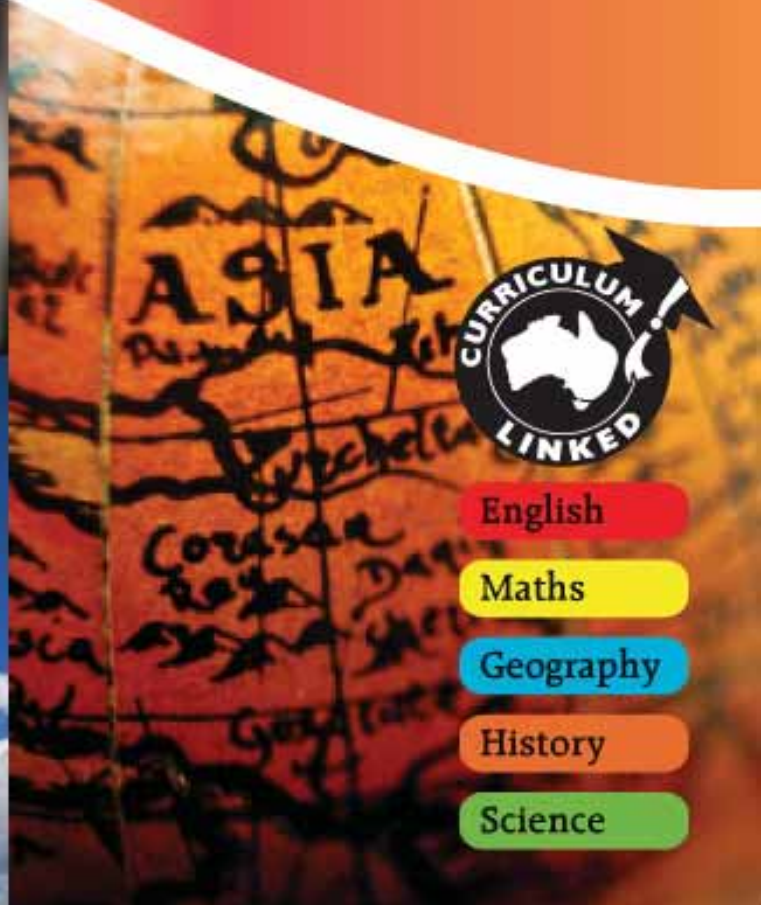


# Cross-Curriculum: Years 3-4

**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.

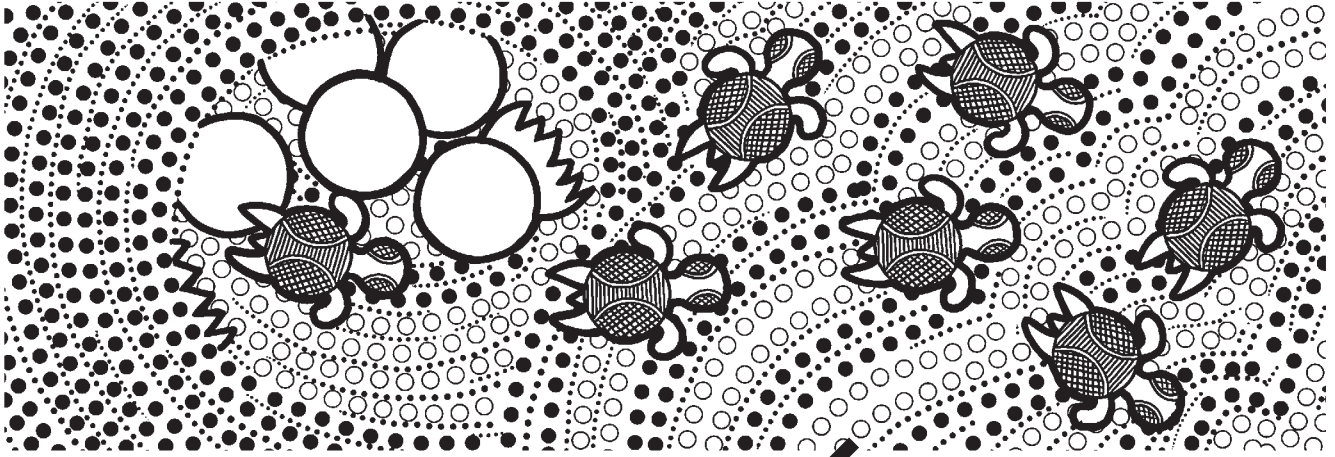
The second section, *Asia And Australia's Engagement With Asia*, focuses on the diversity of peoples, cultures and environments in the Asia region. An overriding learning objective of many of the tasks in this section is for students to reflect on the similarities of cultural practices in Asia with those in their own community. Students will observe the commonality between Australia and Asia in regard 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.



- ☐ Australian Aborigines and Torres Strait Islanders are entitled to eat turtle eggs as part of their traditional diet. Three female green turtles have each laid 120 eggs in nests in a section of a beach on the Great Barrier Reef.



1. An Indigenous person opens a green turtle nest to collect some eggs. She takes  $\frac{1}{3}$  of the eggs. She then goes to the second nest and takes  $\frac{1}{4}$  of the eggs. Finally, she collects  $\frac{1}{5}$  from the third nest.

**How many turtle eggs in total does she take home?**

2. It is the custom for an Elder to divide the eggs among the band according to need. She gave one family 35 eggs and another family 32 eggs.

**How many eggs did the third family receive?**

3. Each family group received turtle eggs that were yolkless. This means that the eggs were infertile. The first family received 3 yolkless eggs, the second family received 4, and the third family received 5. Express the number of yolkless eggs that each family received as a fraction.

**Family 1:**

**Family 2:**

**Family 3:**

4. When baby turtles hatch and dig their way out of the nest, they have to make a mad dash to the ocean to avoid being eaten by seabirds and crabs. About 50% of hatchlings do not survive the journey to the ocean.

If there were 9 green turtle nests in total on a beach with an average of 95 fertile eggs in each nest, estimate how many baby turtles might have reached the ocean.

**I estimate that**

**hatchlings reached the ocean.**



- ☐ Read the information on page 17 to help you to complete the questions and tasks below.

1. At what time of the Kija and Jaru year would:

i. the roads be cut off by floods?

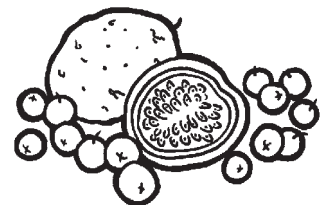
ii. people spend more time each day looking for food?

iii. people spend more time nearer the coast?

2. Look at the different foods eaten in Kija and Jaru country. Complete the table below by arranging the foods under the headings.

COLLECTED	HUNTED OR FISHED

3. Indigenous Australians choose bush foods for their nutritional value and use in traditional medicines. For example, the conkerberry bush (*Carissa lanceolata*) not only provides juicy berries, but when burnt, the chemicals emitted in the smoke, repel mosquitoes



Research a bush food (boab fruit, bush banana, wild onion) and its properties. Draw a sketch of the bush food in the space below and label it with its common and scientific name.

## MY BUSH FOOD

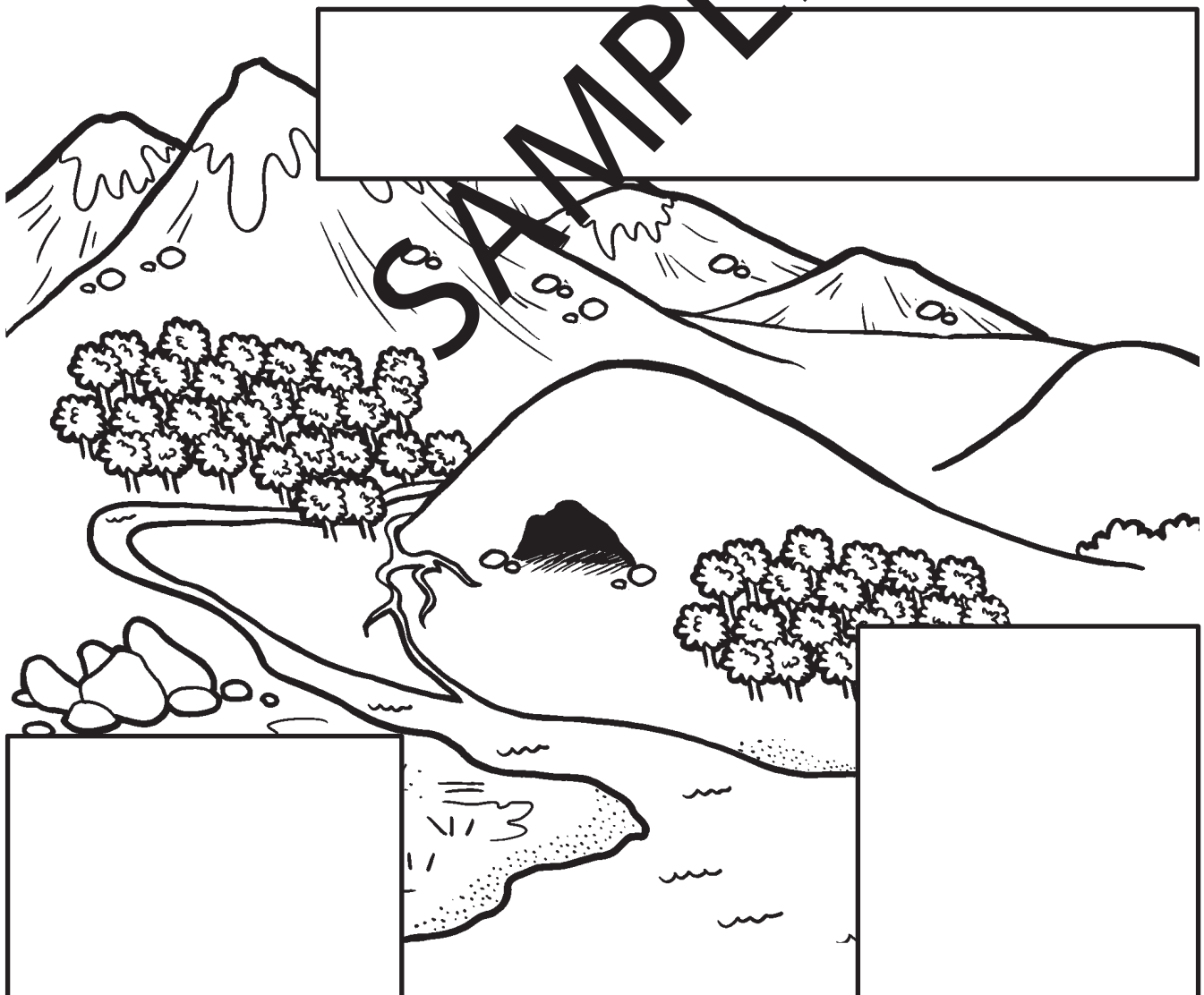
- ☐ Read the information on page 23 together with the following nutritional information about the Bogong moth to answer the first question.

**Did you know that 100 grams of Bogong moth has 38.8 grams of fat and 1,805 kilojoules of energy? Compare this to a 100 gram hamburger which has 12.7 grams of fat and 999 kilojoules of energy. No wonder Bogong moths are a heavyweight food!**

1. Why were Bogong moths such an important food source for the Ngarigo? Give three reasons.

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

2. Annotate this picture of the terrain of the Snowy Mountains with ideas about the Ngarigo's activities in different campsites throughout their territory.



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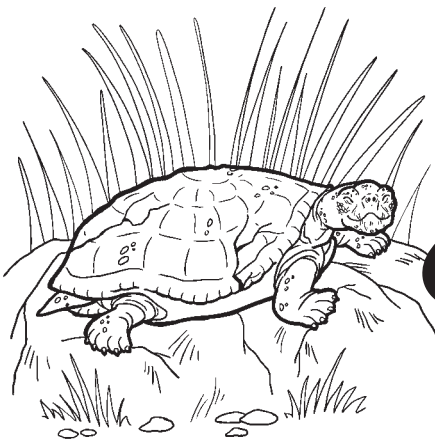
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2. Which adjectives would you use to describe these characters from the story?  
Write the adjectives under the characters' images.

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.



_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

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

- ☐ The Chinese New Year is one of the biggest celebrations in the Chinese-Australian community. It is not a public holiday, but everyone likes to join in on the fun and celebrate the age-old traditions that migrants from China brought to Australia over 150 years ago.

1. What usually happens in your local area to celebrate the Chinese New Year? What do people usually do at midnight on Chinese New Year's Eve?

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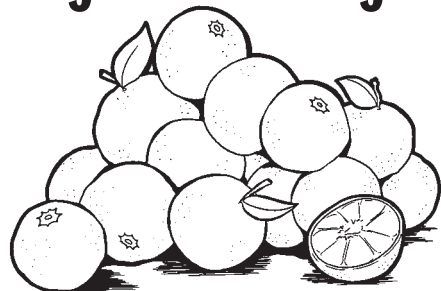
2. Can you find out what the following symbols linked to the Chinese New Year celebrations mean? Write your answers under the symbols and colour them in with appropriate colours.

## Narcissus Flower



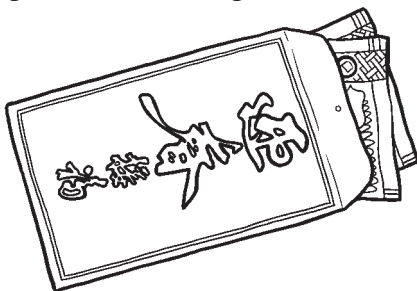

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## Oranges and Tangerines



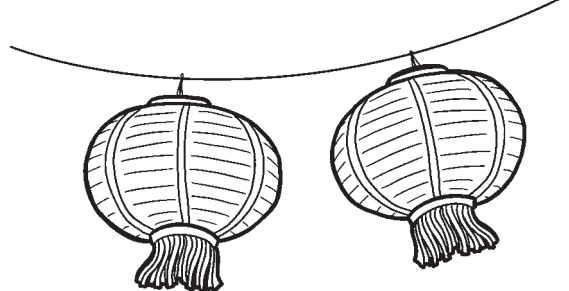

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## Hóngbao or Angbao Envelope




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## Coloured Lanterns

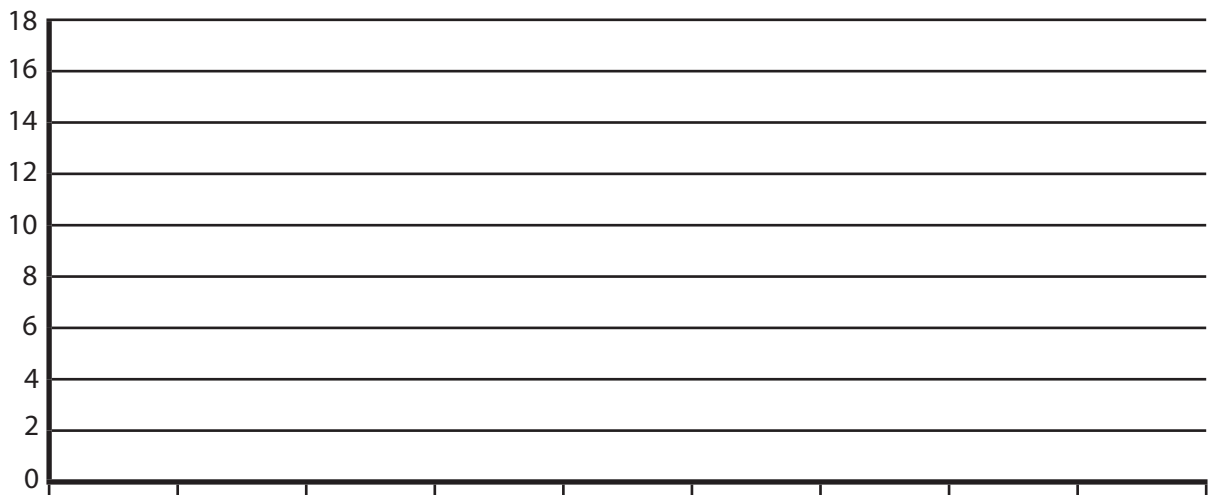



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☐ A community decided to have a clean-up at the local nature reserve. After a busy day, volunteers removed the following rubbish:

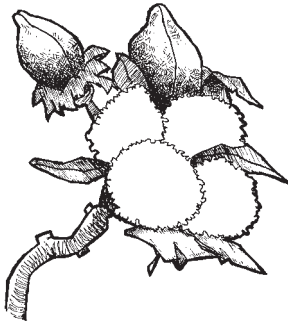
<p><b>14</b></p>  <p><b>plastic cutlery items</b></p>	<p><b>12</b></p>  <p><b>bottle caps</b></p>	<p><b>10</b></p>  <p><b>aluminium drink cans</b></p>
<p><b>4</b></p>  <p><b>plastic shopping bags</b></p>	<p><b>9</b></p>  <p><b>foil lolly wrappers</b></p>	<p><b>5</b></p>  <p><b>car tyres</b></p>
<p><b>10</b></p>  <p><b>drink containers</b></p>	<p><b>7</b></p>  <p><b>cereal boxes</b></p>	<p><b>2</b></p>  <p><b>old paint cans</b></p>

1. Shade in green the rubbish collected that can be recycled.
2. Shade in red the rubbish collected that cannot be recycled.
3. Create a bar graph to show the materials that the volunteers were able to send to the recycling centre in the space below. Don't forget to give your graph a title and to label the x- and y-axis.



☐ Use the information on page 56 to help you to complete the questions below.

1. How good are you at spotting cotton in the everyday things that you see and use? Complete the missing letters of these six objects that are made of cotton.



J \_ \_ \_ S  
 U \_ \_ \_ W \_ \_ R  
 S \_ \_ G \_ \_ T  
 B \_ \_ K \_ T  
 P \_ \_ A \_ \_ S  
 S \_ \_ T \_

2. Why is cotton such a popular choice for clothing in Australia? Give three reasons.

**Reason 1:** \_\_\_\_\_

**Reason 2:** \_\_\_\_\_

**Reason 3:** \_\_\_\_\_

3. Look at the pie chart bottom right. It shows irrigation water use in Australia. Use it to answer the following:

i. Which industry uses a similar volume of irrigated water as cotton?

\_\_\_\_\_

ii. Which industry uses the most irrigated water?

\_\_\_\_\_

iii. Can you give two reasons why the industry that uses the most irrigated water might need so much.

\_\_\_\_\_

\_\_\_\_\_

- iv. Do you agree or disagree with the statement that, "cotton is a thirsty crop"? Use the pie chart to help you to answer the question.

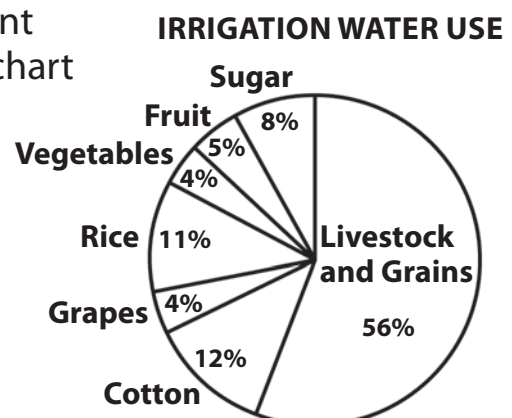
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_





- ☐ Fire-stick farming was an important process for the survival of Indigenous Peoples in many parts of the Australian continent. Below the illustrations, make notes explaining what happens in the process of fire-stick farming and how this practice gave the Noongar a sustainable food supply.



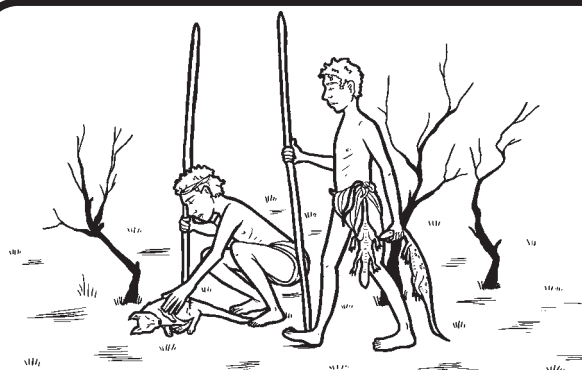
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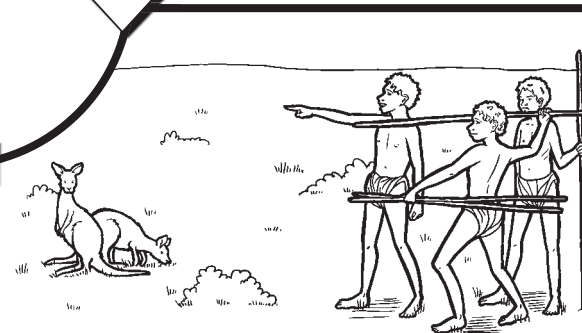
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