

NATURE STUDY AUSTRALIA

THE DESERT

Spinifex Hopping Mouse



SAMPLE

AUSTRALIAN *Desert* NATURE STUDY

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I'M GLAD YOU'RE HERE



Hi, I'm Marie, and I'm delighted that you are exploring the desert with me. It is my hope this nature study guide will encourage you to marvel at our Australian desert and outback regions.

The Math in Nature: Area & Perimeter (referred to as M.I.N: Area & Perimeter in this guide) is a companion guide to this study. However, both guides can be used independently of each other. M.I.N: Area & Perimeter focuses on learning math with desert themed hands on activities.

To

The One Who Created all Things

My Amazing Family

Special Friends

Thank you!

*Photo Credits: Thank you, Bruinsma Family,
for your beautiful desert holiday pictures.*

Say G'Day

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What's next?

The Desert Nature Study Guide is the second in an eight part Australian habitat series which will include:

Oceans

Urban

Tundra, Ice & Snow

Freshwater

Rainforest

Dry Forest and Woodland

Wetland

Alpine

Table of Contents

Adventure Awaits: How do I use this nature study?	6
Read All About It: What books do I need?	9
Plan Ahead: What supplies do I need?	15
Schedule It: How do I make this nature study work for me?	18
Lesson 1 Desert Biomes: Where are they located in the world?	19
Lesson 2 Australian Deserts: Walkabout the 'Dead Heart.'	22
Lesson 3 Landforms: Australian icons in the desert	25
Lesson 4 Survival Factors: Who endures the Red Centre?	29
Lesson 5 Mammals: Who lives on the sandy plains?	32
Lesson 6 Reptiles: Who slithers along the sandy dunes?	37
Lesson 7 Invertebrates: Who builds cities in the back country?	40
Lesson 8 Birds: Who glides the desert sky?	43
Lesson 9 Aquatic Wildlife: Who swims in the billabongs?	46
Lesson 10 Plants: What grows in the back of beyond?	49
Lesson 11 People: Who live in the Never Never?	52
Lesson 12 Survival Skills: How do I survive a desert?	55
Appendix A: Vocabulary/Phrases for a Desert Word Wall	58
Appendix B: How can I Keep Safe While on Walkabout?	59
Appendix C: What Desert Fun Can I Add?	60
Appendix D: Where Do I Find Deserts Online?	61
What's Next? Nature Study Guides by NSA	62

ADVENTURE AWAITS!

How do I Use this Nature Study?

Let's Go Walkabout!

Each chapter in the desert nature study guide will prepare you with the knowledge you need to answer questions when they're blown your way by an eager Eremologist. It is by no means exhaustive. I'll be referring you to helpful resources or links on the week's topic if you'd like to research it further and walk deeper into the study of Eremology. These resources and suggestions for walking deeper are located in the sidebar where you'll find the following five prompts.

Inspire

Be inspired and motivated with a video and a reminder to review a topic covered in another nature study guide. I hope these prompts enhance your nature investigations.

Discover

Discover stories related to the week's theme which will offer enjoyment and ignite excitement for the topic. Read them aloud to the children or listen to the read aloud version on YouTube. Included with this guide is a notebook page to list the titles of books you and the children have read. Utilize the book report and poem study notebook pages. File these in the student's portfolios.

Most of the books I've listed are either available online or through the library. Please feel free to use your own library for stories related to this unit, and if you've found a gem of a book that would be a great fit, please let me know. The studies do not rely on these books, so don't stress if you can't find a title or if you're unable to visit the library.

After reading a story to your children, ask them to narrate it back to you. Start with the youngest child so the older children are challenged further to recall what was read to them.

Please preview the books first to see if they meet your standards. There are a few books that have a secular worldview. I'd suggest skipping the historical viewpoints and stick to the facts related to the study. Also ensure your children have a firm grounding in Biblical worldview so they'll be able to perceive evolution's point of view on historical science.

Investigate

Research the week's topic with the reference books listed. This is not a complete list and there are many great books available. If you have a resource sitting on your book shelf or have access to another through the library, feel free to use those reference books instead.

Engage

Invite the children to a group activity using the project suggested here. If you don't have time for the extra student assignments, then this is the activity for the week. These ideas will enhance their understanding as they begin to focus on the subject. Photograph activities and use the activity notebook page to paste the image and write a summary of what was made or learnt.

Explore

Explore the desert and its ecosystems with the ideas listed. Allow the children to play freely outdoors in your area and once their energies have been exhausted (somewhat) begin to engage them with questions and activities. Since, visiting a desert on a regular basis may not be possible, explore your local dry areas and compare them to desert environments, plants and animals. Give them the opportunity to ask questions and share their nature discoveries with you. You'll be able to gauge their interest and understanding of the content covered. Photograph the excursions and use the field trip activity page included with this unit to record places you've visited. Place activity pages into their individual portfolios.

Assignments & Projects

Assignments and projects have been suggested for the four learning styles. The learning styles have been categorised according to how a particular personality learns best. This model was developed by the [Myers-Briggs](#) system. This is a brief description of the four learning styles:

- **The Feeler** is the people person who enjoys participating in group activities. They are concerned with how people are affected and impacted by circumstances and topics in the world, in the country and their community. They work best with people in good relations with them.
- **The Intuitor** flows with ideas about how to design projects, what materials to use and how to put it all together. They are full of suggestions and ideas for all types of topics, but they need encouragement to implement and complete assignments.
- **The Thinker** just wants the facts and they're not interested in opinions. They enjoy research, using textbooks and thrive on a schedule. It's important to be organised with this type of learner.
- **The Sensor** prefers to get their hands dirty. They insist on starting projects right away and completing them soon. This person is always busy and moving continuously. They don't enjoy research or lengthy discussions, instead, they'd prefer to efficiently accomplish a project with physical effort.

An activity or project is suggested for the three age groups within the learning styles with the following icons as indicators:



Preschool



Primary



Secondary

Challenge the children by mixing up their preferred activities with more challenging assignments to strengthen their weaknesses.

Some of the assignments will have related notebook pages. If there is no notebooking (NB) page for an activity then please encourage the children to design their own.

Videos can be uploaded and saved in files for individual children. Investigate [the Seesaw App](#) which is an online journal where children's work can be displayed and saved according to subject areas for each student.

Share the children’s projects with family members or friends by inviting them to see and comment on their accomplishments. [Daybook](#) is another app where photographs can be stored along with text explaining the activity.

Notebook Pages & The Portfolio

Notebook pages have been included with this desert nature study. Please use them to record field trips, activities, experiments and projects. File the pages into a ring binder to provide a safe place for all the work accomplished through the unit. All notebooking pages are to be filed in a portfolio for presentation and record keeping purposes. The portfolio can be subdivided with the weekly themes or according to subject areas. It’s up to you.

Vocabulary Words & Desert Phrases

A list of vocabulary words and phrases have been included for your convenience in [Appendix A](#). They can be defined through dictionary work, used as spelling words or added to a Desert [Word Wall](#).

Extension Activities

This section includes a topic related to the current lesson. If a child is interested in learning about a concept then engage him/her in a mini project to indulge their curiosity. Record the work and add it to the portfolio.

In an article “How to Interest Children in the Outdoor World,” C. A. Rooper explained:

“...the first thing is to create in the children a real interest in the subject. In order to do this (for children will not do so spontaneously) the parent must lead the way. The parent must first take a lively interest in the subject, and make it, if possible, a kind of “hobby,” and then the children will easily be induced to follow. ... and for that purpose nothing answers so well as a walk, the too often despised walk. And yet a walk can be made most attractive as well as useful.

It should be arranged with a definite object, and the route chosen with a special end in view. ... This method will not permit a hurried rush after a quantity of specimens nor a record number of them found, but it will give, which is far more interesting, a thorough knowledge and real acquaintance with a few, and the children will learn from it the beauties, charms, curious adaptations and peculiar habits of certain objects in nature from which knowledge and interest in all will be developed.” (PR 13, p. 733)

G. Dowton wrote in a Parents Review article, The Charm of Nature Study this:

“It is very helpful sometimes to read up the facts about a certain subject before a special expedition in order to have a guide as to what to look for or to know what may be expected. Then personal observations may be written up afterwards. This is far more instructive than reading up the subject afterwards and trying to fit personal observation to known facts, or what one feels ought to have seen.”

READ ALL ABOUT IT

What Books do I Need?

Following is a list of suggested resources to complement the desert nature study. The list is not exhaustive, so please use books from your home or community library if you can't find these. The * indicates book titles may be in the library.

Desert Reference Book:

Choose **one** reference book appropriate for your child's age.

- *Ecosystems | Deserts by Erinn Banting for preschool/lower primary students. (Australian)
- * Australian Landscapes | Deserts & Savannahs in Australia by Rachel Dixon for Primary students.
- *[Australian Habitats | Deserts](#) by Greg Pyers for Primary/Lower Secondary students.
- *[Ecosystems of Australia | Deserts](#) by Greg Pyers
- *[Go Facts | Deserts](#) by Ian Rohr for Primary/Secondary students.
- *[Desert Explorer](#) by Greg Pyers for Primary/Lower Secondary students.
- [Exploring Science Around You | Deserts](#) by Nicola Davies for Primary students.
- [Exploring the World Around You](#) by Gary Parker for Upper Primary/Secondary students. (A Christian resource).

Choose
1 only

Wildlife Reference Book:

These resources are brimming with photographs and facts about the amazing diversity of Australian wildlife. Choose **one or two** titles for each lesson that's appropriate for your child's age. I preferred the first two titles.

- *[Junior Encyclopedia of Australian Wildlife](#) by Kylie Currey for Preschool/Primary students.
- *[How Animals and Plants Survive in Australia's Deserts](#) by Greg Pyers for Primary students.
- [The Littlest Animals of the Desert | Children's Science and Nature](#) by Baby Professor for Preschool students.
- [Animals Live Here | Life in the Desert](#) by Connor Stratton for Preschool students.
- *[Amazing Facts About Australian Mammals](#) by Queensland Museum and Steve Parish.
- *[Amazing Facts About Australian Reptiles](#) by Stephen Swanson. (Primary/Lower Secondary).
- *[Amazing Facts About Australian Insects & Spiders](#) by Patrick Honan.
- *[Amazing Facts About Australian Birds](#) by Steve Parish and Karin Cox.

Choose
1 or 2

Endangered Animal Resource Book:

Choose **ONE** title to investigate this topic. I preferred the first book.

- [*Australia's Endangered Animals and Their Habitats: A Focus on Deserts & Grasslands](#) by Jane Hinchey.
- [*Endangered Animals of Australia's Deserts](#) by Greg Pyers
- [*Biodiversity of Deserts](#) by Greg Pyers.
- [*Amazing Facts About Australian Wildlife | Conservation](#) by Karen Cox and Steve Parish.
- [Pests](#) by Greg Pyers.

Australian Field Guides for Preschool Students:

The field guides are great for identifying animal species but they're not necessary. Check your local library for desert themed field guides.

- [First Field Guide | Australian Mammals](#) | Steve Parish
- [First Field Guide | Australian Birds](#) | Steve Parish
- [First Field Guide | Insects & Spider](#) | Steve Parish
- [First Field Guide | Frogs & Reptiles](#) | Steve Parish

Australian Field Guides Primary/Secondary/Adult:

- [A Naturalist's Guide to the Reptiles of Australia](#) by Peter Rowland and Chris Farrell.
- [Field Guide to Australian Birds](#) | Steve Parish
- [Field Guide to Australian Mammals](#) | Steve Parish
- [Field Guide to Australian Reptiles](#) | Steve Parish
- [Tracks, Scats & Other Traces](#) by Barbara Triggs
- [Wild Food Plants of Australia](#) by Tim Low

Choose 1
OK! 2

Books for Family Reading:

Choose a family read aloud book or assign a book for individual reading from the list below.

- [*The Green Desert : The Many and Spectacular Faces of Lake Eyre](#) by Peter Elfes and Peter Timms (Coffee Table Book).
- [*Desert: Australia](#) by Nick Rains. (Coffee Table Book).
- [*Expedition Diaries | Australian Outback](#) by Simon Chapman. (Primary).
- [*Red Sand Blue Sky](#) by Cathy Applegate. (Primary).
- [*The Girl from the Great Sandy Desert](#) by Jukuna Mona Cuguna. (Primary/Lower Secondary). Includes Dreamtime references.
- [King of the Ranges](#) by C.K. Thompson. (Primary).
- [Red Emperor](#) by C.K. Thompson. (Primary).
- [Warrigal the Warrior](#) by C. K. Thompson. (Primary).

Book Recommendations for Each Chapter:

Following is a list of picture books, story titles or resource books related to the weeks lesson. The books are not essential to the desert nature study but they do offer information in a more relational way and they're fun. Books marked with an * can be found at the library. **Choose a book or two for each lesson. Note: Some books have references to evolution and dreamtime beliefs.**

Lesson 1 | Desert Biomes:

- *Map and Track Desert Biomes & Animals | Map & Track Deserts by Linda Barghoorn (Primary).
- The World's Top Ten | Deserts by Neil Morris (Primary)
- *Deserts Around the World | The Great Victoria Desert. (Primary).
- Deserts Around the World | The Atacama Desert
- Deserts Around the World | The Gobi Desert
- Deserts Around the World | The Kalahari Desert
- Deserts Around the World | The Mojave Desert
- Deserts Around the World | The Sahara Desert
- *Places We Live | Living in a Desert by Ellen Labrecque (Preschool/Lower Primary).
- *[Over on a Desert Somewhere in the World](#) by Marianne Berkes. (Preschool/Early Primary).
- [Why, Oh Why are Deserts Dry](#) by Tish Rabe. [Read Aloud](#). (Preschool/Primary).
- *[Hidden in the Sand](#) by Barbara Taylor (Preschool/Primary).



Lesson 2 | Australian Deserts:

- *Australian Landscapes | Deserts & Savannahs in Australia by Rachel Dixon. (Primary).
- *Deserts Around the World | The Great Victoria Desert by Lynn Peppas. (Primary)
- *[Amazing Facts About Australia's Early Explorers](#) by Steve Parish and Karen Cox. (Primary)
- Southern Cross Series | Australian Explorers by Cassell Australia.
- *[Sand Swimmers: The Secret Life of Australia's Dead Heart](#) by Narelle Oliver. (Preschool/Primary). [Teacher Notes](#). The beginning is evolutionary based but a good book displaying desert ecosystems.
- *[Burke and Wills](#) by Roland Harvey. (Early Primary).
- [Hello from Nowhere](#) by Caisley Raewyn (Preschool).

Lesson 3 | Landforms:

- *[Amazing Facts About Australia's Iconic Landscapes](#) by Karen Cox, Allan Cox and Steve Parish. (Primary). Evolutionary based, recommend paging through the book to look at various landscapes.
- *Database of Australia | Australia's Landscapes by John and Jennifer Barwick.
- *[World Heritage in Australia | Uluru – Kata Tjuta](#) by Greg Pyers. (Primary).
- *[Growing Up at Uluru, Australia](#) by Stan Breeden. This book will be used in L11.
- *[Mrs White and the Red Desert](#) by Josie Boyle. (Preschool/Early Primary).
- *[Desert Lake: The Story of Kati Thanda – Lake Eyre](#) by Pamela Freeman. (Preschool/Primary). This book will be used again in Lesson 9. Aquatic Wildlife.

- *[Life in A | Desert Dune](#) by Greg Pyers. (Preschool/Primary). Book can be used for lessons 5-8 & 10.

Lesson 4 | Survival Factors

- [The Shy Mala](#) by Liliana Stafford.
- *[How Animals and Plants Survive in Australia's Deserts](#) by Greg Pyers.

Lesson 5 | Mammals

- *[In the Deep Red Desert](#) by Angie Lionetto-Civa. (Preschool).
- *[Big Red Kangaroo](#) by Claire Saxby. [Classroom Ideas](#) by Walker Books. (Preschool/Lower Primary)
- *[Life Cycles of Australian Animals | Red Kangaroo](#) by Greg Pyers. (Preschool/Lower Primary).
- *[Bilby Secrets](#) by Edel Wignell. [Classroom Ideas](#) by Walker Books. (Preschool/Lower Primary)
- [Bilby and the Bushfire](#) by Joanne Crawford. (Preschool/Primary).
- *[Finding Out About | Bilbies](#) by Greg Pyers. (Preschool/Lower Primary).
- *[Bush Tracks](#) by Ros Moriarty. (Preschool). [Read Aloud.](#)
- [Who Did That](#) by Jill B. Bruce. (Preschool/Lower Primary).
- [Who Did That 2](#) by Jill B. Bruce. (Preschool/Lower Primary).
- [King of the Ranges](#) by C.K. Thompson. (Primary). Suitable for read aloud time.
- [Red Emperor](#) by C.K. Thompson. (Primary). Suitable for read aloud time.
- [Warrigal the Warrior](#) by C. K. Thompson. (Primary). Suitable for read aloud time.

Lesson 6 | Reptiles

- *[Desmond the Death Adder](#) by Rebecca Johnson. (Preschool).
- *[The Outback](#) by Annaliese Porter. (Preschool).
- *[Survival at 40C Above](#) by Debbie S. Miller. (Primary). Access Teacher Notes on [this](#) page.
- *[Life in a Desert Dune](#) by Greg Pyers. (Preschool/Primary).

Lesson 7 | Invertebrates

- [Through a Termite City](#) by Carole Telford & Rod Theodorou. (Preschool/Primary).
- *[All About Ants](#) by Densy Clyne. (Primary).
- *[Animal Engineers | Anthills](#) by Christopher Forest. (Preschool/Primary).
- *[Life in a Desert Dune](#) by Greg Pyers. (Preschool/Primary).

Lesson 8 | Birds

- *[Emu](#) by Clare Saxby. (Preschool/Primary). [Read Aloud.](#) [Download](#) Classroom Ideas.
- [Monarch of the Western Skies](#) by C.K. Thompson. Read Aloud. (Primary/Secondary).
- *[Life Cycle of Australian Animals | Emu](#) by Greg Pyers. (Primary).

- [*Life Cycle of Australian Animals | Wedge-tailed Eagle](#) by Greg Pyers. (Primary).
- [*Birds of Prey | Close Up](#) by Charles Hope. (Preschool/Primary).

Lesson 9 | Aquatic Wildlife

- [*Drought](#) by Tricia Oktober. (Preschool/Primary).
- [*Summer Rain](#) by Ros Mariarty (Presechool).
- [Dig, Wait, Listen: A Desert Toad's Tale](#) by Anne Sayre. (Primary/Secondary).
- [*Desert Lake: The Story of Kati Thanda – Lake Eyre](#) by Pamela Freeman. (Preschool/Primary).

Lesson 10| Plants

- [Spinifex Mouse](#) by Norma MacDonald. [Teacher Notes](#). (Preschool/Lower Primary).
- [A Walk in the Desert](#) by Caroline Arnold. [Read Aloud](#). (American).
- [*Amazing Facts about Australian Native Plants](#) by Cathy Hope & Steve Parish. (Primary/Secondary).
- [Mallee Plants: Surviving Harsh Conditions](#) by [Australian National Botanic Gardens](#) (Primary/Secondary).
- [*Soul of the Desert](#) by Philippa Nikulinsky. (Primary/Secondary).

Lesson 11 | People

- [*Big Rain Coming](#) by Katrina Germein. (Preschool).
- [*Ready to Dream](#) by Donna Jo Napoli and Elena Furrow. (Preschool/Lower Primary). (Art)
- [*When We Go Walkabout](#) by Rhoda Lalara & Alfred Lalara. (Preschool).
- [*Growing Up at Uluru, Australia](#) by Stan Breedon.
- [*You and Me Murrabee](#) by Kerri Hashmi and Felicity Marshall
- [*History of the First Australians Book Series](#).
- [*Australia's Indigenous Peoples | People of the Centre](#) by Marji Hill. (Primary).
- [Taming the Australian Desert](#) by ABC Education. (Years 7-10). [Online Resource](#).
- [*Playground](#) compiled by Nadia Wheatley. (Primary/Lower Secondary).

Lesson 12 | Survival Skills

- [*When I Was Little Like You](#) by Mary Malbunka. (Primary).
- [Land of the Dingo People](#) by Percy Trezise. (Primary). Note : Includes dreamtime references.
- [*Living with the Land | Bush Tucker and Medicine of the Ngaanyatjarra Lands](#). (Primary/Lower Secondary).
- Bush Tucker | ABC Education | [Online Resource](#)

- [*Bush Tukka Guide](#) by Samantha Martin (Primary/Secondary/Adult).
- [Outback Survival](#) by Bob Cooper (Secondary/Adult)
- [Survival, Tracking and Awareness Website](#).
- [*Travelling Wild Australia with the Bush Tucker Man](#) by Les Hiddins. (Secondary/Adult)
- [Book of the Bush](#) by Edward Kynaton

Poet Study

[Henry Lawson](#) was an Australian writer and bush poet. Along with Banjo Paterson, Henry Lawson is among the best known Australian poets and fiction writers of the colonial period. We've selected a few of his poems relating to the Outback for poem readings and studies. These poems can be found in the beautiful book, [The ABC Book of Australian Poetry | A Treasury of Poems for Young People – Compiled by Libby Hathorn](#).

- [The Never-Never Land](#), pg. 50
- [Andy's Gone with Cattle](#), pg. 108
- [Trouble on the Selection](#), pg. 52
- [The Days When We Went Swimming](#), pg. 82
- [Ballad of the Drover](#), pg. 102

PLAN AHEAD

What Supplies do I Need?

<p>Lesson 1 Desert Biomes</p>	<p>Create a ‘Desert Word Wall.’ Add L1 words in Appendix A.</p>	<p>Print student Rock Identification tags in NB pages. Print Rock Identification Cards. Optional:</p>
<p>Desert themed paraphernalia to prepare and create a study corner.</p>	<p>Optional: Buy arid toy animals here.</p>	<p>Rocks in a bag can be purchased here.</p>
<p>Collect desert reference and story books for L1.</p>	<p>Lesson 2 Australian Deserts</p>	<p>Prepare to visit a landform in your area. Identify rocks. Print Field Trip NB page. Nature Journal.</p>
<p>Globe or world map.</p>	<p>Collect reference and story books for L2.</p>	<p>Choose an individual activity for child/children and prepare supplies needed. Print NB pages.</p>
<p>Prepare an ecosystem nature walk. Nature Journals. Field Trip NB page.</p>	<p>Map of Australia that clearly shows the deserts.</p>	<p>Add desert words to wall.</p>
<p>Choose an individual activity for child/children and prepare supplies needed. Print NB pages.</p>	<p>Nature Journal.</p>	<p>Lesson 4 Survival Factors</p>
<p>In the Engage section, L2-9, one mapping project is built upon each week. Read through the project prompts before starting.</p>	<p>Choose a desert to map over the coming weeks. Decide on what kind of map you’ll create and prepare all materials needed. Do the maps framework/outline. Or prepare a desert wall project.</p>	<p>Collect reference and story books for L4.</p>
<p>An alternative option is to create a ‘Desert Wall’ project on poster board which includes pictures of desert wildlife, landscapes etc with notecards including interesting desert information.</p>	<p>Choose an individual activity for child/children and prepare supplies needed. Print NB pages.</p>	<p>Choose one habitat to include on your display map or desert wall. Research plants and animals which live in the ecosystem. Prepare materials.</p>
<p>Australian Geographic Animal Sticker Book Creatures of the Rainforest and Deserts, is an optional resource for the above activities.</p>	<p>Add desert words to wall.</p>	<p>Nature Journal. Research nature journaling ecosystems here.</p>
<p></p>	<p>Lesson 3 Landforms</p>	<p>Optional: Go for a nature walk and choose an ecosystem to capture in your nature diary.</p>
<p></p>	<p>Collect reference and story books for L3.</p>	<p>Choose an individual activity for child/children and prepare supplies needed. Print NB pages.</p>
<p></p>	<p>Collect materials for the map’s base features and to make your deserts chosen landform.</p>	<p>Add desert words to wall.</p>
<p></p>	<p>Print Art Study NB page.</p>	<p></p>

Lesson 5 Mammals	Nature Journal.	Lesson 9 Aquatic Wildlife
<p>Collect reference and story books for L5.</p> <p>Toy animals or stickers.</p> <p>Prepare a nature walk to search for tracks and scats of animals.</p> <p>Optional: Plaster of Paris to create animal track casts.</p> <p>Print your free copy of Australian Animal Track and Scat cards here. Use them for identification.</p> <p>Visit an animal park or zoo to observe arid mammals. Nature journal. Print Field Trip NB page.</p> <p>Print NB pages:</p> <ul style="list-style-type: none"> • Poem Study • Art Study • Life Cycles • Opals • Mammals <p>Choose an individual activity for child/children and prepare supplies needed. Print NB pages.</p> <p>Add desert words to wall.</p>	<p>Choose an individual activity for child/children and prepare supplies needed. Print NB pages.</p> <p>Add desert words to wall.</p>	<p>Collect reference and story books for L9.</p> <p>Toy animals or stickers. Clay or playdough to create waterhole. Blue paint. Notecard.</p> <p>Optional: Visit a pond in your area to observe aquatic wildlife and compare it to the desert billabongs. Nature journal.</p> <p>Choose an individual activity for child/children and prepare supplies needed. Print NB pages.</p> <p>Add desert words to wall.</p>
	Lesson 7 Invertebrates	
<p>Lesson 6 Reptiles</p> <p>Collect reference and story books for L6.</p> <p>Toy animals or stickers. Clay or playdough. Modelling tools.</p> <p>Download Reptile ID Cards. Print Reptile NB page & list.</p> <p>Optional: Prepare a reptile nature walk in a reptile park.</p>	<p>Collect reference and story books for L7.</p> <p>Clay or playdough. Modelling tools. Notecards. Nature journal.</p> <p>Print Invertebrates/Insects NB pages.</p> <p>Choose an individual activity for child/children and prepare supplies needed. Print NB pages.</p> <p>Add desert words to wall.</p>	<p>Lesson 10 Plants</p> <p>Collect reference and story books for L10.</p> <p>Materials for succulent terrarium: variety of succulent plants, fine gravel, small rocks, sand, soil, glass bowl and activated charcoal. Print Project NB page. Desert animals for decoration.</p> <p>Optional: Visit an arid ecosystem in your area to investigate plants. Nature journal.</p> <p>Print Plant NB pages.</p> <p>Choose an individual activity for child/children and prepare supplies needed. Print NB pages.</p> <p>Add desert words to wall.</p>
	Lesson 8 Birds	

Lesson 11 People	Lesson 12 Survival Skills	NOTES:
<p>Collect reference and story books for L11.</p> <p>Research Indigenous art symbols here. Prepare a nature walk and then create a masterpiece on canvas displaying the encounters you had as you walked.</p> <p>Canvas and paints.</p> <p>Optional: Visit an Aboriginal Art Gallery. Try to see the story in the symbols.</p> <p>Print:</p> <ul style="list-style-type: none"> • People NB page • Project NB page • Art Study NB page <p>Choose an individual activity for child/children and prepare supplies needed. Print NB pages.</p> <p>Add desert words to wall.</p>	<p>Collect reference and story books for L12.</p> <p>Prepare a nature walk in a park. Nature journal.</p> <p>Print:</p> <ul style="list-style-type: none"> • Bush Tucker NB page. • Survival Skills NB page. <p>Choose an individual activity for child/children and prepare supplies needed. Print NB pages.</p> <p>Add desert words to wall.</p>	

SCHEDULE IT

How do I Make the Nature Guide Work for Me?

The following schedule is a suggestion only. Please modify it to suit your family. Don't be a slave to the schedule, fit the unit in when you are able to. There are a few options to choose from :

- There is a lot of information to digest in each lesson and to fully enjoy the experience, I suggest that you take a leisurely walk by aiming to complete a lesson every fortnight. There's enough content here for a 20+ week study.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Introduction and Inspiration	Discover	Investigate	Engage	Explore
Choose a project to work on this week.				

- If you'd prefer a brisk walk through the unit then read the introduction, follow the prompts in the sidebar and leave the extra activities and projects.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Introduction and Inspiration	Discover	Investigate	Engage	Explore

- You could also complete a lesson in a full day or two. Adjust it to make it work you.

“The child who sees his mother with reverent touch lift an early snowdrop to her lips, learns a higher lesson than the ‘print-books’ can teach. Years hence, when the children are old enough to understand that science itself is in a sense sacred and demands some sacrifices, all the ‘common information’ they have been gathering until then, and the habits of observation they have acquired, will form a capital groundwork for a scientific education. In the meantime, let them consider the lilies of the field and the fowls of the air” (Home Education, p. 63).

Inspire

Introduce children to the characteristics of reptiles with [this](#) video from Free School.

Inspire children with Steve Irwin's perentie encounter [here](#).

Discover

Read [Desmond the Death Adder](#) by Rebecca Johnson. (Preschool).

Read [The Outback](#) by Annaliese Porter. (Preschool).

Read [Survival at 40C Above](#) by Debbie S. Miller. (Primary). Access Teacher Notes on [this](#) page.

Investigate

Investigate by digging deeper:

- Read [Life in a Desert Dune](#) by Greg Pyers. (Preschool/Primary)
- Read [How Animals and Plants Survive in Australia's Deserts](#) by Greg Pyers, pg. 10-11 & 26-27.

Reptiles

Who slithers along the sandy dunes?



[Reptiles](#) are vertebrates which have scales, lay eggs and are cold-blooded. A cold-blooded reptile relies on the environment to warm up. Animals in the reptile family include snakes, lizards, turtles, tortoises, alligators and crocodiles.

The desert reptile fauna of Australia is the richest of any desert in the world. It contains unique species such as the Goanna, Bearded Dragon and the Thorny Devil.

Goanna is the name given to any of the various Australian monitor lizards of the genus [Varanus](#). The [Perentie](#) is Australia's largest goanna with an impressive length of 2.5 metres. It's a fearsome, outback predator eating anything from small mammals to tiny insects like termites. They locate their prey by flicking out their forked tongue to collect scent molecules from the air. They'll either actively hunt or ambush prey. Prey will be vigorously shaken, then swallowed whole.

A perentie will defend itself by raising its body and hissing. If that doesn't scare a predator away, they'll swipe with their tails, bite and claw at the threat. The perentie is a fast runner reaching a speed of 40 km/h and they're able to maintain that speed for some time. The goanna is an excellent swimmer and climber. They also scan their environment searching for potential food and threats by lifting their body onto the hindlegs. This behaviour is known as 'tripoding.'

Perentie shelter or hibernate in burrows. They're solitary reptiles outside of mating season which is between spring and summer. They're known to lay eggs in termite nests which offer protection and a constant temperature for incubation. Eggs will incubate 2-3 months and when the hatchlings emerge, they'll snack on termites. The mother usually returns to help the young lizards dig their way out of the termite nest.

Investigate

- Read [Junior Encyclopedia of Australian Wildlife](#) by Kylie Currey, pgs. 94-95, 100-113. (Primary)
- Page through [Amazing Facts About Australian Reptiles](#) by Stephen Swanson. (Primary/Lower Secondary).
- Create a geometrical masterpiece with Jo Buijs in [M.I.N: Area & Perimeter](#).

Engage

Discuss the characteristics of [reptiles](#). Download Lizard Identification Cards.

Create reptiles living in your desert with clay or playdough and add them to the desert map project.

Alternatively, add toy reptiles to the map.

Explore

Step into the Centre to encounter a Thorny Devil lizard [here](#). Pause the video to sketch the lizard into your nature journal. Note interesting facts about it.

The [Bearded Dragon](#) is a common reptile in arid and semi-arid environments. They're diurnal, omnivorous creatures hunting for insects and small vertebrates while foraging on fruits and leaves. Amazingly, Bearded Dragons regulate their body temperature by changing their colour from light to dark to attract heat on cooler days.

During mating season, the Bearded Dragons will show dominance by puffing out their 'beards,' bobbing heads and biting tails. They'll also puff out their beard when feeling threatened, hiss like a cat and change colour to intimidate the predator. It will shelter or hibernate in a hole scooped out in the sand underground.

The [Thorny Devil](#) is a fierce-looking lizard with sharp spines protruding from its body, but all they eat are ants. An ant trail is their favourite spot to lick up ants and they can eat over a thousand at one sitting. Between the thorny spines run grooves from the tail to the lizards mouth, which provides a unique way of drinking, by collecting dew that runs along into the lizard's mouth.

Their ability to change skin colour from dull browns to red enables them to camouflage themselves from predators. They walk with jerky movements and often freeze, staying undetected by birds of prey. When threatened, it will tuck its head under the front legs to reveal a false head protected with sharp horn-like spines.

Thorny Devils are solitary, diurnal creatures which are able to wander large distances in search of a mate. The female digs a hole about 25cms deep and 60cms long where she lays about 10 eggs. Once the hole is filled, she'll sweep it over so that the location of the eggs is concealed. She'll lose 40% of her body weight during this process. Three months later, the juveniles will dig their way to the surface and immediately search for ants to eat.

The [Bandy-bandy](#) is a fascinating, white and black striped snake which burrows underground and feasts on blind snakes. They're nocturnal creatures which are seen above ground after rain.

The width of the black and white zebra-like stripes vary, making each snake unique in a similar way our fingerprints make each one of us unique. The Bandy-bandy displays interesting behaviour when defending itself. It'll raise its tail and create the illusion of escaping in one direction by slowly moving its body up and down in loops, while disappearing in the opposite direction. This behaviour is known as 'flicker fusion' and its used to confuse predators.

Other desert reptiles to investigate include the:

- [Desert Death Adder](#)
- [Earless Dragon](#)
- [Desert Skink](#)
- [Mulga Snake](#)

Sensor	Thinker
<p> Draw desert reptiles on cardstock paper that has been spread with a mixture of sand, glue and paint. Use half as much glue as paint. Use desert colours like browns and reds. Carefully, and quickly use the tip of a paint brush handle to scap the reptile outline onto the sand covered cardstock. It'll look like a rockpainting in the sand.</p> <p> Catch a Bearded Dragon with Brave Wilderness here. Narrate what you've learned about the dragon. Sketch a dragon into your nature journal.</p> <p> Draw a Bearded Dragon in your nature journal with the Snake Artist here.</p>	<p> Page through the book, The Outback by Annaliese Porter. Notice the colours of the desert and take note of the patterns displayed in the book. Spot and count the outback creatures. Paint your own reptile picture using desert colours and patterns similar to the book or choose a reptile picture to colour here.</p> <p> Explore the desert for reptiles here and record your investigations on the reptile notebook pages provided with this guide.</p> <p> Compare various reptile species using a Venn diagram from the notebook pages. Compare snakes to lizards or goannas to dragons. File the diagrams.</p>
Feeler	Intuitor
<p> Download Junior Ranger Nature Notes Bandy-bandy by Parks and Wildlife Service NT. Then learn and discuss the characteristics of the Bandy-bandy snake. Play the snake and ladder game.</p> <p> Discuss the story line in Survival at 40C Above by Debbie S. Miller. What is fact and what is fiction? Then choose a reptile to research. Once you've gathered your information, write a story using the facts you've gathered about the reptile while weaving a fictional day in its life.</p> <p> Discover the ancient footprints of a dinosaur found at Karoola Station in Outback Australia here. Narrate what you learn in a written report. File it in the portfolio.</p>	<p> Search your area for reptiles. Observe and discuss their behaviours. Draw reptiles in a sand pit or choose a reptile to paint here.</p> <p> If a lizard lived in your garden, where would it soak up the sun's warmth? Where is it the hottest and coolest during the day? Measure the temperature in various places in your garden with a thermometer. Fill out a chart displaying the information you've gathered.</p> <p> Observing nature teaches us about art and mathematics. One example is natural tessellations found on reptile scales. Learn more about natural and manmade tessellations here. Observe the colours and tessellation pattern in desert reptiles, then design your own tessellation masterpiece like this.</p>

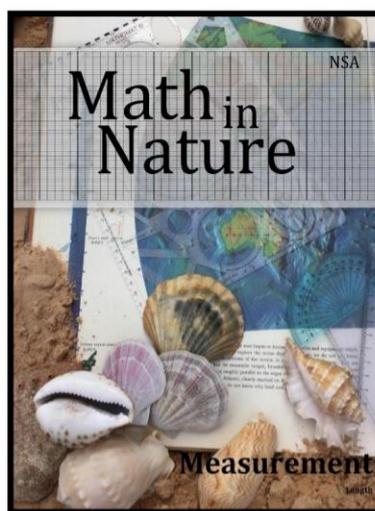
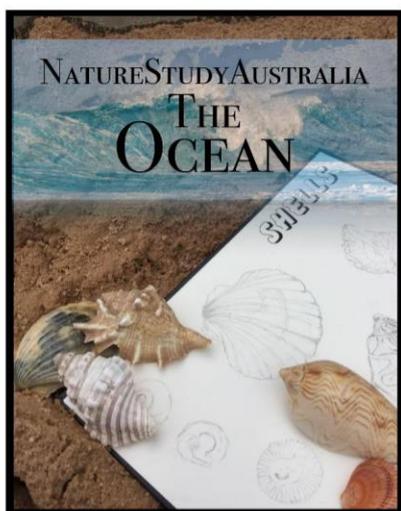
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So! We have a brand new series of nature study guides which focus on the diverse biomes within Australia.

We've dived into the ocean and explored its depths.
We walked-about the outback and its deserts.
So, what's next?

What is life like in the dry forests and woodlands?
What fascinating creatures make this biome their home?

Each new nature guide in the biome series will be released with a companion math guide which focuses on one element of math which is aligned to the Australian curriculum. Each lesson focuses on learning math naturally as nature is explored outdoors.



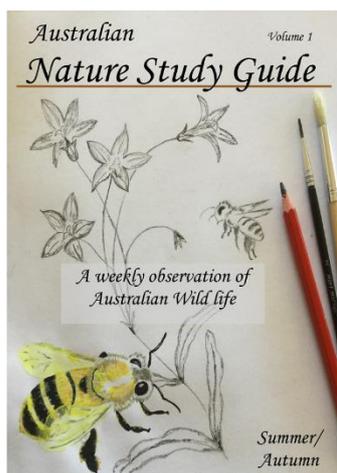
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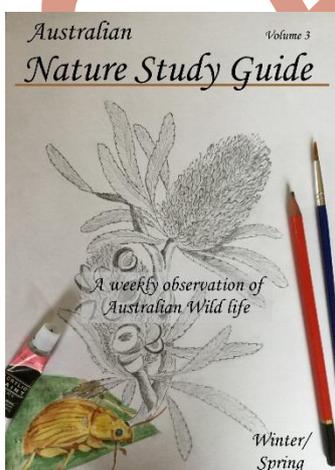
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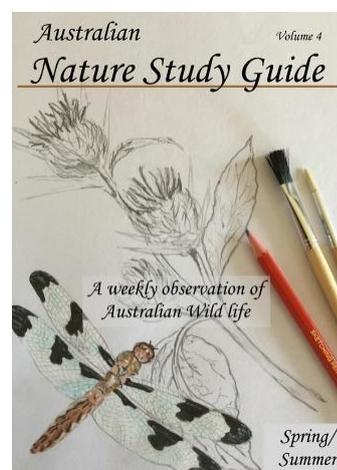
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