

Teacher Notes

Themes

- Natural wonders
- Diverse landscapes and environments
- Human exploration

Key learning outcomes

- Discover and learn about the different natural wonders around the world.
- Develop your understanding of the world's diverse climates, landscapes and geographic phenomena.
- Develop an awareness for environmental conservation.

Key curriculum areas

- **Science:** Science Understanding (Biological sciences, Earth and space sciences)
- **English:** Language; Literature; Literacy
- **HASS:** Geography
- **Cross-curriculum Priority:** Sustainability

Publication details

Our World Full of Wonder

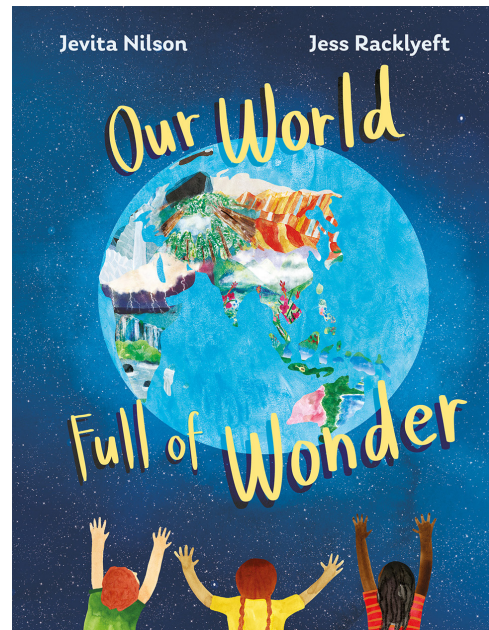
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Teacher notes prepared by David Gullan.

CSIRO Publishing
Private Bag 10
Clayton South, VIC 3169, Australia

Website: www.publish.csiro.au
Tel: 1300 788 000 (local call in Australia)
Email: publishing.sales@csiro.au



Our World Full of Wonder

Jevita Nilson and Jess Racklyeft

About the book

Our world is full of amazing natural wonders. From sparkling seas and towering trees, to valleys, lakes and waterfalls, there are extraordinary places that seem too magical to be true but can be found right here on planet Earth.

There are ghostly green lights of the aurora borealis near the North Pole, and exquisite rainbow mountains in China. There is a lake in Australia so pink it looks like fairy floss, and giant crystal caves hidden below Mexico.

These are just some of the incredible places you will discover in *Our World Full of Wonder*.

Shall we go explore?

Recommended for

Readers aged 5 to 9 (Years 1 to 4)



PUBLISHING

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About the author and illustrator

Jevita Nilson is a children's author with a love for nature, words and all things wondrous. Based in Perth, she writes heartfelt lyrical fiction and non-fiction picture books to inspire curious kids.

Jess Racklyeft is an author and illustrator based in Melbourne. She particularly loves illustrating plants and animals and sharing her love of the Australian bush. She is the illustrator of *The Forgotten Song* (CSIRO Publishing).

Pre-reading questions or activities

Natural wonders

Before reading the book, ask the class if they have heard of the term 'natural wonder'. What do you know about natural wonders? Why do you think they are called **natural** wonders? Do you know any natural wonders around the world? Does Australia have any natural wonders?

Landscapes

Ask the students if they know what a landscape is and if they can name any different landscapes. What makes landscapes different? What different landscapes have you seen before?

Discussion questions

Science

1. The explorers in this book travelled to many vastly different landscapes and saw some incredible natural wonders. What natural wonders have you seen? What made them so special? What different landscapes have you seen?
2. *'There is a place where a sea of stars outshines the sky, where glowing tides glide along the sandy shore, illuminating the moonless night.'* What is the author describing in this passage? Use the information in the book to find out what's behind this natural phenomenon.
3. We see many different environments throughout the exploration of the natural wonders. Stop at each page and discuss what animals you might find in these different habitats. Justify your answers.

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English

1. Have the students choose a page at random and ask them what literary devices (e.g. alliteration, metaphor, simile) the author has used to describe this natural wonder. How does this help the reader?
2. This book has a beautiful story, but we also learn many things as we read because the author uses both narrative and nonfiction text features. What narrative features can you identify? What nonfiction text features can you identify? Why do you think the author uses this mix of text features?

HASS

1. The explorers travelled to many different countries during their adventure. Can you name all the continents and countries they visited? How many of the natural wonders were in Australia? Did the explorers visit every continent?
2. Looking at the map at the back of the book, where is the closest natural wonder to where you live?

Sustainability

1. *'Earth is a glorious gift. We all have a responsibility to protect our world full of wonder for future generations.'* Why do you think the author finishes the story with this statement? What are some ways we can protect our wonderful world?

Activities

Science

Crystal caves

Caution: This activity requires adult supervision and guidance as it includes the use of boiling water.

Taking inspiration from the breathtaking crystal caves of Mexico seen in our story, you can make your own crystal caves in class! To help make the experiment more purposeful, watch the following video to help unpack the technical language and the chemical processes involved:

<https://www.youtube.com/watch?v=jyYrHQvvqy8>

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Materials:

- A wooden skewer (you can also use a clean wooden chopstick)
- A clothes peg
- 1 cup of water
- 2–3 cups of sugar
- A wooden spoon
- A tall narrow glass or jar

Instructions:

1. **Prepare the skewer:** Attach the wooden skewer to the clothes peg so that it hangs down inside the glass, ensuring it is about 1–2 cm from the bottom of the glass. Set aside the skewer and clothes peg for later use.
2. **Adult supervision:** Get an adult to assist you.
3. **Boil water:** Pour water into a pan and bring it to a boil.
4. **Dissolve sugar:** Gradually add about 1/4 cup of sugar to the boiling water, using the wooden spoon to stir continuously until the sugar dissolves.
5. **Create saturated solution:** Continue adding sugar incrementally, stirring until each addition dissolves. This process requires patience as it will take longer for the sugar to dissolve each time. Persist until no more sugar will dissolve. Once fully saturated, remove the pan from the heat and allow the solution to cool for at least 20 minutes.
Optional: While the solution cools, dip half of the skewer in the sugar solution and then coat it with dry sugar to initiate crystal growth. Ensure the skewer cools completely before placing it back into the glass – this will prevent sugar crystals from falling off.
6. **Transfer solution:** With adult help, carefully pour the sugar solution into the glass, filling it almost to the top. Submerge the skewer into the glass, ensuring it hangs straight down the centre without touching the sides.
7. **Cool and settle:** Allow the glass to cool completely and place it in a location where it won't be disturbed.
8. **Wait:** Over the next 3–7 days, sugar crystals will form on the skewer.

For coloured crystals:

To create coloured crystals, add food colouring to your sugar water. Use a generous amount to achieve a vibrant colour.

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Lighting up the animal kingdom

Bioluminescence is one of the more magical things in nature. As a class work together to research bioluminescence and find out:

- What is it?
- How does it work?
- Which animals do it?

After you have answered these questions, it's time to split up into small groups and focus on a specific animal that displays bioluminescence and continue your research. Together create a presentation, research report or poster about your bioluminescent creature, which you can share with the class.

English

Writing for natural wonders

Jevita Nilson does a wonderful job describing all the wonders of our world to the reader. She uses metaphors, similes, alliteration and many more literary devices to create stunning visuals in the mind of the reader, and you can do the same. Choose a natural wonder from around the world that has not been mentioned in the book and write your own lyrical description using one or more of the literary devices you have observed in the story.

HASS

Map making

Australia has many natural wonders, and we are lucky to see two of these magnificent destinations mentioned in the story. As a class investigate what other natural wonders can be found in Australia. Once the class has created a list of natural wonders students can start placing them accurately on a map of Australia, creating a map of natural wonders to visit, just like the one we see at the end of the story.

Extension: Students can write a brief description for each of the natural wonders on their map.

Sustainability

Protect our wonders

At the end of the book the author encourages readers to look after the wonders of our world and protect and maintain them for future generations. To help protect these wonderful destinations and others not mentioned in the story, students can select a natural wonder of their choice and create a short brochure to build awareness for its protection. The brochure should include information about the natural wonder, such as what it is, where it is and what are possible threats, and then information about what we can do to protect and maintain this wonder for future generations.

Teacher Notes

Australian Curriculum Links (Version 9.0)

Year level	Learning area: Science	Other learning areas
Years 1/2	<p>Science Understanding: Biological sciences</p> <ul style="list-style-type: none"> Identify the basic needs of plants and animals, including air, water, food or shelter, and describe how the places they live meet those needs (AC9S1U01) <p>Science Understanding: Earth and space sciences</p> <ul style="list-style-type: none"> Describe daily and seasonal changes in the environment and explore how these changes affect everyday life (AC9S1U02) 	<p>English</p> <p>Language: Text structure and organisation</p> <ul style="list-style-type: none"> Explore how texts are organised according to their purpose, such as to recount, narrate, express opinion, inform, report and explain (AC9E1LA03) Identify how texts across the curriculum are organised differently and use language features depending on purposes (AC9E2LA03) <p>Language: Language for expressing and developing ideas</p> <ul style="list-style-type: none"> Experiment with and begin to make conscious choices of vocabulary to suit the topic (AC9E2LA09) <p>Literature: Literature and contexts</p> <ul style="list-style-type: none"> Discuss how language and images are used to create characters, settings and events in literature by First Nations Australian, and wide-ranging Australian and world authors and illustrators (AC9E1LE01) <p>Literacy: Texts in context</p> <ul style="list-style-type: none"> Discuss different texts and identify some features that indicate their purposes (AC9E1LY01) Identify how similar topics and information are presented in different types of texts (AC9E2LY01) <p>Literacy: Interacting with others</p> <ul style="list-style-type: none"> Use interaction skills including turn-taking, speaking clearly, using active listening behaviours and responding to the contributions of others, and contributing ideas and questions (AC9E1LY02) Use interaction skills when engaging with topics, actively listening to others, receiving instructions and extending own ideas, speaking appropriately, expressing and responding to opinions, making statements, and giving instructions (AC9E2LY02) <p>HASS</p> <p>Knowledge and understanding: Geography</p> <ul style="list-style-type: none"> The natural, managed and constructed features of local places, and their location (AC9HS1K03) How places change and how they can be cared for by different groups including First Nations Australians (AC9HS1K04)

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Years 3/4	<p>Science Understanding: Biological sciences</p> <ul style="list-style-type: none">Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals (AC9S3U01) <p>Science Understanding: Earth and space sciences</p> <ul style="list-style-type: none">Compare the observable properties of soils, rocks and minerals and investigate why they are important Earth resources (AC9S3U02)	<p>English</p> <p>Language: Text structure and organisation</p> <ul style="list-style-type: none">Describe how texts across the curriculum use different language features and structures relevant to their purpose (AC9E3LA03) <p>Literature: Examining literature</p> <ul style="list-style-type: none">Discuss how an author uses language and illustrations to portray characters and settings in texts and explore how the settings and events influence the mood of the narrative (AC9E3LE03) <p>Literacy: Texts in context</p> <ul style="list-style-type: none">Recognise how texts can be created for similar purposes but different audiences (AC9E3LY01) <p>Literacy: Interacting with others</p> <ul style="list-style-type: none">Use interaction skills to contribute to conversations and discussions to share information and ideas (AC9E3LY02) <p>HASS</p> <p>Knowledge and understanding: Geography</p> <ul style="list-style-type: none">The importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent (AC9HS4K05)
All	<p>Cross-curriculum Priority: Sustainability</p> <ul style="list-style-type: none">Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments (SS2)	

Related books from CSIRO Publishing

- *Oceans at Night* (<https://www.publish.csiro.au/book/8104>)
- *Shine, Star, Shine!* (<https://www.publish.csiro.au/book/8089>)
- *The Great Southern Reef* (<https://www.publish.csiro.au/book/8042>)
- *Wollemi: Saving a Dinosaur Tree* (<https://www.publish.csiro.au/book/8072>)

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Other CSIRO resources

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