Farms and people’s connections to them

YEAR 2
Design and Technologies, and Geography

www.primezone.edu.au
Introduction

Rationale

This resource material aims to help teachers and students in primary schools investigate and understand more about primary industries in Australia.

The objectives of the educational resources are to:

- Support Primary Industries Education Foundation Australia and its members in expanding awareness about primary industries in Australia by engaging and informing teachers and students about the role and importance of primary industries in the Australian economy, environment and wider community.
- Provide resources which help build leadership skills amongst teachers and students in communicating about food and fibre production and primary industries in Australia.
- Develop educational resources that can be used across Australia to provide encouragement, information and practical teaching advice that will support efforts to teach about food and fibre production and the primary industries sector.
- Educate school students on ways food and animals are raised and grown.
- Demonstrate to students that everyone can consider careers in primary industries and along the supply chain of food and fibre products.
- Assist school students to spread this message to their families and the broader community.
- Develop engaging learning programs using an inquiry process aligned with the Australian Curriculum.
- Develop in school communities, an integrated primary industries education program that emphasises the relationship between food and fibre industries, individuals, communities, the environment and our economy.

An integrated primary industries education program that emphasises the relationship between food and fibre industries, individuals, communities, the environment and our economy.

These educational resources are an effort to provide practical support to teachers and students learning about food and fibre production and primary industries in schools.
Several key principles underpin the theoretical and practical application to this unit. In providing an integrated framework for inquiry, complemented by rich explorations of texts that are, in turn, supported by an emphasis on undertaking a challenge or task, the unit requires students to:

- Search for information using both digital and non-digital means
- Use research techniques and strategies
- Use thinking and analysis techniques
- Present findings to a real audience, and
- Reflect both on the product created and the process undertaken.

Rather than seeing knowledge as something that is taught, the emphasis in this unit is on knowledge and understanding that is learned. The unit involves students in:

- Working from a basis of their prior knowledge and experience
- Seeing a real task or purpose for their learning
- Being directly involved in gathering information firsthand
- Constructing their knowledge in different ways
- Presenting their learning to a real audience
- Reflecting on their learning.

The approach used, is the inquiry approach through five phases: Engage, Explore, Explain, Elaborate and Evaluate. The phases of the model are based on the 5Es instructional model (Bybee, 1997). This unit of work containing student activities assists students to raise questions, gather and process data, make conclusions and take action. These phases are:

- **Engage**: The ‘Engage’ phase begins with lessons that mentally engage students with an activity or question. It captures their interest, provides an opportunity for them to express what they know about the concept or skill being developed, and helps them to make connections between what they know and the new ideas.

- **Explore**: The ‘Explore’ phase includes activities in which they can explore the concept or skill. They grapple with the problem or phenomenon and describe it in their own words. This phase allows students to acquire a common set of experiences that they can use to help each other make sense of the new concept or skill.

- **Explain**: The ‘Explain’ phase enables students to develop explanations for the phenomenon they have experienced. The significant aspect of this phase is that explanation follows experience.

- **Elaborate**: The ‘Elaborate’ phase provides opportunities for students to apply what they have learned to new situations and so develop a deeper understanding of the concept or greater use of the skill. It is important for students to discuss and compare their ideas with each other during this phase.

- **Evaluate**: The ‘Evaluate’ phase provides an opportunity for students to review and reflect on their own learning and new understanding and skills. It is also when students provide evidence for changes to their understanding, beliefs and skills.

Teacher notes

Resource description

This resource material aims to help teachers and students in junior primary classes explore Australian farms as places defined differently by diverse groups of people.

Students’ understanding of the concept of interconnection is developed by investigating their links with places locally and globally and the connection Aboriginal and Torres Strait Islander Peoples maintain with Country/Place.

Students discover more about different products, foods, clothes and toys used and where the primary resources for them are found, grown or manufactured.

The inquiry process provides opportunities for students to identify various regions of the world and explore connections between themselves and other places.

Having explored a variety of people’s connections to places where different foods and fibres are produced, students respond to and pose questions about familiar and unfamiliar places; collect and sort information to draw conclusions; present information in a range of forms including tables and pictorial maps, and reflect on conclusions to suggest a response to geographical questions including:

• What is a place?
• How are people connected to farms that produce food and fibres in Australia and other places?
• What factors affect my connections to places?

Year level: 2

Curriculum focus

It contains a unit of work for Design and Technologies, and Geography with a variety of student activities selected as vehicles to help students:

• Explore Australian farms and forests as places defined differently by diverse groups of people.
• Investigate ways Australian farmers and foresters are producing food and fibres, for food, clothing and shelter.
• Discover more about how products, foods, clothes and toys are produced and where the primary resources are found, manufactured or grown.
• Identify various regions of the world and explore connections they have with these and other places.
• Explore their links with places locally and globally and the connection Aboriginal and Torres Strait Islander Peoples maintain with Country/Place.
• Select ideas and undertake an inquiry.
• Share their understanding with others in the school community.
• Reflect on people’s connections with places that produce food and fibres locally and globally.

Design and Technologies and Geography learning areas feature strongly in the unit as the topics deal with food and fibre production, people’s diverse connections to farms, characteristics of these connections, and how they produce food and fibre for us and others for food, clothing and shelter. English and critical and creative thinking also featured strongly throughout the activities. Asia and Australia’s engagement with Asia, Aboriginal and Torres Strait Islander histories and culture and sustainability are the dominant cross curriculum priorities in this unit.

Build on students understandings about where our wool and meat come from; production and technologies used; and management practices used to ensure the growth and survival of livestock on farms.

Based on Australian Curriculum, Assessment and Reporting Authority (ACARA) materials downloaded from the Australian Curriculum website in February 2015. ACARA does not endorse any changes that have been made to the Australian Curriculum.
Australian Curriculum content descriptions

Geography Year 2

Strand: Geographical Knowledge and Understanding

The connections of people in Australia to other places in Australia, the countries of the Asia region, and across the world ACHGK012

Strand: Geographical Inquiry and Skills: Observing, questioning and planning

Pose geographical questions about familiar and unfamiliar places ACHG5013

Strand: Geographical Inquiry and Skills: Collecting, recording, evaluating and representing

Collect and record geographical data and information, for example, by observing, by interviewing, or from sources such as, photographs, plans, satellite images, story books and films ACHGS014

Represent data and the location of places and their features by constructing tables, plans and labelled maps ACHGS015

Strand: Geographical Inquiry and Skills: Communicating

Present findings in a range of communication forms, for example, written, oral, digital and visual, and describe the direction and location of places, using terms such as north, south, opposite, near, far ACHGS017

Strand: Geographical Inquiry and Skills: Reflecting and responding

Reflect on their learning and suggest responses to their findings ACHGS018

Design and Technologies Foundation – Year 2

Strand: Design and Technologies knowledge and understanding

Explore how plants and animals are grown for food, clothing and shelter and how food is selected and prepared for healthy eating ACTDEK003

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander histories and cultures

OI.2: Aboriginal and Torres Strait Islander communities maintain a special connection to and responsibility for Country/Place throughout all of Australia.

OI.3: Aboriginal and Torres Strait Islander Peoples have unique belief systems and are spiritually connected to the land, sea, sky and waterways.

OI.5: Aboriginal and Torres Strait Islander Peoples’ ways of life are uniquely expressed through ways of being, knowing, thinking and doing.

Asia and Australia’s engagement with Asia

OI.1 The peoples and countries of Asia are diverse in ethnic background, traditions, cultures, belief systems and religions.

OI.3 The peoples and countries of Asia have contributed and continue to contribute to world history and human endeavour.

Sustainability

OI.2: All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival.

OI.7: Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments.

Source: Australian Curriculum, Assessment and Reporting Authority (ACARA), downloaded from the Australian Curriculum website on February 2015.
Implementing the unit and activities in the classroom

Using the unit
The unit can be used in a number of ways. It will be of most benefit to teachers who wish to implement a sustained sequence of activities following the inquiry stages identified in the About the approach section of this unit and content descriptions in the early years in Design and Technologies, and Geography as stated in the Australian Curriculum.

Selecting activities
At each stage several activities are suggested from which you are encouraged to select the most appropriate for your purposes. Not all activities in each stage of the unit need to be used. Alternatively, you may add to or complement the suggested activities with ideas of your own.

It is suggested that teachers create a hyperlinked unit. Organise the digital resources for your class’s use on a website or wiki or provide them on your interactive whiteboard.

Resourcing the unit
The resources suggested are on the whole, general rather than specific. Schools and the contexts in which they exist vary widely as does the availability of some resources – particularly in remote areas. There is a strong emphasis in the unit on gathering information and data.

Research and observations are encouraged to develop important skills and ensure that the exploration of the topics is grounded in a relevant context.

Some YouTube and online videos in addition to Internet based resources are suggested in the unit. You will need to investigate what is available in your school.

Adapting the unit
The unit is targeted at junior primary students. This is a suggested age range only and teachers are encouraged to modify activities to suit the needs of the students with whom they are working.

The unit’s topics are based on content descriptions of the Australian Curriculum and on the key cross curriculum priorities of Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia’s engagement with Asia, and sustainability.

While the suggested content of the unit’s topics is of relevance and significance for all students it may need adjustments within the context in which the students are working.

Many of the activities contain the following icons offering a suggestion on how many students should be involved:

- Suggested for individuals
- Suggested for pairs or small groups
- Suggested for larger groups or entire classes

Resource sheets are provided for some activities. Most are for photocopying and distribution to students. They are identified within units in bold italic: Resource 1.1.

The resource sheets are designed to assist teachers to facilitate learning without having to access a range of other resources.
What about assessment?

Rather than being a task carried out at the end of the unit, assessment is viewed as integral to the entire unit sequence. Each activity should be regarded as a context for assessment of student learning.

When planning and implementing the unit of work make clear decisions on what you will focus on in assessing learning. The unit provides an opportunity for a range of skills and understandings to be observed. We encourage you to devise an assessment plan or assessment rubric that features areas to be assessed over subsequent lessons.

In planning for assessment, student learning in the following areas can be considered:

- Understandings about the topic.
- Development of skills.
- Exploration and clarification of values.
- Use of language in relation to content.
- Ability to use and critically analyse a range of texts.
- Ability to analyse and solve problems.
- Ability to interpret information, perceive its meaning and significance, and use it to complete real-world tasks.
- Ability to work cooperatively with others.
- Approach to learning (independence, confidence, participation and enthusiasm).

For this unit, the following understandings are provided to assist teachers in planning for assessment.

Assessment strategies

Each stage in the inquiry sequence provides information about student learning. There are, however, two stages in the unit that are central to assessment: the Engage stage and the Evaluate stage. Work that is undertaken in these stages can assist teachers to monitor growth and observe concrete examples of the way student ideas have been refined or have changed through the unit sequence. Work samples should be retained for this purpose.

This unit contains a ‘Student Task’ which is well suited for assessment, as it is the summation of the work undertaken by the students in this unit.
Should I do all the activities?

At each stage of a unit, a number of activities are listed. You would not be expected to do them all. Instead, the unit is designed so that a selection of activities can be made at each stage. You should select the activities according to the needs and interests of your students and the time, relevance to the existing school curriculum and resources available to you.

While you are encouraged to follow the suggested inquiry sequence for each unit, it is quite possible to pick and choose from the range of activity ideas throughout the unit. It may also be used in conjunction with other programs you use.

How do these units fit into my weekly program?

Although the unit integrates a range of key subject areas, it is not designed to be a total program. It is assumed that regular routines that operate in your classroom will continue to run alongside your unit of work. For example, you may have regular times for use of the library, for maths, physical education etc. These things don’t change – although student’s writing topics or choice of topics to research in the library or in Information and Communication Technology classes may be influenced by this unit.

How long should the unit run?

This will of course depend on your particular circumstances but generally, a few weeks to a term are suggested.

I don’t know much about food and fibre production myself – will I be able to teach it effectively?

Yes! The unit is designed in such a way that you, as the teacher are a co-learner, and you are therefore provided with teacher notes, plus readily available resources that are mainly web-based. Most importantly, you will find that you learn with the students and make discoveries with them.
This page provides basic food and fibre production information that may be helpful when you interact with the school students.

- Agriculture plays a vital role in Australia, contributing to our social, economic and environmental sustainability.
- In 2011, there were 157,000 farmers in Australia. Around half of these were mixed crop and livestock farmers (22 percent), beef cattle farmers (20 percent) or dairy farmers (8 percent).
  
  **Sources:** Australian Bureau of Statistics, 2010-11 Agricultural Census; Australian Bureau of Statistics, Australian Social Trends, Australian Farming and Farmers, December 2012, Catalogue No. 4102.0.

- These farmers own or manage Australia’s 135,000 farm businesses – 99 percent of which are Australian owned.

  **Sources:** Australian Bureau of Statistics, 2010–11 Agricultural Census; Australian Bureau of Statistics, Agricultural Land and Water Ownership, December 2010, Catalogue No. 7127.0.

- Each Australian farmer produces enough food to feed 600 people, 150 at home and 450 overseas. Australian farmers produce 93 percent of Australia’s daily domestic food supply.

  **Sources:** Keogh M, Australian Farm Institute, 2009, “Australia’s response to world food security concerns”, Address to the 1st National Farmers’ Federation Annual Congress – Prime Minister’s Science, Engineering and Innovation Council (2010); Australia and Food Security in a Changing World. The Prime Minister’s Science, Engineering and Innovation Council, Canberra, Australia.

- The average Australian farmer is male (72 percent), 53 years old (compared with 40 years old for people in other occupations), and a self-employed owner manager (56 percent).


- As of June 2012, there were 290,000 people employed in Australian agriculture. The complete agricultural supply chain, including the affiliated food and fibre industries, provide over 1.6 million jobs to the Australian economy.

  **Sources:** Australian Bureau of Agricultural & Resource Economics and Sciences (ABARES), Australian Commodity Statistics, 2012; Australia’s Farm Dependent Economy: Analysis of the role of Agriculture in the Australian Economy. Modelling undertaken by Econtech.

- The agricultural sector, at farm-gate, contributes 2.4 percent to Australia’s total gross domestic product. The gross value of Australian farm production in 2011–12 was $46.7 billion.


- Australian farmers are environmental stewards, owning, managing and caring for 59 percent of Australia’s land mass.

  **Sources:** Australian Government Department of Agriculture, Fisheries and Forestry, At a Glance, 2012.

- Farmers are at the frontline of delivering environmental outcomes on behalf of the Australian community, with 94 percent of Australian farmers actively undertaking natural resource management.

  **Source:** Australian Bureau of Statistics, Natural Resource Management on Australian Farms 2006–07.

- Australia’s primary industries have led the nation in reducing greenhouse gas emissions: a massive 40 percent reduction between 1990 and 2006.

  **Source:** Australian Government Department of Climate Change, National Inventory by Economic Sector 2006.

Meat and Livestock Industry

- Australia’s national cattle herd stands at 28.5 million head with the beef industry accounting for 57 percent of all farms with agricultural activity.
- Australia produced around 2.2 million tonnes of beef and veal in 2012–13 directly contributing to 1 percent of Australia’s gross domestic product.
- Australia’s national sheep flock is 74.7 million head with the sheep industry accounting for 32 percent of all farms with agricultural activity.
- Australia produces approximately 6 percent of the world’s lamb and mutton supply and in 2012–13 exported 51 percent of all lamb and 96 percent of all mutton produced.
- Australia’s beef and lamb industry employs approximately 200,000 workers across farm, processing and retail.
- Australian cattle and sheep farmers are the custodians of almost half of Australia’s land.
- Australia’s beef and lamb industry is committed to ensuring a sustainable food supply for future generations with ongoing research and development projects relating to water, soil, biodiversity, animal welfare, energy, emissions and more.


Fishing and Aquaculture Industry

Australia’s marine domain, our Exclusive Economic Zone, is one of the largest in the world, covering around 10 million square kilometres. This is larger than mainland Australia (7.69 million square kilometres). Despite the size of this zone Australia ranks 46th in the world for seafood production.

Australia has progressively adopted a more ecosystem-based approach to fisheries management which looks at the effect of fishing practices not just on the target species, but also on the environment and other related species. Fisheries managers monitor both stock and fishing levels as well as a range of other environmental factors to ensure the amount of seafood harvested every year does not deplete stocks. In addition, government observers travel regularly on fishing boats to ensure compliance to quotas, bycatch limits and other regulations.


During 2011–12 in Australia:

- There were 6,991 people directly employed in the commercial fishing, hunting and trapping sector, and 3,642 in aquaculture enterprises.
- The sector comprises approximately 120 wild catch fisheries and 70 aquaculture species.
- The gross value of Australian commercial seafood and products (e.g. pearls) was valued at $2.3 billion, an increase of 3 percent on the previous year.
- Australian imports of fisheries products increased by 5 percent.
- The value of production for the wild-catch sector declined by 1 percent to $1.3 billion and production volume decreased by 4 percent to 157,505 tonnes. While the gross value of aquaculture production rose by 10 percent ($100 million) to $1.1 billion.
- The largest contributor to Australian aquaculture production in 2011–12 was salmonids, which make up 52 percent of the total aquaculture production volume and 49 percent of the value.
- Tasmania accounted for the largest share of gross value of production (30 percent), followed by South Australia (19 percent) and Western Australia (17 percent). Commonwealth fisheries accounted for 13 percent of the gross value of production.

Cotton Industry

- Every year cotton farmers make an important social and economic contribution to the nation creating jobs for 8,000 people (in Northern New South Wales and Southern Queensland alone), support for more than 4,000 businesses and over $2 billion for the national economy in export earnings.  
  

- In 2013, there were 1,181 cotton farms. 63 percent were in New South Wales and 37 percent were in Queensland. Of those farms cotton makes up 17 percent of land area on farm.

  Source: Cotton Annual 2014.

- Australia’s cotton growers produce enough cotton to provide jeans, socks, underwear and a shirt for 450 million people. The overall yield in 2012 was 10.37 bales per hectare – the first time in history that average yields have exceeded 10 bales per hectare. Australia’s cotton growers produce yields almost three times the world average.


- The average Australian cotton farmer is 39 years old, has a family owned and operated farm, employs on average six or more people, grows other crops like sorghum, soybeans, wheat and canola, has 496 hectares of cotton and is not only a farmer but also a builder, mechanic meteorologist, agronomist, conservationist, scientist and marketer.


- The Australian cotton crop was worth almost $2.3 billion at the farm gate.

  Source: Cotton Australia tables (compilation of industry sources), Cotton Compass.

- The Australian cotton industry has achieved a 40 percent increase in water productivity over the last decade i.e. 40 percent less water is now needed to grow one tonne of cotton lint, compared to 2003.


- The ratio of dryland cotton (rain grown) to irrigated cotton varies depending on the market and conditions. Of the 2011–12 crop 5 percent was dryland and 95 percent irrigated. Favourable grain and sorghum prices meant many dryland farmers opted not to plant cotton at that time.

  Sources: Cotton Australia tables (compilation of industry sources), ABARES Crop Report December 2012.

- Australian cotton growers have reduced their insecticide use by 95 percent over the past 15 years. Source: Monsanto Audited numbers 20.12.2013.

- Cotton growers are good environmental stewards, owning and caring for native vegetation equivalent to 40 percent of the area of their cotton farms, on average.

  Source: 2011 Cotton Grower Survey (Cotton Research and Development Corporation and Cotton Catchment Communities Co-operative Research Centre).

Pork Industry

• Australia is the first nation in the world to introduce the voluntary phase-out of gestation stalls.

• Pork accounts for approximately 0.4 percent of the national greenhouse gas emissions – significantly lower than other agricultural sectors, including beef at 11.2 percent, sheep at 3.4 percent, and cattle at 2.7 percent.


• Whether housed indoors or outdoors, a pig spends more time resting than any other domestic animal.

• Australia’s pig herd health is one of the cleanest in the world, free from many detrimental diseases found in most other pig producing countries

• The feed component (mainly grains such as wheat, barley and sorghum) makes up about 60 percent of the total cost of producing pork.

• Pigs have a very wide angle of vision (310°) and are therefore easily distracted.

• On average, a sow will produce 10–12 piglets per litter.

• The average growth rate of Australian pigs is around 600–650 grams a day from birth to sale.

• Pigs have colour vision but they can’t focus both eyes on the same spot.

• Pigs are unable to perspire and they lose heat through their mouths. Their ideal growing temperature is 20–22°C.

Forestry Industry

- Forestry plays a vital role in Australia, contributing to our social, economic and environmental sustainability.
- Forests are also the foundation for a broad range of cultural and spiritual experiences for diverse groups of people. They are a major tourist attraction for Australian and overseas visitors, providing for a vast array of recreational and educational activities.
- In 2010–11, the total turnover of Australia’s forest product industries was more than $24 billion.
- Australia has 125 million hectares of forest, equivalent to 16 percent of Australia’s land area. Australia has about 3 percent of the world’s forest area, and the seventh largest reported forest area of any country worldwide.
- Australia’s 123 million hectares of native forests are dominated by eucalypt forests and acacia forests.
- 32 percent of all Australia’s native forests (private and public land) are protected for biodiversity conservation. With 73 percent of Australia’s identified old growth forests in formal or informal nature conservation reserves.
- 9 percent (36.6 million hectares) of the native forests were available and suitable for commercial wood production in 2010–11 comprising 7.5 million hectares of multiple-use public forests and 29.1 million hectares of leasehold and private forests.
- Forests protect soil and water resources and are increasingly being recognised for their carbon storage and sequestration capability. The total carbon stored in forests, wood and wood products and paper products was in the order of 400 million tonnes in 2010.
- Australia’s native and plantation forests provide the majority of the timber and a significant proportion of the paper products used by Australians.
- On average, each year, every Australian consumes the equivalent of about 1 cubic metre of harvested log in the form of timber products, including timber for home building, joinery and furniture and paper products.
- Australia’s forest management is among the best in the world in terms of conservation reserves and codes of practice for production forests.
- Australia has two forestry certification schemes that enable users of wood and wooden products to know the source of the wood.
- The sector directly employs 73,267 people in the forest and wood products industry in Australia (2011). This includes full and part time employees with 1.5 percent of all employees being Indigenous.

[http://www.forestlearning.edu.au](http://www.forestlearning.edu.au)
Step 1: Engage with the topic

Getting started

**Purpose**

To provide students with opportunities to:

- develop ideas about how places may be defined differently by a variety of people
- develop understandings about Australian farms and forests as places defined differently by diverse groups of people
- develop understandings about how farms and forests produce food and fibre products
- organise the ideas they have about farms and forests as places people are connected to
- set directions for an investigation.

**Select from the following activities**

**Same and different**

**EXPLORE** and **DISCUSS** the range of places students visit, use or are linked to with family or friends, for example:

- **DRAW** some of the places you visit with your family.
- **DRAW** some of the places you use regularly.
- **DRAW** places you are linked to in some special way.

**LIST** the range of places visited and classify them for example: places of worship, places where we play sport, places where we have holidays, places where we visit relatives, places where we go fishing, places where we grow food, places where we have picnics and go camping, places where we go for recreation such as mountain bike riding, horse riding and bush walking, places where we plant trees...

**SHARE** the list and classifications about places students visit, use or are linked to in a special way and talk about whether similarities or differences exist within the class. Students can draw/write/tell their responses, using the following questions as a guide:

- What can we say about the places we visit, use or are linked to in our class?
- In what ways are they the same/different?

**Personal responses**

Find out what students already know about farms and forests. Encourage them to **TELL, WRITE** or **DRAW** their ideas. **DISPLAY** these for future reference.

**Brainstorm**

**BRAINSTORM** ideas about all the different ways people might define a farm. Guesstimate ‘before views’ about:

- What farms and forests look like, sound like and feel like?
- Whether all farms and forests are the same in size?
- If all farms produce the same things?
- Whether all farms have animals?
- If all farms produce large crops?
- Whether all farms are in the country?
- Whether trees have to be grown in forests or whether they can be planted on farms?
- Whether some farms produce enough for only family consumption and use?
Step 1: Engage with the topic

Talk about how someone might define a place that grows fish, timber, grapes, sheep, fruit, cattle, cotton, chickens, alpacas, dairy cows, vegetables, oranges, nuts, bees, seafood, goats, herbs...

Word associations

As a class **LIST** key words about farms, the different types, where they are located, what they produce. **DISPLAY** these.

**TALK** about how someone might define a place that grows: fish, timber, grapes, sheep, fruit, cattle, cotton, chickens, alpacas, dairy cows, vegetables, oranges, nuts, bees, seafood, goats, herbs...

As a class **LIST** key words about forests: the different types of forests and plantations, what they grow, where they are located, and what forests produce. **DISPLAY** these.

**TALK** about how the different types of trees grown in forests or on plantations, plus all the activities people do in their forests such as camping, walking, mountain bike riding, horse riding, picnics and visiting.

Watch and listen

**INVESTIGATE** how people can define farms in different ways. ABC Open’s ‘Video Postcards’ project invites people across regional Australia to share a corner of their earth with the world. **VIEW** two of the videos and discuss their differences and similarities.


As a class **TALK** about how she defines the farm. (for example: a backyard).

**EXPLORE** another farm that is also described as a backyard at: [https://open.abc.net.au/projects/video-postcards-30rs6yp/contributions/my-backyard-by-michelle-barrett-80vc4wg](https://open.abc.net.au/projects/video-postcards-30rs6yp/contributions/my-backyard-by-michelle-barrett-80vc4wg)

**TALK** about how these two people define places using similar language and discuss whether they are actually the same or different.

Class connections

As a class, **TALK** about the word ‘connections’. Ask questions like:

- What does the word mean?
- How do we use it in everyday speech?
- Who are you connected to?
- Are you connected to any places?

As a class, **TALK** about your connections to farms and forests and what they produce.

- **ASK** questions like:
  - How are we connected to farms and forests?
  - Where might we get our food from?
  - Where might the wool used in our jumpers come from?
  - Where might the cotton in our jeans come from?
Step 1: Engage with the topic

- Who likes eating fresh fruit and vegetables? Where might they come from?
- Where might the timber used for our doors and window frames come from?
- Where might the fish we eat come from?
- Where might the milk we drink come from?

 RECORD the class ideas in the class display that can be added to throughout the unit.

Focus on illustrations of farms

Using the illustrations of farms located in Resource 1.1 ask students to INVESTIGATE ways Australian farmers and foresters are producing food and fibres, for food, clothing and shelter. TALK about student’s connections to these places.

ASK questions like:
- What do we eat that comes from a piggery?
- Can you tell me what the cotton farm produces for us?
- Who can describe what the cattle and sheep farm produces?
- What about the plantation forest, what products come from the trees in the plantation?
- Can you tell me more about what the farm located at sea produces for us?

Magic circle

PLACE incomplete statements on cards and place them in a box:
- I’m connected to the salmon farm because we eat...
- I’m connected to the cotton farm because I wear cotton...
- I’m connected to the pig farm because my family eats...
- I’m connected to the plantation forest because the paper we write on comes from...
- I’m connected to the State forest because we picnic and play in ...
- I’m connected to the plantation forest and its trees...
- I’m connected to the cattle and sheep farm because my family eats...
- The different types of trees in the forest are...
- Tuna in the sea...
- The cotton wool in our craft area comes from...

Students can sit in groups and take turns to select a card. READ these and ask students to complete and then DISCUSS the statement in groups. Students REPORT back some of the information gained.

Concept maps

In pairs, ask students to DESIGN a concept map to ORGANISE the ideas they have about farms as places people are connected to. Add these to the class’s display.

Investigate ways Australian farmers and foresters are producing food and fibres, for food, clothing and shelter.
Step 1: Engage with the topic

**Setting the task**

*Note: This is a suggested assessment task.*

Explain to the class that from the activities they have done they are showing an understanding of how people are linked to places. They will next **DEVELOP** a ‘big idea’ about places people are connected to and factors that influence these connections and **RECORD** information in a table and map to take their ideas further.

Develop a ‘big idea’ about places people are connected to and factors that influence these connections.
Step 2: Explore places and connections

**Purpose**
To provide students with opportunities to develop their understanding of:
- objects they are connected to
- where food and fibres and other objects are produced
- geographical language used to name a place in the world
- a focus for the forthcoming experiences in the ‘Explain’ stage of the inquiry.

**Visit farms**
Where possible, **COORDINATE** a visit to local farm or forest to directly find out more about the places on the farm or forest, what is grown, the running of the farm or forest, and the way the farm or forest is cared for. If interested contact the Primary Industries Education Foundation Australia for names of farms to visit and contact details. Email: info@primaryindustrieseducation.com.au

**Farms or forests as places we are connected to**
Young children are fascinated by the world around them. They are naturally curious and want to understand about places and where things come from.

**TALK** with students about farms and forests as places that produce many different types of foods and fibres. Who might go past a farm or forest on the way home? Who has a family member who lives on a farm or near a forest? What do they grow? What do they produce?

**TALK** about farms and forests as places we are all connected to.

**PRESENT** a scenario to the class.

*This morning you may have been woken up by a rooster crowing. After a shower and dressing you probably had breakfast; perhaps a bowl of cereal, a slice of toast and jam, and glass of orange juice.*

*Did you know the rooster lives on a nearby farm? Your soap may have come from Canada. Your clothes include cotton grown in Australia and wool from New Zealand. The cereal and bread contain wheat from Australia. The jam could have been made from Spanish oranges and sugar grown in Queensland. Your orange juice probably came from South Australia. Milk on your cereal may have come from Victoria. Your wooden table was made from Tasmanian timber.*

Using a globe or map of the world, help students to **LOCATE** these places.

**Use a story**
**READ** the story ‘Nicky’s World’ written by Claire Gurry and illustrated by Nicola Neutze, that has Australian content and an emphasis on discovering more about the different products, clothes, toys and foods featured and where the primary resources for them are found, grown or manufactured.


**Take a look at labels**
**TALK** with the class about how we have food that comes from Australia and food that comes from other countries. **ASK** students to bring along one food item from home that has a label or its packaging which shows the words ‘Made in...’ or ‘Product of...’ or ‘Produced in...’ or ‘Grown in...’ or ‘Handmade in...’.

**READ** labels on tins, packets, and bottles and discover the different countries that produce the foods we eat.

Using a globe or map, help students to **TRACE** the journey from each country found on a label to Australia.
Discover more about different products, clothes, books and toys and research where the primary resources for them are found, grown or manufactured.

**Delve deeper**

Go a step further and using a globe, invite students to **TRACE** the journey from each country found on a label of a product to Australia. **IDENTIFY** which products came from furthest away.

**Explore connections**

Using the classroom as a context, ask students in pairs to **FIND** 5 things that have come from another country and **NOTE** the item and country it originated from.

**COLLATE** the information and **LOCATE** the counties in an atlas or **MARK** them on a blank world map. **DISPLAY** maps in the classroom.

**MAKE** a classroom big book using photographs or drawings of the individual students using various objects from around the world which they have identified in the classroom.

Put the pages of the photographs, drawings and questions raised into an A3 or A4 plastic leaf folder for the students to **LOOK** at and add to during the term.

Alternatively **CREATE** a slide show using digital technologies.

**Re-visit maps**

As a class, **FIND** an example of a world map that has a scale. Where possible, a large paper map is ideal for this activity. Alternatively, **SEARCH** for a world map on Google or go to: [http://mapsofworld.com](http://mapsofworld.com)

**LOCATE** the scale on a map and the measurement used to describe distance, for example: kilometres.
Step 2: Explore places and connections

**SELECT** countries from the previous activity and ask students to **IDENTIFY** these countries on the world map.

**DEMONSTRATE** how to measure distance using the map scale using their ruler. **EXPLORE** distances between Australia and the countries identified in the previous activity.

**Tables and maps**

**SUMMARISE** the information gathered about the different products, their place of origin and distance travelled to Australia onto a large class chart. Horizontal headings could include each student’s product name; vertical headings might include place of origin and distance travelled to Australia. Students **DRAW** a personal map to describe their product’s place of origin and route travelled to Australia (if any).

**Atlas work**

In pairs or small groups invite students to use an atlas to find the various countries named in earlier classroom activities. **FIND** which ones are being repeated again and again and discuss trade and how we buy things from other countries.

**Surveying**

Take a classroom **SURVEY** of student’s clothing items, looking at the labels to **DETERMINE** country of origin and then have the class graph these. **CREATE** simple picture graphs.

**LOOK** inside your hat. **FIND** the label. **ASK** questions like:

- What country was it made in?
- How many hats were made in China?
- How many hats were made in...?

**FIND** the label inside the shirt of the person sitting next to you. **ASK** questions like:

- What country was the shirt made in?
- How many shirts were made in...?

**TALK** with the students about the reality that many goods may have been processed overseas but the food or fibre may have originated in Australia.

**SHARE** examples with the class. For example, cotton used to produce a cotton t-shirt may have been grown in Australia and then exported overseas where the t-shirt was produced. Similarly, timber used in furniture manufactured in Australia may have been grown in Indonesia and then imported by Australian companies.
Step 3: Explain connections

Purpose

To provide students with opportunities to:

• explore the connection Aboriginal and Torres Strait Islander Peoples maintain with Country/Place
• explore and explain connections children in Australia, Timor Leste, Vietnam and Laos have to places
• understand more about factors that can affect connection to places.

Use an Indigenous perspective

READ a selection of different Aboriginal Dreaming stories and Torres Strait Islander People’s Tagai stories with the class.

VIEW ‘The Quinkins’ an Aboriginal Dreamtime story, by Percy Tresize and Dick Roughsey on YouTube at:
https://www.youtube.com/watch?v=GTdgYcHRoTo

DISCUSS how Aboriginal Dreaming stories and Torres Strait Islander People’s Tagai stories provide explanations for the connection Aboriginal and Torres Strait Islander Peoples maintain with Country/Place.

FIND OUT about Phil Wallis, a Traditional owner and the place that is important to him and his people.
https://www.youtube.com/watch?v=rmttpaH5iR4&list=UUnoxDA5iji0limevCrfQVSA&index=19

After reading and viewing these sources, DISCUSS the many ways in which Aboriginal Peoples and Torres Strait Islander Peoples identify with places and the meanings that places have for them.

Use a global perspective

TALK with the students about children all over the world who use everyday products, foods, clothes and toys in their own homes and classes in the country or area in which they live.

VIEW the ChildFund Australia video titled Our Day Project (26:27 minutes) that features children from four countries including Laos, Timor Leste, Vietnam and Australia.
See: http://www.youtube.com/watch?v=FaBln7TQ3A

VIEW the introduction and initial sequences (0.00-11:06). TALK with the students about the different children and their connection to and including: the places where they live, where they grow food, raise animals, catch fish, find firewood and live their lives.

LOOK at the particular objects the children from all countries use, the foods they eat, the clothes they wear, the homes they share and the places they live in.

ASK students questions like:

• What interesting things did you notice about the children’s connection to the places they live in?
• How are the children featured in the video similar to you?
• What new perceptions have you gained about other people’s connection to places?

Please note: The equality of people should be stressed in these activities, whatever the perceived inequalities in ownership of material goods, access to healthcare, education and employment might seem.

Look at the particular objects the children from all countries use, the foods they eat, the clothes they wear, the homes they share and the places they live in.
Step 3: Explain connections

**Windows on our world**

**DRAW** windows on each of four large pieces of art paper and label them as: Australia, Timor Leste, Vietnam and Laos.

Ask students to **IMAGINE** they are looking out the windows and to **DRAW** or **WRITE** about what they would see whilst looking out on the place they and the children featured in the video are connected to.

As a class, **DISCUSS** similarities and differences the students find.

Add a students’ ‘windows’ to the class display.

**Discuss how Aboriginal Dreaming stories and Torres Strait Islander People’s Tagai stories provide explanations for the connection Aboriginal and Torres Strait Islander Peoples maintain with Country/Place.**
Step 4: Elaborate on concepts and ideas

Presentation planning

**Purpose**
To provide students with opportunities to:
- learn about factors that can affect our connection to places
- plan and conduct a presentation about peoples connections to places that grow or produce things they eat, wear and use
- investigate important connections
- apply what they have learned
- share investigation findings.

**Factors that can affect our connection to places**

Note for Teachers: Primary Industries play a vital role in Australia’s economy and society, but the gap between rural and urban communities is growing, contributing to a lack of understanding of where food and other basic necessities of life come from. The 2010 television advertisement in which the grandfather shows a row of plants to his granddaughter and says “This is where peas come from” – to which she retorts “Don’t be silly Grandad, peas come from the freezer”, is an excellent example of this disconnect between the community and the industries that sustain them. While intended as a humorous element, there is a concern that this may be an accurate representation of the understanding and experiences of many young Australians.


SHOW the class the McCain Baby Peas 2010 advertisement found at: [https://www.youtube.com/watch?v=f29AJv0-pK4](https://www.youtube.com/watch?v=f29AJv0-pK4)

TALK about how many children in classrooms across Australia live in cities and obtain their food from supermarkets and some local Farmer’s Markets and DISCUSS whether this might be a reason why many children make the connection that their food comes from these places?

DISCUSS other factors that might affect our thinking about where our food and fibre products come from.

THINK about whether growing your own food might affect our thinking about where our food and fibre products come from.


DISCUSS the students ideas about the messages in the video postcard.


ASK questions like:
- Would growing our own food garden help us make better connections with where our food comes from?
- Who might like to start a school garden?
- Who knows how to start one?
- What might we like to grow? Why?


The gap between rural and urban communities is growing, contributing to a lack of understanding of where food and other basic necessities of life come from.
Create tables and maps explaining the connections

*Note: This is a suggested assessment task.*

With students **PLAN** a table and a map showing how they are connected to places. **Use Resource 1.2** to draft ideas.

Ask students to **RECORD** one of their favourite foods they eat and where the food comes from on their table and map.

Ask students to **CHOOSE** the favourite clothes they wear and to **RECORD** on their table and map where their favourite clothes come from. Remind them to read the labels.

Thirdly, ask students to **CHOOSE** their favourite toy, find the label on it and to **RECORD** on their table and map where the toy comes from.

**What am I?**

After students have researched and created their table and map **PLAY** *What am I?* as a class or in small groups. For example, ‘I am a country. I am a near neighbour to Australia. I am east of Australia. I produce wool. What am I?’

**Share findings**

Involve others in your school community and **SHARE** with them what the class knows about their connection to places that grow the food they eat, the fibres they wear and the objects they use. Help others **UNDERSTAND** where different products, foods, clothes and toys are found, grown or manufactured.

This could be done at an Assembly where the class shares ideas, with a ‘buddy’ class, or in a display in a prominent place.

**Debrief**

As a class, **DISCUSS** what students have learned about places like farms and how we are all connected to them.
Step 5: Evaluating

Think back and evaluate

**Purpose**
To provide students with opportunities to:
• reflect on their own learning.
To provide teachers with:
• insights into students’ understandings and attitudes, as well as their perceptions of their own strengths and weaknesses.

**Procedure**

PROVIDE students with a set of focus questions for their reflections:
• Draw about something new that you learnt in this unit, in relation to places we are connected to, where food and fibre are grown.
• What is the most important thing you have learned?
• How can you help others learn about places that grow food and fibre?
• What would you still like to find out about places that grow food and fibre?
• How well did you participate in any group learning activities?
• What questions do you have about the topic at the moment?
• What piece of work are you most satisfied with?
References

Australian Academy of Science (2005) Primary Connections, Canberra, Australia.

Websites (viewed February 2015)

This is a list of websites used in this unit for teacher use. As content of the websites used in this unit is updated or moved, hyperlinks may not always function.

Australian Broadcasting Corporation. ABC Open
Lily: A School of the Air student from Mardie Station https://open.abc.net.au/projects/day-in-the-life-11bh6tz/contributions/lily-school-of-the-air-student-from-mardie-station-56lz9sv

Australian Curriculum Assessment and Reporting Authority. Australian Curriculum
http://australiancurriculum.edu.au

Australian Forestry Standard

Australian Government Department of Agriculture
http://www.agriculture.gov.au/forestry


Australian Pork Limited
http://www.australianpork.com.au

Cotton Australia
http://www.cottonaustralia.com.au

Creative Commons
http://creativecommons.org/licenses/by/3.0/au/deed/en

Fisheries Research Development Corporation

Forest Learning
http://www.forestlearning.edu.au

Forest Stewardship Council Australia
http://au.fsc.org/

Garnaut Climate Change Review

Junior Landcare

Meat & Livestock Australia
http://www.mla.com.au

Maps of the World
http://mapsofworld.com
References

National Farmers’ Federation

Primary Connections
https://primaryconnections.org.au/about/teaching

Primary Industries Education Foundation

Wood Naturally Better

YouTube videos:
Australia Ads. McCain Baby Peas 2010 Ad https://www.youtube.com/watch?v=f29Afv0-pK4
Child Fund Australia. Our Day Project http://www.youtube.com/watch?v=FaBln7ITOA
The Great Barrier Reef Marine Park Authority. Phil Wallis, Traditional Owner https://www.youtube.com/watch?v=rmtthp6jJfR4&list=UUoxoDA5jiiOimevCrQVSA&index=19
Matthew Hunt. The Quinkins https://www.youtube.com/watch?v=GTdeYcHRoTo
Resource 1.1

Explore a piggery

Illustration: Liz Grant, Designgrant
Explore a plantation and native forest

Illustration: Liz Grant, Designgrant
Explore a cattle and sheep farm
Explore a salmon farm
Explore a cotton farm

Illustration: Liz Grant, Designgrant
Resource 1.2

**Facts about my favourite things**

Name of my favourite food:

___________________________________________________________________________________

Description:

___________________________________________________________________________________

___________________________________________________________________________________

Picture:

___________________________________________________________________________________

It comes from...
Facts about my favourite things

Name of my favourite toy:

________________________________________

Description:

________________________________________

Picture:

It comes from...
Facts about my favourite things

Name of my favourite clothes:


Description:


Picture:

It comes from...