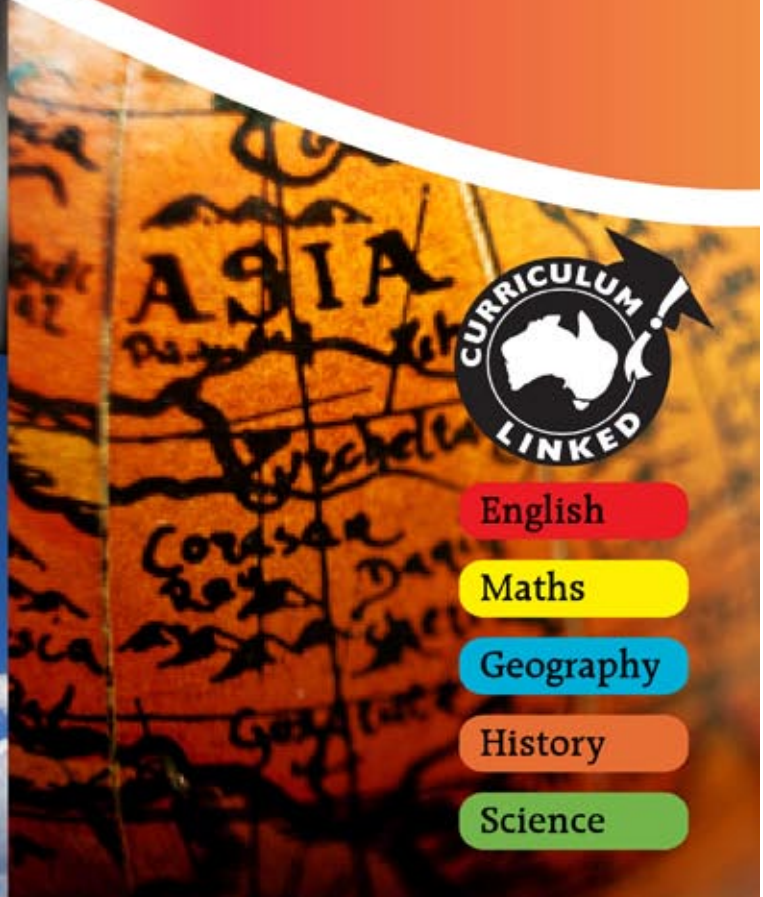


# Cross-Curriculum: Years 3-4

Integrating priorities  
across learning areas as  
specified by the Australian  
National Curriculum.

By Lisa Craig



English

Maths

Geography

History

Science

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## Teachers' Notes

*Cross-Curriculum: Years 3-4* is the second book in a series of three which addresses the Australian National Curriculum's cross-curriculum priorities: Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia's engagement with Asia, and sustainability. This book has been specifically written for students in Years 3 and 4, who are living in Australia and are expected to explore the specified priorities across Maths, English, Science, History and Geography.

In the first section of this book, students will develop their knowledge and understandings of indigenous practices through Maths, English, Science, History and Geography activities. Students are encouraged to engage with indigenous concepts of symmetry and natural cycles, through the creation of mathematical patterns in art, the recognition of climate patterns in Australia, and through the exploration of how the movement of people is determined by the availability of natural resources. In the English content tasks, students are invited to complete their own story about indigenous trackers.

The second section, *Asia And Australia's Engagement With Asia*, focuses on the diversity of peoples, cultures and environments in the Asia region. An overriding learning objective of many of the tasks in this section is for students to reflect on the similarities of cultural practices in Asia with those in their own community. Students will observe the commonality between Australia and Asia in regards to celebrations for religious, historical and commemorative purposes; some of which have been brought to Australia by Asian migrant groups. Students will also be challenged to make their own Mongolian board-game and play by its rules, as well as speculate on the life of the earliest known primate found in China.

The final section of the book, *Sustainability*, looks at ways in which students can contribute to more sustainable practices in the local and wider Australian community. Case studies such as banning plastic shopping bags, the cotton industry's use of genetically modified plants, the age-old practice of fire-stick farming and risks to the Great Barrier Reef offer students opportunities to investigate how the choices and actions of people have played a pivotal role in protecting environments for the future.

*Cross-Curriculum: Years 3-4* aims to enrich and complement content in core learning areas. The ample graphic data, illustrations and maps will give students the support to participate in conversations about different points of view in our multi-perspective, changing world.

## National Curriculum Links

### ORGANISING IDEAS

#### **Aboriginal And Torres Strait Islander Histories And Cultures**

- OI.1** Australia has two distinct Indigenous groups, Aboriginal Peoples and Torres Strait Islander Peoples.
- 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.4** Aboriginal and Torres Strait Islander societies have many Language Groups.
- OI.5** Aboriginal and Torres Strait Islander Peoples' ways of life are uniquely expressed through ways of being, knowing, thinking and doing.
- OI.6** Aboriginal and Torres Strait Islander Peoples have lived in Australia for tens of thousands of years and experiences can be viewed through historical, social and political lenses.
- OI.7** The broader Aboriginal and Torres Strait Islander societies encompass a diversity of nations across Australia.
- OI.8** Aboriginal and Torres Strait Islander Peoples have sophisticated family and kinship structures.
- OI.9** Australia acknowledges the significant contributions of Aboriginal and Torres Strait Islander people locally and globally.

#### **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.2** Interrelationships between humans and the diverse environments in Asia shape the region and have global implications.
- OI.3** The peoples and countries of Asia have contributed and continue to contribute to world history and human endeavour.
- OI.4** The arts and literature of Asia influence aesthetic and creative pursuits within Australia, the region and globally.
- OI.5** Collaboration and engagement with the peoples of Asia support effective regional and global citizenship.
- OI.6** Australia is part of the Asia region and our histories from ancient times to the present are linked.
- OI.7** Australians play a significant role in social, cultural, political and economic developments in the Asia region.
- OI.8** Australians of Asian heritage have influenced Australia's history and continue to influence its dynamic culture and society.

### **Sustainability**

- OI.1** The biosphere is a dynamic system providing conditions that sustain life on Earth.
- OI.2** All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival.
- OI.3** Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems.
- OI.4** World views that recognise the dependence of living things on healthy ecosystems, and value diversity and social justice are essential for achieving sustainability.
- OI.5** World views are formed by experiences at personal, local, national and global levels, and are linked to individual and community actions for sustainability.
- OI.6** The sustainability of ecological, social and economic systems is achieved through informed individual and community action that values local and global equity and fairness across generations into the future.
- OI.7** Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments.
- OI.8** Designing action for sustainability requires an evaluation of past practices, the assessment of scientific and technological developments, and balanced judgments based on projected future economic, social and environmental impacts.
- OI.9** Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments.

### CONTENT DESCRIPTORS

#### **Maths**

Year 3: ACMMG061, ACMMG063, ACMMG066, ACMSPO69

Year 4: ACMMG091, ACMNA078, ACMNA080

#### **English**

Year 3: ACELT1594, ACELT1596, ACELT1680

Year 4: ACELT1602, ACELY1679, ACELT1694

#### **Science**

Year 3: ACSHE050, ACSHE051

Year 4: ACSHE061, ACSHE062, ACSSU073, ACSSU074, ACSSU075

#### **History**

Year 3: ACHHK060, ACHHK064, ACHHS066, ACHHS067, ACHHS068

Year 4: ACHHK077, ACHHK080, ACHHS082, ACHHS083

#### **Geography**

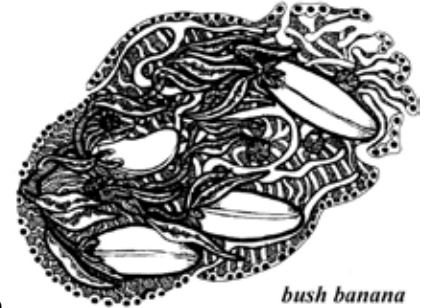
Year 3: ACHGK015, ACHGK016

Year 4: ACHGKS022, ACHGKS023

Read the information below.

### Indigenous Knowledge Of The Environment

The relationship between Indigenous Australians and their Country is based on learning about and caring for the natural resources in their environment, such as: fresh water, oceans, vegetation, wildlife and landforms. Indigenous Australians develop calendars based on their observations of the changes in their environment during a cycle in a year. Below is the seasonal calendar of the Kija and Jaru country of the East Kimberley region of Western Australia.



*bush banana*

<b>YUWINJI</b>	<b>December To Mid-March</b>
<b>Observation:</b>	Heavy rain season with fast-flowing rivers, floods – hard to move around. Grass and plant seeds sprout.
<b>Plant Food:</b>	Black and green plums, white currants, small bush potato.
<b>Animal Food:</b>	Frogs, goannas, variety of snakes.
<b>LINTHARRK</b>	<b>Mid-March To Mid-May</b>
<b>Observation:</b>	Slightly cooler than Yuwinji. Thunderstorms end, rivers slow down. Season of green grass.
<b>Plant Food:</b>	River fig, water lily, conkerberries, boab tree fruit.
<b>Animal Food:</b>	Crayfish, bush turkey, freshwater crocodiles and their eggs.
<b>WARNKANY</b>	<b>Mid-May To End of July</b>
<b>Observation:</b>	Cold nights and warm days. Water is drying up from rivers, billabongs.
<b>Plant Food:</b>	Bush onions, yams, palm tree cabbage, bush banana, boab tree nuts.
<b>Animal Food:</b>	Black bream, emu eggs, goannas, freshwater crayfish, turtles.
<b>PARNTEN</b>	<b>August And September</b>
<b>Observation:</b>	Cool weather ending and land heats up. Water is drying up, leaves fall from trees. More difficult to find bush foods.
<b>Plant Food:</b>	Water-lily seeds and roots, yams, onions.
<b>Animal Food:</b>	Witchetty grubs, emus with chicks, goannas, small hill kangaroo.
<b>WERRKALEN</b>	<b>October And November</b>
<b>Observation:</b>	Land is so hot that it is hard to walk on. Very little water in waterholes. Small, patchy storms begin. Leaves fall off boab trees – rain is coming.
<b>Plant Food:</b>	Green and black plums, white currants, bush potato and tomato, conkerberries.
<b>Animal Food:</b>	Bush turkey, big catfish, honey, echidnas.


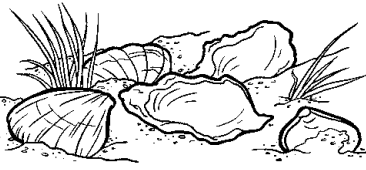



# ★ History 3 Activity

\* Organising ideas: OI.3, OI.5, OI.6  
 \* Content descriptors:  
 ACHHK060, ACHHS066 (Year 3)  
 ACHHK077, ACHHS082, ACHHS083 (Year 4)

In many sites around Darug country, there is evidence of the history and culture of Sydney's original inhabitants.

Complete the table with information about what the evidence tells Australians about the Darug People's way of life. Here are some useful websites to help you:

- ▶ [www.aboriginalheritage.org/sites/identification/](http://www.aboriginalheritage.org/sites/identification/)
- ▶ [www.atnf.csiro.au/people/rnorris/SydneyRockArt/index.html](http://www.atnf.csiro.au/people/rnorris/SydneyRockArt/index.html)

Evidence	What It Tells You About How Darug Clans Lived
<p><b>Darug Place Names</b></p> 	
<p><b>Middens</b></p> 	
<p><b>Rock Engravings</b></p> 	
<p><b>Scarred Trees</b></p> 	
<p><b>Artefacts</b></p> 	

Find out about Aboriginal sites in your local area. Prepare a short talk for the class about what you have learnt about the history of local Indigenous Australians and their connections to the place where you live.

☐ After listening to or reading the folktale entitled *The Turtle Raft*, answer the questions below.

1. Discuss this question with a partner, then write down your ideas.  
What lessons could we learn from *The Turtle Raft*?

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2. Which adjectives would you use to describe these characters from the story?  
Write the adjectives under the characters' images.

Choose from the list in the text box below or think of your own adjectives to add. Adjectives can be used more than once for different characters. Use a dictionary to look up words that you do not know.



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loyal hard-working jealous bitter old gentle  
blind young evil selfish suspicious watchful dutiful  
wise selfless kind quick-tempered helpful crafty

Read this report about an exciting fossil find in Central China.

### Tiny Monkey Lived 55 Million Years Ago

Chinese Scientist Professor Xijin Ni uncovered the skeleton of a monkey the size of a mouse ten years ago in the Hubei Province in Central China. The fossil is believed to be about 55 million years old, making it the oldest primate ever found. With a team of international scientists and computer technology, the secrets of this tiny primate are being revealed.

The fossil's skeleton was found in sedimentary rock that was once part of an ancient lake bed near the Yangtze River. 55 million years ago this region of China was covered in lush rainforest. It is a remarkable find because the monkey's skeleton is almost complete which is a rare thing for fossils this old. Usually only small pieces of skull or leg or arm remain. Professor Xijin Ni has named his important discovery *Archicebus achilles*. The "arche" means "first" and "kebos" means "long-tailed monkey" in Greek. The fossil's unusual ankle bones led to "achilles" being added to the name of the species. Achilles was the mythical Greek warrior.



### What We Know About Archicebus Achilles

After studying *Archicebus achilles*, scientists have come to the following conclusions about the life of the little primate:

- *Archicebus achilles* was like a tarsier; its trunk was about 7 centimetres long and it weighed about 30 grams;
- it lived in tree tops, ate insects and was active during the day;
- it had feet for leaping and grasping in trees, but it had toenails like a small monkey instead of claws like leopards;
- *Archicebus achilles* had a smaller head than other tarsiers and smaller eyes that faced forward – more like squirrel monkeys.

### Technology Helps Bring Archicebus Achilles To Life

For scientists to study the primate's skeleton, which was flattened in rock, they used a powerful digital scanner. The scanned image gave scientists a three-dimensional view of the skeleton that made it virtually "stand up." This was the first time that this technology had been used to study a fossil. Scientists could see in minute detail the fossil bones of the tiny creature. It is believed that *Archicebus achilles* is an important link in the primate family tree, which includes humans. Its discovery suggests that primates first appeared in Asia, not Africa.



- Many important fossil discoveries have been found in China. These fossils have changed the way that scientists think about the appearance and lives of dinosaurs and non-avian birds that lived more than 140 million years ago.

Research one of the following fossil finds from China.

**Sinosauropteryx**

**Shunosaurus**

**Tsintosaurus**

**Caudipteryx zoui**

Prepare a small poster about your chosen fossil. On the poster you could include:

- the meaning of the fossil's name;
- a coloured sketch of the fossil;
- where the fossil was found;
- how the animal lived.

A great website for images is:

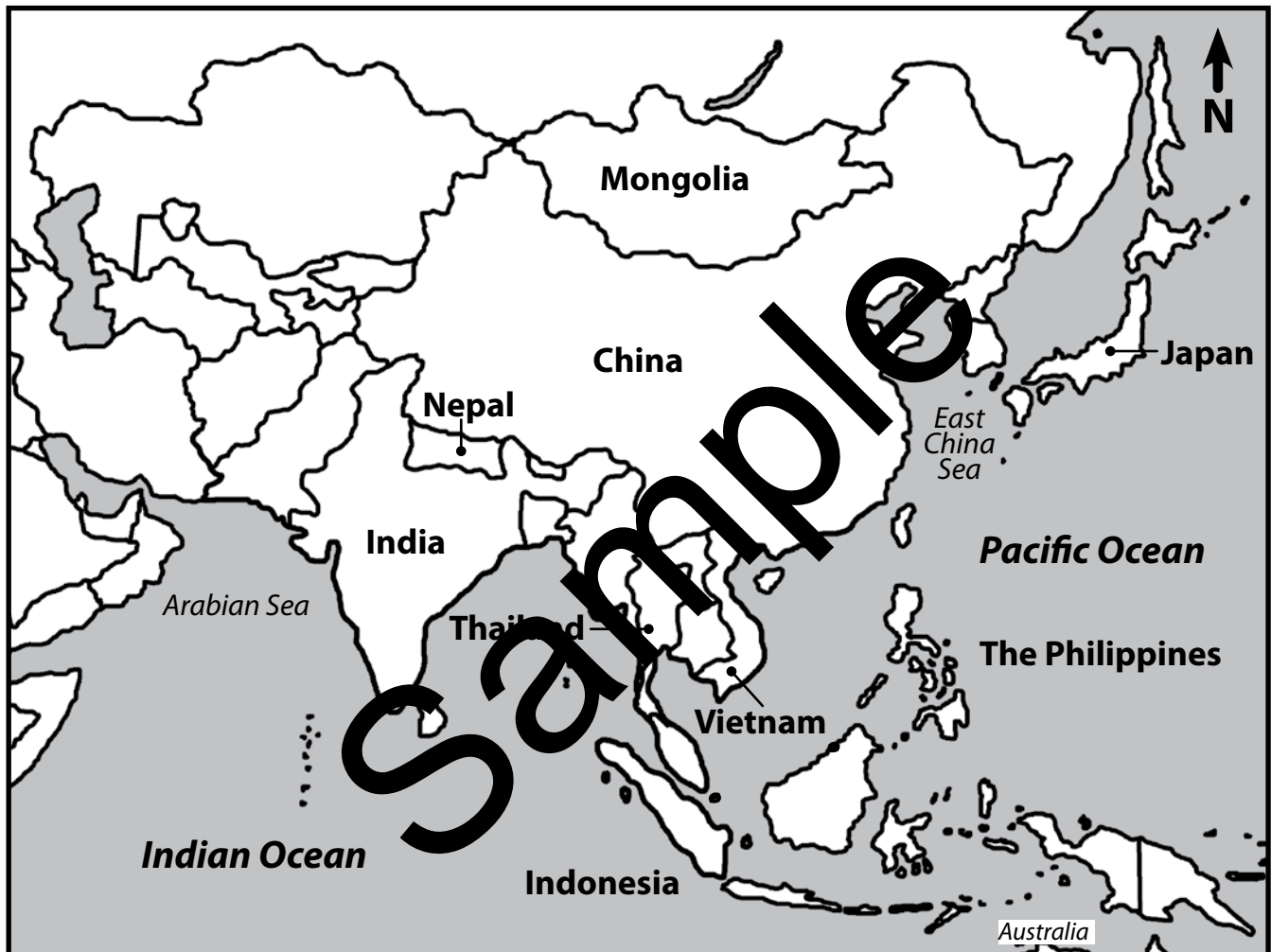
- ▶ <http://australianmuseum.net.au/Chinese-dinosaurs>

Sample



Use the information on page 40 to help you to complete the questions below.

1. The region of Asia is home to over 4 billion people in 51 countries. Some of the countries of Asia are marked on the map below. Shade lightly on the map the countries where the Naadam Festival, Loi Krathong Ceremony and the Ati-Atihan Festival take place.



2. Research a celebration or commemoration from a different Asian country. Record your findings in your workbooks. Label and shade the researched country on the map of Asia above.

Here are some suggestions for your research:

- The Duanwu Festival of China (also called the Dragon Boat Festival)
- The Japanese New Year
- The Hindu Festival of Diwali that is celebrated in India, Sri Lanka, Nepal and Malaysia.
- Tumpek Wayang holiday that is celebrated in Bali, Indonesia.

