Bungarribee Dreaming

Teacher Toolkit
Early Stage 1 to Stage 3

OUTCOMES CONTRIBUTED TO

GEe1-1	GE3-4
GEe1-2	HTe-1
GE1-1	HTe-2
GE1-2	HT1-1
GE1-3	HT1-4
GE2-1	HT2-2
GE2-2	HT2-5
GE2-3	HT3-4
GE2-4	HT3-5
GE3-1	
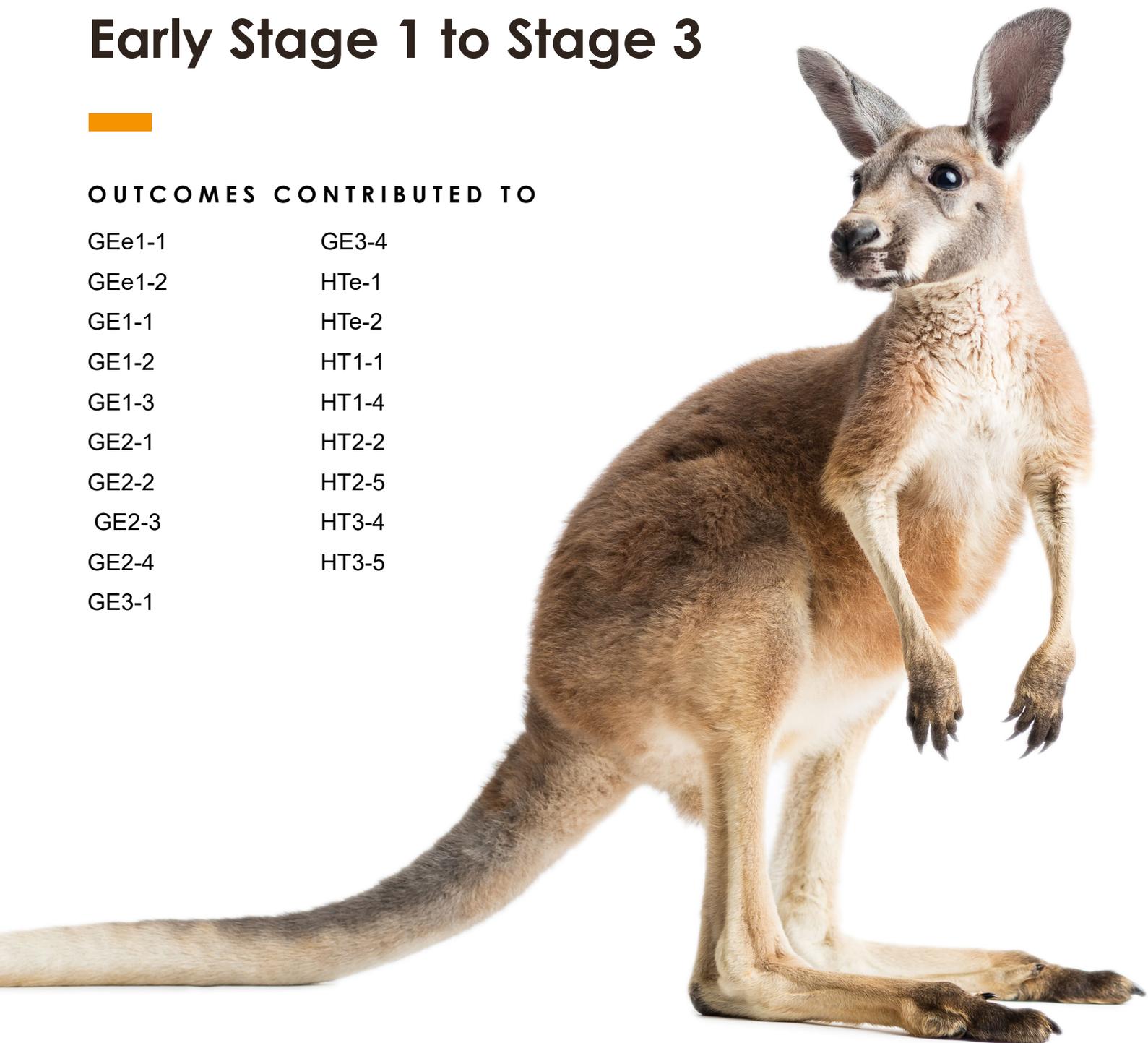
Welcome to the Sydney Zoo Teacher Toolkit

At school: students will examine the features of Australia, communicate stories of their own family heritage and the heritage of Australian Aboriginal and Torres Strait Islander people.

At Sydney Zoo: students will investigate the connections between people and places and how places can be cared for from an Aboriginal perspective.

What is in this toolkit:

- ⊘ 8 Ways Aboriginal Pedagogy images and strategies for teaching and learning. These are explicit throughout this program with explanations of activity significance.
- ⊘ Syllabus-linked pre-visit lesson plans and activity sheets designed to be scaled to each stage as necessary
- ⊘ Information regarding Syllabus content covered during your visit to Sydney Zoo
- ⊘ Syllabus-linked post-visit project plan

Resources required to best use this toolkit:

- ⊘ Computer and screen or smartboard
- ⊘ Internet access
- ⊘ Access to playground/outdoors area where possible

Sydney Zoo acknowledges the Darug nation, their people, past, present and their future generations.

Thank you to Darug knowledge holders and artists who collaborated on the creation of these resources.

Outcomes and Content

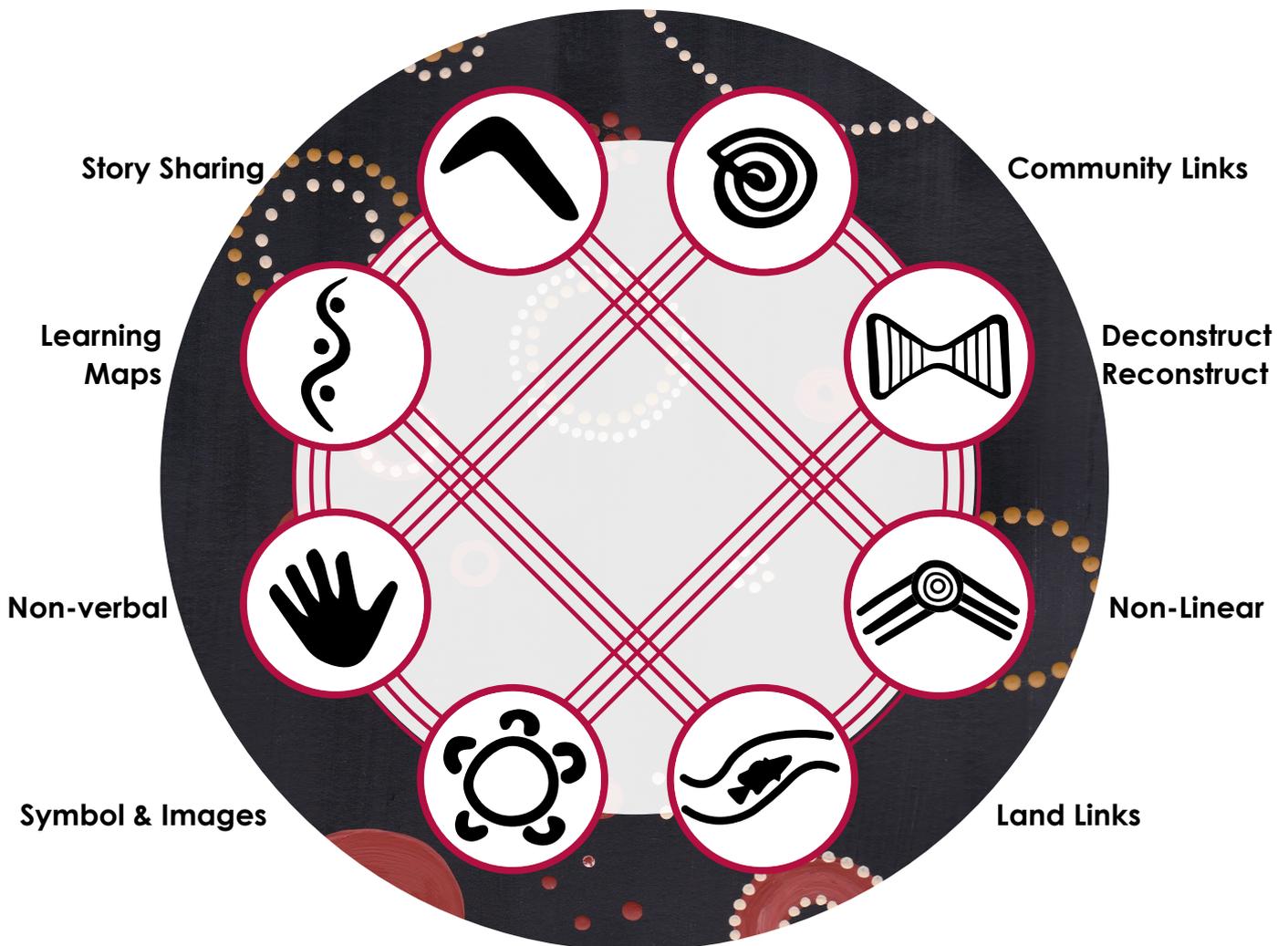| Stage	Outcomes	Content
Early Stage 1	**Geography** A student: **GEe-1** identifies places and develops an understanding of the importance of places to people **GEe-2** communicates geographical information and uses geographical tools	**Key inquiry questions** • What are places like? • How can we look after the places we live in? **Content** **Important places** Students: • investigate the importance of places they live in and belong to (ACHGK002, ACHGK004) **Locating places** Students: • Investigate how the location of places can be represented (ACHGK001)
Early Stage 1	**History** A student: **HTe-1** Communicates stories of their own family heritage and the heritage of others **HTe-2** demonstrates developing skills of historical inquiry and communication	**Key inquiry questions** What is my history and how do I know? What stories do other people tell about the past? How can stories of the past be told and shared? **Content** Who the people in their family are, where they were born and raised and how they are related to each other (ACHHK001) The different structures of families and family groups today, and what they have in common (ACHHK002)
Stage 1	**Geography** A student: **GE1-1** describes features of places and the connections people have with places **GE1-2** identifies ways in which people interact with and care for places **GE1-3** communicates geographical information and uses geographical tools for inquiry	**Key inquiry questions** • What are the feature of, and activities in, places? • How can we care for places? • How can spaces within a place be used for different purposes? **Content** **Features of places** Students: • investigate features of places and how they can be cared for **How places are organised** Students: • investigate activities that occur within places **Australia's location** Students: • investigate Australia's location in the world
Stage 1	**History** A student: **HT1-1** communicates an understanding of change and continuity in family life using appropriate historical terms **HT1-4** demonstrates skills of historical inquiry and communication	**Key inquiry questions:** • How has family life changed or remained the same over time? • How can we show that the present is different from or similar to the past? • How do we describe the sequence of time? **Content** Differences in family structures and roles today, and how these have changed or remained the same over time (ACHHK028) Differences and similarities between students' daily lives and life during their parents' and grandparents' childhoods, including family traditions, leisure time and communications (ACHHK030)

Outcomes and Content

Stage	Outcomes	Content
Stage 2	**Geography** **Skills:** • Acquiring geographical information • Processing geographical information • Communicating geographical information **Tools:** • Maps • Fieldwork • Spatial technologies • Visual representations A student: **GE2-1** examines features and characteristics of places and environments **GE2-2** describes the ways people, places and environments interact **GE2-3** examines differing perceptions about the management of places and environments **GE2-4** acquires and communicates geographical information using geographical tools for inquiry	**Key inquiry questions** • How and why are places similar and different? • What would it be like to live in a neighbouring country? • How do people's perceptions about places influence their views about the protection of places? **Content** **Australia's neighbours** Students: • investigate Australia's neighbouring countries and their diverse characteristics (ACHGK016) **Climate of places** Students: • investigate the climates of different places, for example: (ACHGK017) **Similarities and differences between places** Students: • investigate the settlement patterns and demographic characteristics of places and the lives of people who live there (ACHGK019) **Different environments** Students: • investigate the natural characteristics of Australia and one country in Asia (ACHGK020) **Significance of environments** Students: • investigate the importance of natural vegetation and natural resources to the environment, animals and people (ACHGK021, ACHGK022, ACHGK024)
Stage 2	**History** A student: **HT2-1** identifies celebrations and commemorations of significance in Australia and the world **HT2-2** describes and explains how significant individuals, groups and events contributed to changes in the local community over time **HT2-3** describes people, events and actions related to world exploration and its effects **HT2-4** describes and explains effects of British colonisation in Australia	• **Key inquiry questions:** Who lived here first and how do we know? • Why did the great journeys of exploration occur? • What was life like for Aboriginal and/or Torres Strait Islander peoples before the arrival of the Europeans? • What was the nature and consequence of contact between Aboriginal and/or Torres Strait Islander peoples and early traders, explorers and settlers? **Content** The importance of Country and Place to Aboriginal and/or Torres Strait Islander peoples who belong to a local area. (This is intended to be a local area study with a focus on one Language group; however, if information or sources are not readily available, another representative area may be studied.) (ACHHK060) The diversity and longevity of Australia's first peoples and the ways Aboriginal and/or Torres Strait Islander peoples are connected to Country and Place (land, sea, waterways and skies) and the implications for their daily lives (ACHHK077)

Outcomes and Content

Stage	Outcomes	Content
Stage 3	**Geography** **Skills:** Processing geographical information Communicating geographical information **Tools:** Maps Fieldwork Spatial technologies Visual representations A student: **GE3-1** describes the diverse features and characteristics of places and environments **GE3-4** acquires, processes and communicates geographical information using geographical tools for inquiry	**Key inquiry questions:** • How do people and environments influence one another? • How do people influence places and the management of spaces within them? **Content** **Factors that change environments** Students: • investigate the ways people change the natural environment in Australia and another country, for example: (ACHGK026, ACHGK027) **Environments shape places** Students: • investigate how the natural environment influences people and places, for example: (ACHGK028) • discussion of how climate influences the distribution of where people live **M GS** • comparison of how landforms influence where and how people live in Australia and another country **M VR**
	History A student: **HT3-4** describes and explains the struggles for rights and freedoms in Australia, including Aboriginal and Torres Strait Islander peoples **HT3-5** applies a variety of skills of historical inquiry and communication	**Key inquiry questions:** • How did Australian society change throughout the twentieth century? **Content** Experiences of Australian democracy and citizenship, including the status and rights of Aboriginal people and/or Torres Strait Islanders, migrants, women and children (ACHHK114)

Aboriginal Pedagogy
8 Ways of Learning

Story Sharing

Community Links

Learning Maps

Deconstruct Reconstruct

Non-verbal

Non-Linear

Symbol & Images

Land Links

TELL A STORY. MAKE A PLAN.
THINK AND DO. DRAW IT. TAKE IT OUTSIDE.
TRY A NEW WAY. WATCH FIRST, THEN DO.
SHARE IT WITH OTHERS

From the 8Ways website https://www.8ways.online/

Sydney Zoo has developed this lesson package with a focus on Aboriginal Pedagogy for delivery of all content. Context for each lesson is provided in the lesson plans.

Recommended pre-visit 'visiting Sydney Zoo' lesson outline

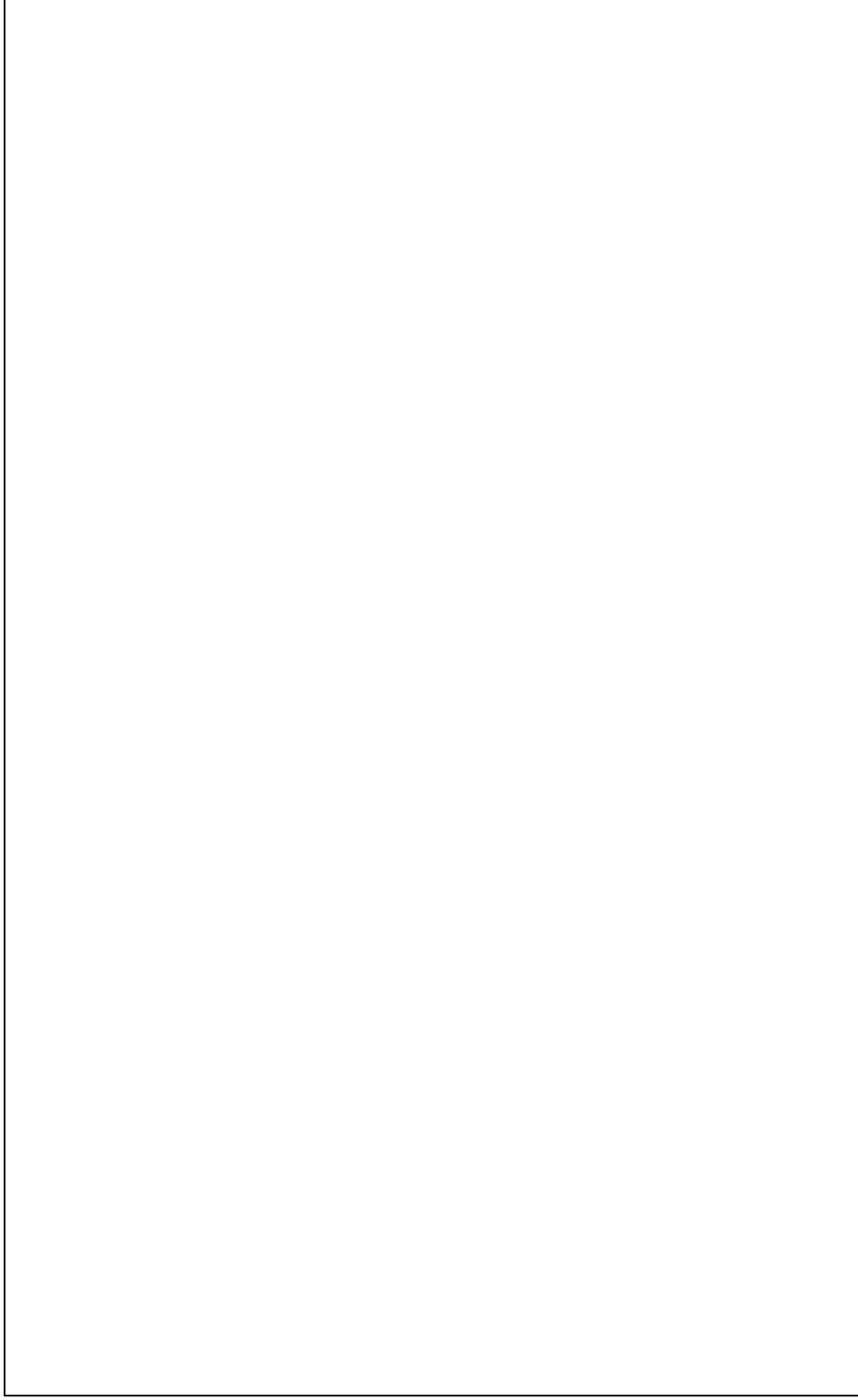| Location & Duration	Outcomes & 8Ways	Learning Activity	Resources
Classroom 30 minutes		**Introduction to Sydney Zoo** 8Ways context: Learning Maps are a way of explicitly mapping and visualising processes. Aboriginal culture uses pathways of knowledge to aid in learning. Break the learning down into what will be learnt and the journey to get there.	
		Activity 1: Explain students will be going on an excursion to Sydney Zoo to learn about *Aboriginal Culture* and *Australian Animals.* Look at the map of Sydney Zoo to find the Australian precinct. This is where the Australian Aboriginal Cultural experience is located.	Smartboard or equivalent **Map** https://sydneyzoo.com/zoo-map
		Activity 2: **Scale for each stage** **Brainstorming** activity with the students. For example: - What do you think you will learn at Sydney Zoo? Things students can learn about Aboriginal culture during program: - Language - Cultural aspects e.g. boomerangs and other tools, use of the land and animals - How Aboriginal people care for the land - Colonisation impacts on Aboriginal people	Board or butchers paper
	8Ways **Learning Maps**	**Activity 3:** **Students use Activity sheet 'Images' and 'Learning Map'** Early Stage 1 up to Stage 2 students can use images in 'Learning Maps' activity sheet, cut them out and stick them to the Learning Map page, student can add words or sentences about what they will be learning, creating a map with a start and finish. Stage 2 and Stage 3 students can draw/write and create a learning map of what they will be learning on blank paper. This can be done as a class or individually/small groups Examples include: • Animal facts • Habitat facts • Threats • Conservation • Aboriginal and Torres Strait Islander knowledge, language and culture • Plant uses • Stories • Importance of places to people and animals • Different uses of places	**Activity sheets** 'Images' 'Learning Map'

Images

Cut out the images below and use them to create a map of what you think you will learn at Sydney Zoo, you can add describing words or sentences.

Learning map

Create a map of all the things you will be learning, include a star and a finish and how you will be learning things.

Recommended pre-visit 'visiting Sydney Zoo' lesson outline

Location & Duration	Outcomes & 8Ways	Learning Activity	Resources
Classroom 45 minutes	GEe1-1 GEe1-2 GE1-1 GE1-3 GE2-1 GE2-4 GE3-1 GE3-4	**Where in the World is Sydney Zoo?** 8Ways context for this lesson includes place-based learning and linking content to the local land and place. **These activities can be scaled back for Early Stage 1 and Stage 1 or scaled up into more detailed discussion with students for Stage 2 and Stage 3.**	
	8Ways **Land Links**	**Activity 1:** **Google Earth – dependent on the stage, students can complete this on own devices or complete as a class.** • Load Google Earth • Use the search tool with students to find 'Sydney Zoo' – multiple options of Zoos in Sydney may appear, find Sydney Zoo on the Great Western Highway **Activity sheet** ' Where in the World is Sydney Zoo' Use the zoom features on Google Earth to answer the questions about the location of Sydney Zoo on the Activity sheet **Discussion** about location of their own school. • Help students to find major roadways and features that they know around their school, discuss oceans, continents • Discuss what natural made and human made features there are.	Smartboard or equivalent Internet access **Link** Google Earth https://www.google.com/earth/ **Activity sheet** 'Where in the world is Sydney Zoo'
		Activity 2: **Google Maps - dependent on the stage, students can complete this on own devices or complete as a class.** • Use the 'Search' tool to find 'Sydney Zoo' • Use the 'Directions' tool to find your school/home or place of importance e.g. football ground or playground **Discuss** with students how they might get to Sydney Zoo for their excursion: Car (or coach), Public transport, Cycling, Walking **Discuss** what the land looked like before roads, cars, trains etc Aboriginal people did not have these methods of transport, but they did know the land and how to get from one place to another • They would have walked long distances, how else could they travel? **Canoes on waterways** **Australian Institute of Aboriginal and Torres Strait Islander Studies (AITSIS) map** • Load the AITSIS map Discuss with students what Aboriginal Nation the Zoo is on (Darug/Dharug) • Is your school on the same Nation? How many language groups/nations are there? Extend discussion around locations	**Links** Google maps https://www.google.com/maps **Link** Aboriginal languages map https://www.mapworld.com.au/products/aboriginal-australia-laminated
		Extension Activity: Stage 2-3 can extend this exercise using online maps such as SIX maps to discuss the local environment:	https://maps.six.nsw.gov.au/

Where in the world is Sydney Zoo?

Circle the correct answers for each line about where Sydney Zoo is located

Which state of Australia is Sydney Zoo located in?
(Colour it in on the image and circle the correct answer)

Queensland   New South Wales   Victoria   Tasmania

Which city is Sydney Zoo located in?

Canberra   Melbourne   Sydney   Adelaide
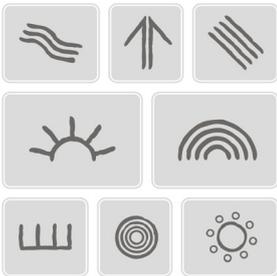
Which Aboriginal nation is Sydney Zoo located on?

Yuin   Kamilaroi   Darug   Bundjalung   Wiradjuri

Which Aboriginal nation is your school located on?

How long will it take you to get to the zoo from school? By:

Car: Cycling:

Public transport: Walking:

Optional pre-visit 'languages' lesson outline

Location & Duration	Outcomes & 8Ways	Learning Activity	Resources
Classroom 45 minutes +	HTe-1 HTe-2 HT1-1 HT1-4 HT2-2 HT2-5 HT3-4 HT3-5	**Languages** 8Ways context in this lesson is about sharing community, finding out about community. It also relates history, family and language to each other and the impact of the past on the present. **2019 was the United Nations International Year of Indigenous Languages.** *Optional: find parents or community members to come and discuss their languages.*	Smartboard or equivalent screen
	8Ways **Community Links** **Non-linear**	**Activity 1:** **Discuss** how many languages are spoken within the population of the classroom • Are any of the languages similar? • How many countries are represented? • Students can speak some of the language(s) they know to the rest of the class e.g. hello, how are you.	
		Activity: 2 **Aboriginal languages and nations** • Does anyone know an Aboriginal language? • How many Australian Aboriginal languages are there? Students to guess how many Aboriginal languages exist/existed before European settlement, discuss using the AIATSIS map to estimate. • before British arrival there were 250 languages and over 800 dialects spoken • a dialect is a way of speaking a language that is only used in a certain location e.g. we speak English, so do people in England, Scotland and America, but we all use slightly different words some of the time. In Australia we might say 'G'day mate' but in some parts of America they might say 'Howdy' • some languages are now 'extinct' – this means no one speaks the language anymore and no one knows how to speak it • there are only 13 of the 250 languages still being learned by children today. 100 languages are still spoken by older generations but will soon be extinct in Australia.	**Link** Aboriginal languages map https://www.mapworld.com.au/products/aboriginal-australia-laminated
		Activity: 3 **Let's learn some language** • Explain that Darug is the Aboriginal language spoken in Western Sydney - there are multiple dialects • Using the flash cards get students to sound out the words and draw pictures or find examples to use these words in the class • Leave the flashcards around the classroom for students to try and use Darug language ongoing..	**Activity sheet** 'Darug Language Flash Cards' *Print as many copies of the flash cards as you need.*

Language Flashcards

Cut out the words, practice saying the words and place them around the classroom to help use Darug language each day in class.

Warami

(wah-rah-my)

Hello

Yanu

(yah-noo)

Goodbye

Didgerigore

(didge-er-ree-gore)

Thank you

Naya

(neigh-ar)

I am

Yuin

(you-in)

Yes

Beal

(bay-yal)

No

Werowi

(we-roh_wee)

Girl

Wongra

(won-grah)

Boy

Language Flashcards

Cut out the words, practice saying the words and place them around the classroom to help use Darug language each day in class.

Wargul

(wah-gool)

One

Bulla

(bull-lah)

Two

Bulla Wargul

(bull-lah wah-gool)

Three

Bulla Bulla

(bull-lah bull-lah)

Four

Bulla Bulla Wargul

(bull-lah bull-lah wargul)

Five

Djaralang

(jar-rah-langl)

Many (numbers)

Wianna

(why-arh-nah)

Mother

Bianna

(bi-arh-nah)

Father

Language Flashcards

Cut out the words, practice saying the words and place them around the classroom to help use Darug language each day in class.

Djuramin

(jew-rah-min)

Sister

Bobbina

(bob-bee-nah)

Brother

Gagunda

(ga-dun-dah)

Kookaburra

Gula

(gu-lah)

Koala

Wirriga

(wee-ree-gah)

Goanna

Ngangawi

(gan-ga-wee)

Echidna

Mogra

(mo-grah)

Fish

Wombady

(wom-bad-ee)

Wombat

Optional lesson pre-visit
'family histories' lesson outline

Location & Duration	Outcomes & 8Ways	Learning Activity	Resources
Classroom 4 5minutes +	HTe-1 HTe-2 HT1-1 HT1-4	**Our own and shared histories** 8Ways context in this lesson is about how symbol/images can represent stories and people, that every person has a story and are given an opportunity to tell it and learn from it, that everybody is part of the community.	
8Ways **Symbols** 8Ways **Storytelling** 8Ways **Community Links** 8ways **Non-verbal**		**Activity 1:** **Drawing a family tree** Students write a list of people they have in their inner circle/family • Aid students in identifying different family members /friends • Using the activity sheet 'Our own history' students make a thumb print with ink or paint on their page like leaves for a tree and write the name of the person under the print. • Can include distant relatives, deceased relatives and important people in their lives that are non-relatives • Students draw branches on their tree to connect their family **Students share their story with their neighbours once they have finished to see how other peoples' families may differ**	**Activity sheet** 'Our own history' Paint or ink pads
		Activity 2: **Discuss** the other people on their family tree, what would have been different for them when they were growing up? For example: • Games • Technology • Transport • Schooling	
		Activity 3: **Darug language words for families:** • Students use family words they learnt in previous lesson from flash cards to label their family tree in Darug.	**Activity sheet** 'Darug Language Flash Cards'

Our own history

1. **Use paint or ink pads to do one thumb print per family or community member that you would like to have on your tree.**

2. **Draw a tree with branches coming from the trunk to connect these prints and make the leaves of your tree.**
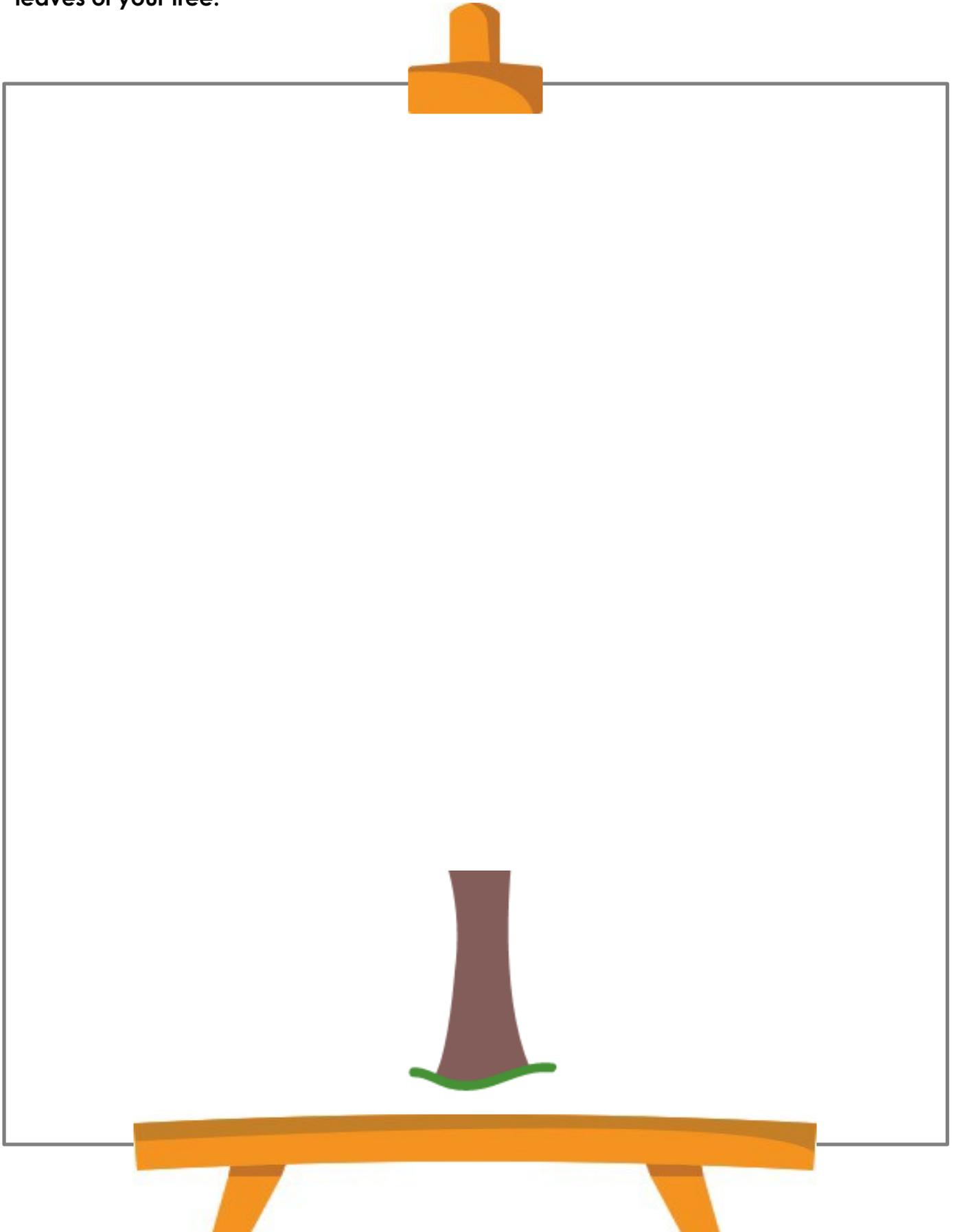
Visiting Sydney Zoo

Visit Sydney Zoo and take your students through the Aboriginal Cultural Experience at your own pace. Students will meet Aboriginal guides and see traditional life information and artefacts on display.

Book a guided visit to Sydney Zoo! (Available Term 1 2020) and have one of our trained Aboriginal guides take your students on a Cultural journey.

Pre-visit checklist:

- Pre-visit activities
- Behaviour expectations of students while visiting Sydney Zoo
  - Follow instructions of your teacher and zoo staff
  - Take only photographs and memories, leave only footprints and smiles
  - If you get lost, find a staff member in uniform and tell them you need help
  - Have a lot of fun and ask lots of questions!
- Ask students to prepare low waste/waste free lunches if possible. We love seeing the students' being low waste/waste free – please brag about this to us
- Wet-weather preparation if the forecast is not favourable (some of our animals love wet days so don't worry about them hiding away)

Upon arrival:

- Check-in at Group Bookings desk to confirm time with Aboriginal guide
- Find allocated bag storage area for student bags if required
- Enjoy your visit with us and please ask any staff for assistance if required
- We recommend not spending much time in Australia if you have booked a guided experience – use the time to see the rest of Sydney Zoo

What is a low or no waste lunch?

- **Sourcing foods that have minimal or no packaging and using reusable containers to carry food.**

- **Bringing your own reusable drink bottle and refill it.**

- **Carrying your own reusable cutlery set.**

Examples

☑ Sandwiches - without clingwrap, they can stay fresh in a suitable reusable container or beeswax reusable wrap.

☑ **Fruit** - apples, bananas and mandarins are easy to eat and/or peel at school or the Zoo, the core and skin can go in the organic bins.

☑ **Nuts, dried fruit, biscuits, popcorn etc.** in a small reusable container, buy them in bulk to reduce packaging and put servings into small containers for snacks.

Optional post-visit
'caring for our place' lesson outline

Location & Duration	Outcomes & 8Ways	Learning Activity	Resources
Multiple lessons	HTe-1 HTe-2 GEe-1 Gee-2 GE1-2 GE1-3 GE2-2 GE2-3 GE2-4 GE3-3 GE3-4	**Caring for our place** This project is designed to be done after a visit to Sydney Zoo where students will learn about totems and Country during their visit to Bungarribee Wildlife Experience. 8Ways context for this project involves having students collect information about their environment and wildlife at their school. They will complete work outdoors that is non-verbal, hands-on and meaningful. Activities will be deconstructed during the planning stage and reconstructed for delivery. Students can share the story of their animal and environment after the project is completed with the school and community as well as produce images to represent their totem and journey.	
	8Ways **Landlinks** 8Ways **Non-verbal** 8Ways **Deconstruct/ Reconstruct** 8Ways **Symbols** 8Ways **Storytelling** 8Ways **Community Links**	**Activity 1:** **Discuss with students what they learned at Sydney Zoo including aspects such as:** • Language, history, culture • Who they met • Animals they saw • Dreaming stories • Activities they did **Discuss with students what they learned about Totems.** Totems: • Discuss what a totem is (A totem is a natural plant, animal or element with which a spiritual connection is formed. Each person has a responsibility to their totems, to protect and take care of its existence.) • They can be any plant or animal • What does it mean if you have a totem? (you must care for it's existence)	
		Activity 2: Introduce concept of a class animal. Explain to students that they will be setting up a tally of animals they see around the classroom • define a time frame with the class • set up a large piece of paper or a board where the observational data can be tallied as the students see different animals within the school landscape • when the time has elapsed, count up the tallies of animal sightings, the animal with the most sightings becomes your class totem **Extension activities:** • Add parameters to the observational data for example: where animals were sighted and plot on a map • Create a graph of the tallied data	**Instruction sheet** 'Choosing your class animal'

Optional **post-visit** 'caring for our place' lesson outline

Location & Duration	Outcomes & 8Ways	Learning Activity	Resources
	HTe-1 HTe-2 GEe-1 Gee-2 GE1-2 GE1-3 GE2-3 GE2-3 GE2-4 GE3-3 GE3-4 8Ways **Landlinks** 8Ways **Non-verbal** 8Ways **Deconstruct/ Reconstruct** 8Ways **Symbols** 8Ways **Storytelling** 8Ways **Community Links**	**Activity 3:** Now that your class has their animal, this activity is designed for students to take responsibility for caring for the local environment where their animal lives. This activity can be scaled to any stage with more complex relationships being discussed with older stages. **Mapping your environment** Students create a map of their school environment where their animal lives (can be a map of the entire school or a sub-section) • Map can be made digitally, drawn or use an existing copy of the school map that students draw on • Plot on the map environmental features including - out of bounds area (and discuss why it is out of bounds) - bush areas - play areas and their favourite places - places to eat - any other areas they feel are significant **Discuss the maps the students have created** • Where does their animal live on that map? • How can we better care for this area to ensure we are looking after our animal and the environment we share with it? • For example: - 'emu parade' once a week to pick up rubbish in that area - plant a bush garden in an appropriate space - create signs to educate other people about your animal and what they can do to help look after the environment and that animal - hold no waste lunch box days to reduce amount of rubbish at school - create 'earth toys' that are a model of your animal but made of items from nature that when broken or discarded will return to the environment and not harm it	
		Activity 4: **Create a project plan on how your class will improve the environment. Option to use the scaffold 'project planning scaffold' as a basis for planning your class project.** **Share your work with us at Sydney Zoo!** **Extension activity Stage 3:** Compare your project and management of place with larger scale projects around Australia and the world. What is working well? What is not working well?	

SYDNEY ZOO

Class project 'protecting animals and place'

Finding your class animal and protecting your place

Step 1

Start a list of animals you frequently see every day near the classroom. (On the board or on a large poster on the wall.

Step 2

Specify a time period you will be searching, we recommend 1 or 2 weeks.

Step 3

Have a tally started next to every animal on the list. Every time a class member sees an animal they add to the tally.

Step 4

At the end of the specified period of time, get the students to count up the tallies and find the animal they see the most. This is your class animal. Extension activities can include graphing the data and mapping where sightings occurred.

Not every animal is glamorous, but they are all important.

Step 5

Create a class project around protecting your class animal and its environment. This can take many forms. Brainstorm ideas from the class and then plan what resources will be required and map out the tasks for students to complete.

Step 6

Share your hard work through art or craft creations of your class animal in its habitat and the ways your class has protected its place at your school.

At Sydney Zoo we love to see the work students are doing in their local environment. Please contact us for advice or inspiration and to share your hard work.

education@sydneyzoo.com

Project planning scaffold for use as a class

What is the problem/opportunity?

Identify and define issues you may face and create criteria

Research first then create a plan

Create your project with appropriate tools, materials and safe practices

Evaluate your project – did you do what you set out to do?

Project planning scaffold for use as a class

Roles	Assigned students

Word bank

Word	Definition
Aboriginal and/or Torres Strait Islander Peoples	Aboriginal Peoples are the first peoples of Australia and are represented by over 250 language groups, each associated with a particular Country or territory. Torres Strait Islander Peoples are represented by five major island groups, and are associated with island territories to the north of Australia's Cape York which were annexed by Queensland in 1879. An Aboriginal and/or Torres Strait Islander person is someone who: • is of Aboriginal and/or Torres Strait Islander descent • identifies as an Aboriginal person and/or Torres Strait Islander person, and • is accepted as such by the Aboriginal and/or Torres Strait Islander community(ies) in which they live.
adaptation	The process of change by which a species becomes better suited to its environment.
built environment	The manufactured artefacts and surroundings that provide the setting for human activity.
characteristics	A set of distinguishing aspects (including attributes and behaviours) of a living thing, object or material. The characteristics of living things are often used to classify them and might include how they move or reproduce. When discussing materials the characteristics are the qualities used by humans to determine their use and the way people work with them. They might include colour, hardness and opacity.
classification	A category into which something is organised.
climate change	A long-term change in regional or global climate patterns eg annual precipitation, frequency of weather events.
climate graph	A graph showing average monthly temperature (by a line) and precipitation (by columns) for a location.
climatic zones	Refers to areas of the Earth that have similar temperatures. The major zones are hot, temperate and polar and are generally demarcated by lines of latitude. Within each zone there are different climates because of the effects of the distribution of continents and oceans and the circulation patterns of the atmosphere and oceans.
conclusions	An opinion or judgement based on evidence.
Country/Place	Country is a space mapped out by physical or intangible boundaries that individuals or groups of Aboriginal Peoples occupy and regard as their own. It is a space with varying degrees of spirituality. Place is a space mapped out by physical or intangible boundaries that individuals or groups of Torres Strait Islander Peoples occupy and regard as their own. It is a space with varying degrees of spirituality.
cultural groups	People belonging to or identifying with a nationality, ethnic group, religion or social group with a distinct culture.
culture	The customs, habits, beliefs, social organisation and ways of life that characterise different groups and communities.
designed solution	A product, service or environment that has been created for a specific purpose or intention as a result of design thinking, and design and production processes.
diversity	Differences that exist within a group, for example, age, sex, gender, gender expression, sexuality, ethnicity, ability/disability, body shape and composition, culture, religion, learning differences, socioeconomic background, values and experiences.

Word bank

Word	Definition
environment	The living and non-living elements of the Earth's surface and atmosphere. Where unqualified, it includes human changes to the Earth's surface eg croplands, planted forests, buildings and roads.
features	The tangible elements of a place or environment.
field sketches	Annotated line drawings created to record features of an environment during fieldwork activities.
investigate	Carry out a systematic or formal inquiry to discover and examine information.
investigation	A scientific investigation is a systematic inquiry applying the processes of planning a course of action, safely manipulating tools and equipment in collecting and interpreting data, drawing evidence-based conclusions and communicating findings.
landscape	A landscape is an area, created by a combination of geological, geomorphological, biological and cultural layers that have evolved over time eg riverine, coastal or urban landscapes.
natural environment	An environment in which humans do not make significant interventions, for example ocean environments or national parks.
natural resources	Resources provided by nature. Resources can be classified as renewable, non-renewable and continuous. Also known as environmental resources.
natural vegetation	The vegetation that has evolved in an area over time.
perception	People's assessment of places and environments.
seasonal calendar	The classification of the weeks or months of the year into seasons eg spring, summer, autumn and winter, or wet and dry, or the classifications of Aboriginal cultures.
sketch map	A labelled drawing outlining the main geographical features of a place.
small-scale map	A map showing a large area of the Earth's surface with little detail eg world map where one centimetre on the map scale represents a large distance on the land.
sustainable	Supporting the needs of the present without compromising the ability of future generations to support their needs.
weather	The condition of the atmosphere at a point in time eg temperature, humidity.

SYDNEY ZOO