



Sample assessment task	
Year level	2
Learning area	Technologies
Subject	Design and Technologies: Materials and technologies specialisations
Title of task	Petite wonders!
Task details	
Description of task	Students will design and produce a miniature community/imaginative garden (size: .50cm <sup>2</sup> - 1m <sup>2</sup> ). Sourced from recycled and/or re-purposed items to include in their garden as well as incorporate existing plants.
Type of assessment	Formative
Purpose of assessment	To inform progression of student learning of characteristics and properties of materials and individual components that are used to produce design solutions
Assessment strategy	Anecdotal notes Observations Photographic evidence Group activities
Evidence to be collected	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Photographic evidence of student process and final product. Peer feedback and reflection</li> </ul>
Suggested time	2 x 1 hour lessons
Content description	
Content from the Western Australian Curriculum and Assessment Outline	<p><b><i>Knowledge and understanding</i></b></p> <p><b>Technologies and Society</b> People design and produce familiar products, services and environments to meet local and community needs</p> <p><b>Materials and technologies specialisations</b> Characteristics and properties of materials and individual components that are used to produce design solutions</p> <p><b><i>Processes and production skills</i></b></p> <p><b>Investigating and defining</b> Explore design to meet needs or opportunities</p> <p><b>Designing</b> Develop, communicate and discuss design ideas through describing, drawing, modelling and/or a sequence of steps</p> <p><b>Producing and implementing</b> Use components and given equipment to safely make solutions</p> <p><b>Evaluating</b> Use simple criteria to evaluate the success of design processes and solutions</p> <p><b>Collaborating and managing</b> Work independently, or collaboratively when required, to organise information and ideas to safely create and share sequenced steps for solutions</p>

<b>Early Years Learning Framework (EYLF)</b>	<p>Outcome 2: Children are connected with and contribute to their world</p> <p>Outcome 4: Children are confident and involved learners</p> <p>Outcome 5: Children are effective communicators</p>
<b>Task preparation</b>	
<b>Prior learning</b>	<p>Students have developed awareness and understanding of sustainable practices, such as reducing, reusing and recycling. Students have discussed services that sustain human life on this earth, such as hospitals, schools, shops, farms, roads, recreation centres, rivers and lakes, transport etc. Students have discussed community needs that are service or pleasure-based and can determine what is real and what is make-believe.</p>
<b>Assessment differentiation</b>	<p>Teachers should differentiate their teaching and assessment to meet the specific learning needs of their students, based on their level of readiness to learn and their need to be challenged.</p> <p>Where appropriate, teachers may either scaffold or extend the scope of the assessment tasks.</p>
<b>Assessment task</b>	
<b>Assessment conditions</b>	<p>Students will work in groups of four</p> <p>Classroom environment and outdoor environment</p>
<b>Resources</b>	<ul style="list-style-type: none"> <li>• Items that can be repurposed/recycled/reused, such as cars, blocks, stones, rocks, materials of different types and an assortment of loose parts</li> <li>• Items to form a boundary area around the service/imaginative environment</li> <li>• (.50cm<sup>2</sup> – 1 m<sup>2</sup>) such as rocks, blocks, sticks, strings, pop-sticks</li> <li>• A3 paper and pencils</li> </ul>

## Instructions for teacher

Lesson 1	
<b>Inspire/inform</b>	<p>Prepare a collection of images to demonstrate a range of different miniature worlds, both real and imaginative.</p> <p>Discuss with the students the need for services in our community and brainstorm the services that they know. Add further information to expand students' understandings, if required.</p>
<b>Show</b>	<p>Model the process of designing a miniature service environment, using the materials that are recycled/repurposed/reused.</p> <p>Consider the material properties and how they will be affected by the environment (how different materials break down in the natural environment).</p> <p><a href="http://www.pureproject.ie/pure-downloads/education/pure_ws_strand3.pdf">http://www.pureproject.ie/pure-downloads/education/pure_ws_strand3.pdf</a></p>
<b>Tell</b>	<p>Students will select and design a miniature service environment (explain that once the project has finished and a number of weeks have passed to enjoy the spaces, they will be dismantled and carefully recycled or disposed of).</p> <p>Students will need to source items for their environment and bring to school for next lesson.</p> <p>Encourage students to use a sustainable process in order to collect items, such as reusing, recycling and repurposing.</p>
<b>Apply</b>	<p>Students work in groups of four to design the miniature service environment.</p>
<b>Reflect</b>	<p>Each group nominates a 'speaker' who will share the groups' ideas with their peers in a whole-class situation in a 2 minute informal presentation.</p>
Lesson 2	
<b>Inspire/inform</b>	<p>Review the designs from previous lesson.</p> <p>Review miniature environments on the internet.</p>
<b>Show</b>	<p>Students show their group members the items they have collected specific to their design.</p> <p>Demonstrate how to mark out the appropriate space in an area outside and how to make a boundary to define the space to use (e.g. wooden blocks, long sticks or rocks, pop sticks, rope).</p>
<b>Tell</b>	<p>Tell the students the space they choose needs to be cleared of any weeds or debris but plants must be left in the ground and can be used to enhance the environment.</p> <p>Excess items can be shared, swapped or lent to other groups.</p> <p>Students will need to work together and collaborate as a team.</p>
<b>Apply</b>	<p>Students make the miniature service environment.</p>
<b>Reflect</b>	<p>Students participate in a 'walk-about' to view each other's environments.</p> <p>The teacher will ask students to respond to each environment and annotate their responses</p> <p>The teacher elects two students to take photos of each environment</p> <p>Peer assessment – one group assesses another group (does its design match the final product?)</p> <p>Individual assessment – students write a reflection of the process taken to create a miniature service environment. They critically reflect on how they collaborated and managed the process of design and producing their product.</p> <p>(Note: Removal of spaces will be required after a certain amount of time. Please consider the environment and how to dispose of items on completion of project.)</p>

## Sample marking key

### Design and Technologies – Materials and Specialisation – Petite Wonders! (Year 2)

**Technologies and society** – People design and produce familiar products, services and environments to meet local and community needs.

**Materials and technologies specialisations** – Characteristics and properties of materials and individual components that are used to produce design solutions

*Working Key I = Independent SS = Some Support LS = Lots of Support*

Student names	Considered properties of the materials when investigating solutions	Shared responsibility and collaborated with team members	Articulates understandings of design process	Comments

## Making connections across learning environments

### National Quality Standards: Quality Area 1 – Educational program and practice

Standard 1.1 An approved learning framework informs the development of a curriculum that enhances each child's learning and development.

Element 1.1.2 Each child's current knowledge, ideas, culture, abilities and interests are the foundation of the program.

	<i>Provocation/activity</i>	<i>Resources</i>
<b><i>Inside spaces/environments</i></b>	<b>Bonzer Bonsai!</b> Establish a small inside garden that can be used for shelter for miniature figurines. As the garden grows more characters can be added to the scene.	Small potted plants, small watering cans and some figurines to create a scene
<b><i>Outside spaces/environments</i></b>	<b>Sandpit spotlight</b> Supply a number of torches and encourage students to build tunnels under the ground in the sandpit. Students use torches to communicate with each other through the tunnels. Tunnels can transport small cars or be threaded with rope to demonstrate the direction and length of each.	Torches, cars and other items to travel through the tunnels, rope ...
<b><i>Ambience/Aesthetic</i></b>	(Sensory) Arrange a number of different fresh herbs, such as rosemary, fennel or lavender, around the classroom.	