. Eg highlight assessment sheet to suit their own pertinent needs.  -Collaborative peer/paired discussions  -Multiple learning level groups to promote peer-mentored learning.  -Utilise teacher aides, parent/ caregiver helpers if available to support learners who display signs requiring guidance and extra support.  -Utilise a voice to text dictation application for those students who have additional needs or who are English as a second language learner).  [Using-the-Speak-text-to-speech-feature](https://support.office.com/en-us/article/Using-the-Speak-text-to-speech-feature-459e7704-a76d-4fe2-ab48-189d6b83333c)  [How to set up voice to text](https://www.youtube.com/watch?v=5abApZ9_mLI)  **Environment-**  -Quiet learning spaces for those who require personal space or with special needs.  -Ample learning spaces  -Bright learning spaces  -Temperature controlled rooms  providing comfort if possible eg fans, heater, air-conditioner if available.  -Maintain class noises are kept at low volume to not overwhelm learners and to enable better thinking opportunities.  -Ensure all teachers focus and reward good behaviour and develop a positive encouraging environment.  **Assessment-**  -Formative assessment should occur continually throughout the lessons, to inform teaching and strategies.  -Students should be assesses in ongoing multiple ways throughout the learning unit, as well as culminating at the end of the unit.  -Moderation and modifications to the assessment rubric may need to occur to be responsive to unique learners. |
| **Lesson 2**  Introduce concept of design and technology to support wants and needs and solve problems and provide  solutions.  What is a compost and how would it help me, other people and my school | -Explain, display and maintain classroom school rules and behaviour expectations  -Revisit previous lessons’ learning and remind students’ where the learning is situated in the 5 week sequence.  -Encourage students’ to read parts of the assessment task out loud to class to revisit requirements.  -Introduce lesson 2 focus on exploring technological planning, processes and procedures that achieve design solution to food waste. This being composting.  -Conduct a class discussion on composting. Guide student’s answers and thinking and encourage learners to record answers into their Technology books.  -Encourage time for students’ to consider assessment task thinking plans and ideas.  **General Capabilities**  Literacy  Numeracy  Information and Communication Technology (ICT) Capability  Critical and Creative Thinking  Personal and Social Capability  Ethical Understanding  Intercultural Understanding  **Cross-Curriculum Priorities**  Sustainability | [Composting for Kids](https://www.youtube.com/watch?v=dRXNo7Ieky8)  [Cooking-Up Compost](http://www.abc.net.au/gardening/stories/s3832312.htm) |  |
| **Lesson 3**  Brainstorming/  Reasons for composting at our school | Explain, display and maintain classroom school rules and behaviour expectations  -Revisit previous lessons’ learning and remind students’ where the learning is situated in the 5 week sequence.  -Encourage students’ to read parts of the assessment task out loud to class to revisit requirements  -Encourage student to do a 10 minute school walk and with i-pads to photograph a spot suitable for a school compost system to build built.  **General Capabilities**  Literacy  Numeracy  Information and Communication Technology (ICT) Capability  Critical and Creative Thinking  Personal and Social Capability  Ethical Understanding  Intercultural Understanding  **Cross-Curriculum Priorities**  Sustainability | <http://popplet.com/>  I Pads Class Camera  Worksheets/  **make-your-own-compost**  compost-fun-page |  |
| **Lesson 4**  Rough draft for assessment | -Explain, display maintain classroom school rules and behaviour expectations.  -Revisit previous lessons’ learning and remind students’ where the learning is situated in the 5 week sequence.  -Encourage students’ to read parts of the assessment task out loud to class to revisit requirements.  - Students will use the lesson to work on and finish rough draft of assessment.  **General Capabilities**  Literacy  Numeracy  Information and Communication Technology (ICT) Capability  Critical and Creative Thinking  Personal and Social Capability  Ethical Understanding  Intercultural Understanding  **Cross-Curriculum Priorities**  Sustainability |  |  |
| **Lesson 5**  Final copy assessment | -Explain, display and maintain classroom school rules and behaviour expectations.  -Students will use this lesson to finish assessment task.  **General Capabilities**  Literacy  Numeracy  Information and Communication Technology (ICT) Capability  Critical and Creative Thinking  Personal and Social Capability  Ethical Understanding  Intercultural Understanding  **Cross-Curriculum Priorities**  Sustainability |  |  |

Quick link to inform and support differentiation of special needs of English as a second language learners who are challenged with utilising a laptop

[Using-the-Speak-text-to-speech-feature](https://support.office.com/en-us/article/Using-the-Speak-text-to-speech-feature-459e7704-a76d-4fe2-ab48-189d6b83333c)

[How to set up voice to text](https://www.youtube.com/watch?v=5abApZ9_mLI)

Quick links to inform and support teachers

[Composting for Kids](https://www.youtube.com/watch?v=dRXNo7Ieky8)

[Cooking-Up Compost](http://www.abc.net.au/gardening/stories/s3832312.htm)

[Environmental and Sustainability Education](http://www.curriculumsupport.education.nsw.gov.au/env_ed/)

[Educating for a Sustainable Future](https://www.environment.gov.au/system/files/resources/1b93d012-6dfb-4ceb-a37f-209a27dca0e0/files/sustainable-future.pdf)

[Teacher guide composting for better soil](http://www.agclassroom.org/ny/resources/pdf/activities/composting.pdf)

<http://popplet.com/>

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