Food and fibre

Introduction

The Australian Curriculum addresses learning about food and fibre production in two ways:

- in content descriptions as in F–6/7 HASS/Geography, Science and Technologies, noting that in Technologies there will be a stronger inclusion than in the other two areas

- where it is identified in content elaborations in other learning areas, such as Mathematics.

The scope of learning in food and fibre reflects relevant content from across the Australian Curriculum.

The Australian Curriculum Connection: Food and fibre provides a framework for all young Australians to understand and value primary industries both across learning areas and specifically within the Technologies learning area as a technologies context in core learning across Foundation to Year 8 and as additional learning opportunities offered by states and territories in Years 9–10

The food and fibre connection has been presented in bands of schooling. In Foundation – Year 6, the connection is described as learning about producing food and fibre. In Years 7–10, it is described as food and fibre production.

Relationship of learning about producing food and fibre (F–6) to the learning areas of the Australian Curriculum

The following table identifies how the scope of food and fibre production is evident in content descriptions from across the Australian Curriculum. From this information, teachers could develop a sequential program for food and fibre production.

Foundation

Learning area/subject	Strand/sub-strand	Foundation content descriptions	Foundation content elaborations
Design and Technologies (Foundation – Year 2)	Design and technologies knowledge and understanding	Identify how people design and produce familiar products, services and environments and consider sustainability to meet personal and local community needs (ACTDEK001)	• asking questions about natural and managed environments and impacts on them when selecting materials, tools and equipment when designing and making products, for example harvesting products from the school garden and using recycled clothing • exploring and critiquing products, services and environments for their impact on sustainability, for example the environmental risks and benefits of a system for organically or hydroponically growing a vegetable crop from seed or seedling to harvest
		Explore how plants and animals are grown for food, clothing and shelter and how food is selected and prepared for healthy eating (ACTDEK003)	• exploring which plants and animals can provide food or materials for clothing and shelter and what basic needs those plants and animals have • identifying products that can be designed and produced from plants and animals, for example food products, paper and wood products, fabrics and yarns, and fertilisers • considering the suitability of a range of tools when cultivating gardens, mulching and building garden structures and preparing and cooking food from recipes • identifying and categorising a wide range of foods, including Aboriginal bush foods, into food groups and describing tools and equipment needed to prepare these for healthy eating

Learning area/subject	Strand/sub-strand	Foundation content descriptions	Foundation content elaborations
	Design and technologies processes and production skills	Explore needs or opportunities for designing, and the technologies needed to realise designed solutions (ACTDEP005)	• discussing possible designed solutions based on experience and some research, for example asking adults for advice
		Generate, develop and record design ideas through describing, drawing and modelling (ACTDEP006)	• communicating design ideas by modelling, and producing and labelling two-dimensional drawings using a range of technologies to show different views (top view and side view), for example a new environment such as a cubby house or animal shelter
		Use materials, components, tools, equipment and techniques to safely make designed solutions (ACTDEP007)	• learning and safely practising a range of technical skills using tools and equipment, for example joining techniques when making products, watering and mulching gardens, preparing food, using software to design an environment
		Use personal preferences to evaluate the success of design ideas, processes and solutions including their care for environment (ACTDEP008)	• developing criteria for success with teacher guidance including consideration of impact on environment
		Sequence steps for making designed solutions and working collaboratively (ACTDEP009)	• checking that planned features have been included in design plans and drawings by referring to identified criteria for success including care for the environment • using lists or storyboarding when planning and making, for example when planning an electronic planting calendar
Science	Science understanding *Biological sciences*	Living things have basic needs, including food and water (ACSSU002)	• identifying the needs of humans such as warmth, food and water, using students' own experiences • recognising the needs of living things in a range of situations such as pets at home, plants in the garden and animals in bushland • comparing the needs of plants and animals

Learning area/subject	Strand/sub-strand	Foundation content descriptions	Foundation content elaborations
F–6/7 HASS	Knowledge and understanding *Geography*	The places people live in and belong to, their familiar features and why they are important to people (ACHASSK015)	• identifying the places they live in and belong to (for example, a neighbourhood, suburb, town or rural locality) • describing the features of their own place and places they are familiar with or they are aware of (for example, places they have visited, places family members have come from, imaginary places in stories, or places featured on television) • identifying how places provide people with their basic needs (for example, water, food and shelter) and why they should be looked after for the future
Mathematics	Numbers and algebra *Patterns and algebra*	Sort and classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns with objects and drawings (ACMNA005)	• observing natural patterns in the world around us • creating and describing patterns using materials, sounds, movements or drawing
	Measurement and geometry *Using units of measurement*	Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language (ACMMG006) Compare and order duration of events using everyday language of time (ACMMG007) Connect days of the week to familiar events and actions (ACMMG008)	• comparing objects directly, by placing one object against another to determine which is longer or by pouring from one container into the other to see which one holds more • sequencing familiar events in time order • choosing events and actions that make connections with students' everyday family routines
	Statistics and probability *Data representation and interpretation*	Answer yes/no questions to collect information and make simple inferences (ACMSP011)	• posing questions about themselves and familiar objects, and events

Learning area/subject	Strand/sub-strand	Year 1 content descriptions	Year 1 content elaborations
Design and Technologies (Foundation – Year 2)	Design and technologies knowledge and understanding	Identify how people design and produce familiar products, services and environments and consider sustainability to meet personal and local community needs (ACTDEK001)	• asking questions about natural and managed environments and impacts on them when selecting materials, tools and equipment when designing and making products, for example harvesting products from the school garden and using recycled clothing • exploring and critiquing products, services and environments for their impact on sustainability, for example the environmental risks and benefits of a system for organically or hydroponically growing a vegetable crop from seed or seedling to harvest
		Explore how plants and animals are grown for food, clothing and shelter and how food is selected and prepared for healthy eating (ACTDEK003)	• exploring which plants and animals can provide food or materials for clothing and shelter and what basic needs those plants and animals have • identifying products that can be designed and produced from plants and animals, for example food products, paper and wood products, fabrics and yarns, and fertilisers • considering the suitability of a range of tools when cultivating gardens, mulching and building garden structures and preparing and cooking food from recipes • identifying and categorising a wide range of foods, including Aboriginal bush foods, into food groups and describing tools and equipment needed to prepare these for healthy eating
	Design and technologies processes and production skills	Explore needs or opportunities for designing, and the technologies needed to realise designed solutions (ACTDEP005)	• discussing possible designed solutions based on experience and some research, for example asking adults for advice

Learning area/subject	Strand/sub-strand	Year 1 content descriptions	Year 1 content elaborations
		Generate, develop and record design ideas through describing, drawing and modelling (ACTDEP006)	• communicating design ideas by modelling, and producing and labelling two-dimensional drawings using a range of technologies to show different views (top view and side view), for example a new environment such as a cubby house or animal shelter
		Use materials, components, tools, equipment and techniques to safely make designed solutions (ACTDEP007)	• learning and safely practising a range of technical skills using tools and equipment, for example joining techniques when making products, watering and mulching gardens, preparing food, using software to design an environment
		Use personal preferences to evaluate the success of design ideas, processes and solutions including their care for environment (ACTDEP008)	• developing criteria for success with teacher guidance including consideration of impact on environment
		Sequence steps for making designed solutions and working collaboratively (ACTDEP009)	• checking that planned features have been included in design plans and drawings by referring to identified criteria for success including care for the environment • using lists or storyboarding when planning and making, for example when planning an electronic planting calendar
Science	Science understanding *Biological sciences*	Living things have a variety of external features (ACSSU017)	• recognising common features of animals such as head, legs and wings • describing the use of animal body parts for particular purposes such as moving and feeding • identifying common features of plants such as leaves and roots • describing the use of plant parts for particular purposes such as making food, and obtaining water

Learning area/subject	Strand/sub-strand	Year 1 content descriptions	Year 1 content elaborations
		Living things live in different places where their needs are met (ACSSU211)	• exploring different habitats in the local environment such as the beach, bush, bush and backyard
	Science as a human endeavour *Nature and development of science*	Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE021) People use science in their daily lives, including when caring for their environment and living things (ACSHE022)	• jointly constructing questions about the events and features of the local environment with teacher guidance • considering how science is used in activities such as cooking, fishing, transport, sport, medicine, and caring for plants and animals
F–6/7 HASS	Knowledge and understanding *Geography*	The natural, managed and constructed, features of places, their location, how they change and how they can be cared for (ACHASSK031)	• using observations of the local place to identify and describe natural features (for example, hills, rivers, native vegetation), managed features (for example, farms, parks, gardens, plantation forests) and constructed features (for example, roads, buildings) and locating them on a map • using observations and/or photographs to identify changes in natural, managed and constructed features in their place (for example, recent erosion, revegetated areas, planted crops or new buildings) • describing local features people look after (for example, a bushland, wetland, park, or heritage building), and finding out why and how these features need to be cared for, and who provides this care
		The weather and seasons of places and the ways in which different cultural groups, including Aboriginal and Torres Strait Islander Peoples, describe them	• describing the daily and seasonal weather of their place by its rainfall, temperature, sunshine and wind, and comparing it with the weather of other places that they know or are aware of

Learning area/subject	Strand/sub-strand	Year 1 content descriptions	Year 1 content elaborations
		(ACHASSK032)	
		Activities in the local place and reasons for their location (ACHASSK033)	• identifying the activities located in their place (for example, retailing, medical, educational, police, religious, office, recreational, farming, manufacturing, waste management activities), locating them on a pictorial map, and suggesting why they are located where they are
Mathematics	Measurement and geometry *Using units of measurement*	Describe duration using months, weeks, days and hours (ACMMG021)	• describing the duration of familiar situations such as 'how long is it until we next come to school?'
	Statistics and probability *Data representation and interpretation*	Choose simple questions and gather responses and make simple inferences (ACMSP262)	• determining which questions will gather appropriate responses for a simple investigation
		Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays (ACMSP263)	• understanding one-to-one correspondence • describing displays by identifying categories with the greatest or least number of objects

Learning area/subject	Strand/sub-strand	Year 2 content descriptions	Year 2 content elaborations
Design and Technologies (Foundation – Year 2)	Design and technologies knowledge and understanding	Identify how people design and produce familiar products, services and environments and consider sustainability to meet personal and local community needs (ACTDEK001)	• asking questions about natural and managed environments and impacts on them when selecting materials, tools and equipment when designing and making products, for example harvesting products from the school garden and using recycled clothing • exploring and critiquing products, services and environments for their impact on sustainability, for example the environmental risks and benefits of a system for organically or hydroponically growing a vegetable crop from seed or seedling to harvest
		Explore how plants and animals are grown for food, clothing and shelter and how food is selected and prepared for healthy eating (ACTDEK003)	• exploring which plants and animals can provide food or materials for clothing and shelter and what basic needs those plants and animals have • identifying products that can be designed and produced from plants and animals, for example food products, paper and wood products, fabrics and yarns, and fertilisers • considering the suitability of a range of tools when cultivating gardens, mulching and building garden structures and preparing and cooking food from recipes • identifying and categorising a wide range of foods, including Aboriginal bush foods, into food groups and describing tools and equipment needed to prepare these for healthy eating
	Design and technologies processes and production skills	Explore needs or opportunities for designing, and the technologies needed to realise designed solutions (ACTDEP005)	• discussing possible designed solutions based on experience and some research, for example asking adults for advice
		Generate, develop and record design ideas through describing,	• communicating design ideas by modelling, and producing and labelling two-dimensional drawings using a range of technologies to show different views (top view and side

Learning area/subject	Strand/sub-strand	Year 2 content descriptions	Year 2 content elaborations
		drawing and modelling (ACTDEP006)	view), for example a new environment such as a cubby house or animal shelter
		Use materials, components, tools, equipment and techniques to safely make designed solutions (ACTDEP007)	• learning and safely practising a range of technical skills using tools and equipment, for example joining techniques when making products, watering and mulching gardens, preparing food, using software to design an environment
		Use personal preferences to evaluate the success of design ideas, processes and solutions including their care for environment (ACTDEP008)	• developing criteria for success with teacher guidance including consideration of impact on environment
		Sequence steps for making designed solutions and working collaboratively (ACTDEP009)	• checking that planned features have been included in design plans and drawings by referring to identified criteria for success including care for the environment • using lists or storyboarding when planning and making, for example when planning an electronic planting calendar
Science	Science understanding *Biological sciences*	Living things grow, change and have offspring similar to themselves (ACSSU030)	• recognising that living things have predictable characteristics at different stages of development • exploring different characteristics of life stages in animals such as egg, caterpillar and butterfly • observing that all animals have offspring, usually with two parents
	Science as a human endeavour *Nature and development of science*	Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE034)	• describing everyday events and experiences and changes in our environment using knowledge of science • suggesting how everyday items work, using knowledge of forces or materials • identifying and describing sources of water

Learning area/subject	Strand/sub-strand	Year 2 content descriptions	Year 2 content elaborations
	Use and influence of science	People use science in their daily lives, including when caring for their environment and living things (ACSHE035)	- identifying the ways humans manage and protect resources, such as reducing waste and caring for water supplies - recognising that many living things rely on resources that may be threatened, and that science understanding can contribute to the preservation of such resources
Mathematics	Measurement and geometry *Using units of measurement*	Name and order months and seasons (ACMMG040)	investigating the seasons used by Aboriginal people, comparing them to those used in Western society and recognising the connection to weather patterns
	Statistics and probability *Data representation and interpretation*	Identify a question of interest based on one categorical variable. Gather data relevant to the question (ACMSP048)	determining the variety of birdlife in the playground and using a prepared table to record observations
		Collect, check and classify data (ACMSP049)	- identifying categories of data and using them to sort data - recognising the usefulness of tally marks
		Create displays of data using lists, table and picture graphs and interpret them (ACMSP050)	- creating picture graphs to represent data using one-to-one correspondence - comparing the usefulness of different data displays