

## Government of Western Australia School Curriculum and Standards Authority



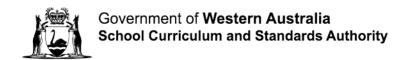
This document is an introduction to planning a teaching and learning outline with syllabus content for Year 1 Design and Technologies: Food and fibre production context. It demonstrates suggested sequencing and timing of syllabus content, giving students the opportunity to study at least one of the contexts for Design and Technologies. Teachers should refer to the Authority's *Policy Standards for Pre-primary to Year 10: Teaching, Assessing and Reporting*, Table 1: *Western Australian Curriculum and Assessment Outline*, for further details on curriculum requirements and available options.

Schools may choose to teach the syllabus content for two hours a week for a semester **or** one hour a week for the year. Sample plans provide a range of possible learning experiences from which assessment should be drawn. The following Year 1 sample teaching and learning outline provides teachers with possible learning experiences over eight weeks and unpacks the syllabus content to assist teachers in their understanding.

A presentation is available on the Authority's website (see <u>Resources > Presentations</u>) which unpacks the process to develop this plan.

The syllabus content for Design and Technologies: Food and fibre production (context) is set out in the table below.

Year 1			
Technologies and society	People produce familiar products and services to meet personal and community needs		
Food and fibre production	Plants and animals used for production have basic needs, such as food/nutrients, water, space, protection		
Investigating and defining	Explore opportunities for design		
Designing	Develop and communicate design ideas through describing, drawing, modelling and/or sequence of written or spoken steps		
Producing and implementing	Lise given components and equipment to safely make solutions		
Evaluating	Use personal preferences to evaluate the success of design processes		
Collaborating and managing	Work independently, or with others when required, to safely create and share sequenced steps for solutions		





## Year 1

## **Learning Area: Technologies – Design and Technologies (context: Food and fibre production)**

## **Year 1 Achievement standard**

At Standard, students identify people that produce familiar products and services and recall some simple stages of the production process. In Engineering principles and systems, students use technology to move objects and observe the reactions. In Food and fibre production, students identify plants and animals used for production and their basic needs. In Materials and technologies specialisations, students observe, explore and select materials to use for construction based on materials' characteristics and behaviours.

With all Design and Technologies contexts, students explore opportunities when designing products or solutions. They develop and communicate design ideas through describing, drawing, modelling and/or a sequence of written or spoken steps. Students use given components and equipment and work safely to make solutions. They develop personal preferences to evaluate the success of design processes. Students work independently, or with others, to safely create and share sequenced steps for solutions.

Weeks	Syllabus content	Content unpacked	Suggested teaching and learning experiences
1	Food and fibre production Plants and animals used for production have basic needs, such as food/nutrients, water, space, protection	<ul> <li>Farm animals</li> <li>coverings of different animals for protection</li> <li>different places animals live where their basic needs are met, including space:         <ul> <li>closed/inside spaces</li> <li>shed, coop, yard, factory, nest</li> <li>open/outside spaces</li> <li>nest, paddock, desert, farm, river, ocean</li> </ul> </li> </ul>	<ul> <li>make observations and engage in discussion about the coverings of different animals</li> <li>viewing activity</li> <li>describe the tactile and multi-sensory experiences for the coverings of different animals, such as scales, feathers, fur, skin, hair, wool</li> <li>sensory activity</li> <li>describe the coverings of different animals as; looks like, feels like, smells like</li> <li>connect covering of different animals to the space where they live</li> </ul>
2–3	Technologies and society People produce familiar products and services to meet personal and community needs	<ul> <li>production of familiar food/plant products</li> <li>products to meet personal needs</li> <li>link animal with familiar food product, such as, laying hens with eggs</li> <li>link animal with familiar fibre product, such as, sheep with wool</li> <li>link plant with familiar food product, such as, wheat with pasta, couscous</li> <li>link plant with familiar fibre product, such as, cotton with jeans, shirt</li> </ul>	<ul> <li>feed me</li> <li>nutrition required</li> <li>list foods consumed</li> <li>clothe me</li> <li>my clothes</li> <li>annotated sketch of what I am wearing</li> <li>show how wheat could be milled, made into flour, then into pasta</li> <li>show harvesting of cotton, weaving into cloth, then construction of garments, such as a shirt</li> </ul>
4	Food and fibre production Plants and animals used for production have basic needs, such as food/nutrients, water, space, protection	<ul> <li>identify animal basic needs</li> <li>food/nutrients</li> <li>water</li> <li>space</li> <li>protection</li> </ul>	<ul> <li>identify, describe and draw a variety of spaces where animals live and their basic needs are met</li> <li>food supply</li> <li>water protection from wind, sun, rain, predators</li> </ul>
5	Investigating and defining Explore opportunities for design Designing Develop and communicate design ideas through describing, drawing, modelling and/or a sequence of written or spoken steps	Animal home  design features of animal shelters size shape dimension environment – location materials used for animal shelters develop and communicate design ideas for an animal shelter, include sequence of steps	<ul> <li>consider a range of stimulus – sticks for nests, trees for shade/wind breaks for sheep, wood and wire for chicken coop, pig pen mud</li> <li>discuss aspects of size, what makes the shelter strong</li> <li>describe the environment – location of the animal shelter, why is it there</li> <li>select a farm animal, and:         <ul> <li>model a design idea for a specific animal, such as sheep in a paddock, chickens in a coop, pig in a yard; consider and provide reasons for location of shelter, feed, and water</li> <li>outline sequence of steps to produce model</li> </ul> </li> </ul>

6–7	Producing and implementing Use given components and equipment to safely make solutions Collaborating and managing Work independently, or with others when required, to safely create and share sequenced steps for solutions	<ul> <li>provide a variety of equipment and materials for constructing an animal shelter, consider:         <ul> <li>materials</li> <li>shape</li> <li>size</li> <li>weight</li> </ul> </li> <li>incorporate basic needs, produce own model of an animal shelter         <ul> <li>implement planned, logically sequenced steps</li> </ul> </li> <li>work independently to safely create model of an animal shelter</li> </ul>	<ul> <li>provide recycled materials, small toys, miniature vehicles etc. to construct a home for the selected farm animal</li> <li>consider supply/availability of materials for the:         <ul> <li>structure of the home</li> <li>placement and access to the water supply</li> <li>food supply/food storage</li> <li>place to sleep and rest</li> <li>protection from sun, wind, predators</li> </ul> </li> <li>create a model of the animal home independently and safely</li> </ul>
8	Evaluating Use personal preferences to evaluate the success of design processes Technologies and society People produce familiar products and services to meet personal and community needs	<ul> <li>design a model of an animal shelter to include:</li> <li>how basic needs of the animal are met</li> <li>identification of people who produce familiar food products</li> <li>comparison of original design idea</li> <li>personal preferences for the design</li> </ul>	<ul> <li>discuss with a partner, design features of the model for an animal shelter, including:         <ul> <li>personal preferences</li> <li>how basic needs of the animal are met</li> <li>comparison with original design idea, note similarities and differences</li> <li>identification of people who produce familiar food products</li> </ul> </li> <li>collate and communicate observations and information in a chart form with space for expansion of ideas</li> </ul>