

Agricultural Education and the Australian Curriculum

Supporting resources: Primary production

Primary production education offers a context for delivering elements of the Australian Curriculum while catering for students' diverse needs and interests. Understanding of the origin of a range of food and fibre products may be derived from components of the Australian Curriculum: Science and Australian Curriculum: Design and Technologies.

This document contains Australian Curriculum connections that can be purposefully taught through Agricultural Education. It also provides links to relevant resources developed by government and primary industries organisations to support teaching and learning across Prep to Year 10 in primary production contexts.

Additional primary production educational resources from the Primary Industries Education Foundation Australia (PIEFA) can be found at their Primezone website: www.primezone.edu.au.

Curriculum connection	Resources	Description
<p>Design and Technologies</p> <ul style="list-style-type: none"> • Prep – Year 2: Explore how plants and animals are grown for food, clothing and shelter and how food is selected and prepared for healthy eating (ACTDEK003) <p>Science</p> <ul style="list-style-type: none"> • Prep: Living things have basic needs, including food and water (ACSSU002) • Year 1: Living things live in different places where their needs are met (ACSSU211) 	<p><i>Australian Eggs</i></p> <ul style="list-style-type: none"> • 'Eggs-actly where do the eggs we eat come from?' • 'It's gooey — But what is actually inside an egg?' <p>www.australianeggs.org.au/education/primary</p>	<p>These resources support students to understand the Australian egg industry through activities, games, lesson plans and videos.</p>
	<p><i>Meat & Livestock Australia</i></p> <ul style="list-style-type: none"> • 'Greener farms' <p>www.goodmeat.com.au/global/assets/goodmeat/education/stage-1-greener-farms.pdf</p>	<p>Through this workbook, students learn about the basic needs of living things. They also investigate the paddock-to-plate supply chain and the important role of farmers.</p>
	<p><i>Dairy Australia</i></p> <ul style="list-style-type: none"> • 'Life as a dairy cow' <p>www.dairy.edu.au/resources/pdf-resource/farm-to-plate--inquiry-unit-foundation--year-2</p>	<p>This unit guides students to investigate and understand more about raising and caring for cows on dairy farms.</p>
	<p><i>Learn About Wool</i></p> <ul style="list-style-type: none"> • 'Needs of sheep' <p>www.learnaboutwool.com/lesson-plans/needs-of-sheep</p>	<p>In this lesson, students learn how farmers look after sheep to meet their basic needs. They use what they have learnt to create a paddock on a sheep farm and identify how they would meet the needs of their own sheep.</p>
	<p><i>Primary Industries Education Foundation Australia</i></p> <ul style="list-style-type: none"> • 'A year on a farm' <p>https://www.primezone.edu.au/resource/a-year-on-a-farm/</p>	<p>This unit uses five inquiry teaching sequences to explore the work performed on a farm year-round, where animals are raised, crops are grown and where different foods we eat and fibres we use are produced.</p>

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<p>Design and Technologies</p> <ul style="list-style-type: none"> • Years 3–4: Investigate food and fibre production and food technologies used in modern and traditional societies (ACTDEK012) <p>Science</p> <ul style="list-style-type: none"> • Year 3: Living things can be grouped on the basis of observable features and can be distinguished from non-living things (ACSSU044) • Year 4: Living things depend on each other and the environment to survive (ACSSU073) 	<p><i>Australian Eggs</i></p> <ul style="list-style-type: none"> • ‘To lay or not to lay — What makes a hen happy?’ • ‘Sustainability — Egg farmers are doing their bit!’ <p>www.australianeggs.org.au/education/primary</p>	<p>These resources support students to understand the Australian egg industry through activities, games, lesson plans and videos.</p>
	<p><i>Meat & Livestock Australia</i></p> <ul style="list-style-type: none"> • ‘Farming through history’https://www.goodmeat.com.au/globalassets/goodmeat/education/stage-2-farming-through-history.pdf 	<p>Students can use this study guide to learn about the history of Australian farming and how cattle and sheep production has developed from the time of the early settlers until now.</p>
	<p><i>Primary Industries Education Foundation Australia</i></p> <ul style="list-style-type: none"> • ‘Investigating food and fibres’https://www.primezone.edu.au/resource/investigating-food-and-fibres/ 	<p>This unit supports students to investigate how foods and fibres are produced. It includes sections on:</p> <ul style="list-style-type: none"> • foods and fibres we use • how food and fibre are obtained • production systems • the contributions they make to societies.
	<p><i>NSW Department of Primary Industries</i></p> <ul style="list-style-type: none"> • ‘Pulse education kit’ <p>www.dpi.nsw.gov.au/education-and-training/school-resources/pulse-education-kit</p>	<p>This suite of resources provides opportunities to learn about the characteristics and health benefits of different pulses through engaging activities, experiments, factsheets and lesson plans.</p>
	<p><i>Curtin University Centre of Excellence for Science, Seafood and Health</i></p> <ul style="list-style-type: none"> • ‘Awesome aquaculture’ (student resource) <p>https://www.yumpu.com/en/document/view/24018808/awesome-aquaculture-centre-of-excellence-for-science-seafood-</p>	<p>The student workbook provides information, experiments and activities on how aquaculture works. Topics explored include supply chains and sustainable aquaculture techniques that can save endangered sea creatures.</p>
<p>Design and Technologies</p> <ul style="list-style-type: none"> • Years 5–6: Investigate how and why food and fibre are produced in managed environments and prepared to enable people to grow and be healthy (ACTDEK021) 	<p><i>Queensland Curriculum and Assessment Authority (QCAA)</i></p> <ul style="list-style-type: none"> • ‘Year 6 STEM example unit plan’ • ‘Year 6 STEM sample assessment — Let it grow!’ <p>www.qcaa.qld.edu.au/p-10/aciq/frequently-used-resources/stem</p>	<p>Through this integrated unit, students explore the primary industries that supply fresh produce and investigate optimal conditions for growing plants. The sample assessment focuses on the design of a sustainable garden space that will provide the school community with fresh, healthy snacks.</p>

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<p>Science</p> <ul style="list-style-type: none"> • Year 5: Living things have structural features and adaptations that help them to survive in their environment (ACSSU043) • Year 6: The growth and survival of living things are affected by physical conditions of their environment (ACSSU094) 	<p><i>Meat & Livestock Australia</i></p> <ul style="list-style-type: none"> • 'Future foods'https://www.goodmeat.com.au/globalassets/goodmeat/education/stage-3-future-foods.pdf 	Students can use this guide to explore the challenges cattle and sheep farmers face, and how these farmers are working with scientists and funding new research that can help us to meet the challenge of feeding the world.
	<p><i>Cotton Australia</i></p> <ul style="list-style-type: none"> • 'Australian cotton plant adaptations' https://cottonaustralia.com.au/lessons-and-units 	This lesson plan and worksheet explore the structural and behavioural adaptations of cotton plants.
	<p><i>Primary Industries Education Foundation Australia</i></p> <ul style="list-style-type: none"> • 'Exploring sustainable practices in food and fibre production'https://www.primezone.edu.au/resource/exploring-sustainable-practices-in-food-and-fibre-production/ 	This unit has five inquiry teaching sequences about sustainable management practices in food and fibre production. The unit covers management practices used to ensure the growth and survival of crops, forests, fish, seafood and livestock on farms.
<p>Design and Technologies</p> <ul style="list-style-type: none"> • Years 7–8: Analyse how food and fibre are produced when designing managed environments and how these can become more sustainable (ACTDEK032) <p>Science</p> <ul style="list-style-type: none"> • Year 7: Interactions between organisms, including the effects of human activities can be represented by food chains and food webs (ACSSU112) 	<p><i>NSW Department of Primary Industries</i></p> <ul style="list-style-type: none"> • 'The Australian hamburger unit' www.nswdpi-schools-program.com/burger-unit 	This resource explores the main Australian agricultural production industries (wheat, beef, dairy, sheep, pork, poultry and horticulture) from paddock to plate. The activities within this unit of work provide opportunities for students to design and grow a garden to provide ingredients for a healthy burger.
	<p><i>Primary Industries Education Foundation Australia</i></p> <ul style="list-style-type: none"> • 'Go nuts' https://www.primezone.edu.au/resource/go-nuts/ 	In this unit of study, students investigate a nutrition challenge and use a design process to create an innovative solution, using nuts as a main component.
	<p><i>Australian Eggs</i></p> <ul style="list-style-type: none"> • 'Eggs — From farm to plate' www.australianeggs.org.au/education/secondary 	Through this unit students will gain insight into the egg industry, the ethical considerations of consumers, the day-to-day work experiences of egg farmers, and sustainable considerations for the future.
	<p><i>Cotton Australia</i></p> <ul style="list-style-type: none"> • 'Australian cotton: Following the thread' https://cottonaustralia.com.au/lessons-and-units 	This resource book supports teachers to engage students in appreciating more about food and fibre production, understand what Australian cotton growers and processors do and produce, and how they convert cottonseed

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	<p><i>Primary Industries Education Foundation Australia</i></p> <ul style="list-style-type: none"> <li>• ‘Investigating Australian approaches to producing fish, seafood and meat’ https://www.primezone.edu.au/resource/investigating-australian-approaches-to-producing-fish-seafood-and-meat/ 	<p>and lint into products suitable for sale.</p> <p>This unit consists of five inquiry teaching sequences about how food and fibre is produced, processed and brought to consumers. Students are given an insight into ways primary producers in the fisheries, beef and lamb, pork and chicken industries produce, process and bring their products to consumers.</p>