

The Great Barrier Reef: Solar Powered

By Dr Mark Norman

Did you know that the Great Barrier Reef is so huge that it is the only structure made up of living creatures that can be seen from space?

And did you know: the whole Great Barrier Reef is run on solar power?

About the book

With stunning, brilliantly coloured photographs, this book is a visual feast of the marine environment that is the Great Barrier Reef. Well laid out, facts are presented in a way that is both accessible and engaging with memorable headings, break-out boxes, sidebars and easy to understand text.

This is a valuable resource that will stimulate students and leave a lasting impression about the beauty and fragility of this natural wonder.

Learning Activities

The learning activities below have applications for Literacy, Science, Art and the Environment. What is applicable to one Key Learning Area may overlap with another.

Other suggestions:

Watch a DVD documentary on The Great Barrier Reef. Details available online. Go to visual library on www.reefed.edu.au

Consider having the class participate in the Reef Guardians Schools Program. Refer to <http://www.reefed.edu.au/guardians/>

INTRODUCING THE BOOK

What is the book's full title?

Where is The Great Barrier Reef? (have map on hand)

What does *solar powered* mean?

Who is the author? Refer students to small photo and blurb about author opposite the Contents page

Look at the back cover: What do you think the caption is referring to?

Genre: Written and visual information

Readership: Grade Two Plus

Themes include:

Physical formations of the reef

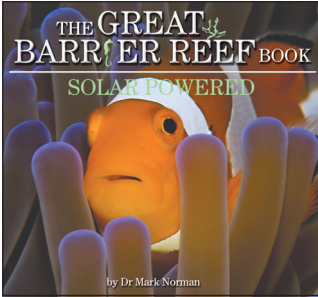
Coral

Other marine life

Solar power

Conservation

Climate change



Visual literacy

Flick through the pages of the book glancing at the photographs. What are your first impressions of the Great Barrier Reef? Tell the class.

Book features

The Great Barrier Reef Book has features that are important in a factual text.

Locate all the features below:

- Contents page. Note the engaging headings and factual sub-headings
- Break-out boxes (information inside a box)
- Sidebars. What information is included in these?
- Glossary
- Index
- Websites

SCIENCE

Research **one** of the following fish found on the Great Barrier Reef:

- Upside-down jellyfish (p. 4)
- Blackside Hawkfish (p. 4)
- Ring-tailed Maori Wrasse (p. 4)
- Spotted Angelfish (p. 5)
- Nautilus (p. 6)

Present the information as follows:

- A heading that will gain the readers interest
- A factual subheading
- The creature's scientific name
- A drawing/picture of the fish
- A paragraph on interesting features
- A sidebar showing size, food and predators

Quiz on interesting facts:

Write down three facts that surprised you about *The Great Barrier Reef* in general and/or any creatures who live there. Turn these facts into questions and use them in a game of trivia.

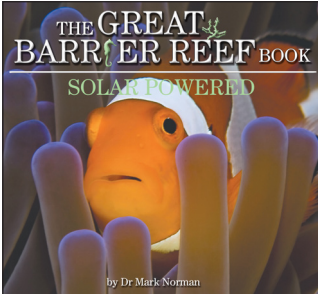
Climate Change and the Great Barrier Reef:

(pp. 3, 28-29 and http://www.gbrmpa.org.au/corp_site/key_issues/climate_change)

Discuss why climate change is a serious threat to the marine environment on The Great Barrier Reef?

How can you help?

As a group decide on what practical action your class can take at school to help reduce global warming and therefore help save the Great Barrier Reef.



Create a poster of your action plan to display in the classroom.

Implement your plan.

Talk with your teacher and principal to see if you can enlist the support of the entire school.

THE ENVIRONMENT

Conservation:

Marine National Parks (www.gbrmpa.gov.au)

The Australian Marine Conservation Society creates Marine National Parks.

What is a marine national park?

Why are marine national parks important?

Find out about another marine park – The Great Australian Bight Marine Park

- Where is it? (Include a map of Australia)
- How big is it?
- Briefly describe the weather in the marine park.
- What creatures live in the park?
- What species are endangered?
- List the main differences between the Great Barrier Reef and the Great Australian Bight marine parks.

Tourism

(www.gbrmpa.gov.au)

Imagine you are on holiday on the Great Barrier Reef. What should you do, or not do, to be a responsible tourist? Make a list.

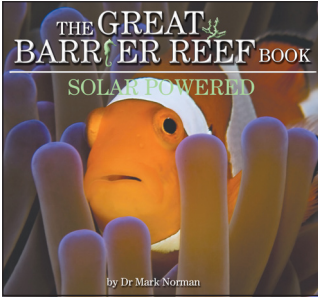
ENGLISH

Poetry:

Imagine you have just been scuba diving on the Great Barrier Reef. Write a poem about the experience – what you saw/how you felt.

Journal writing:

Imagine you are an astronaut in space. Down below you can see the Great Barrier Reef. Write a journal entry describing what you see.



Captions:

Select a picture from the book and add a caption.

Letter writing

Write a letter to the author, Dr Mark Norman, telling him what you liked about his book and what lasting impression his book has made on you. Read out your letter to the class.

Visual literacy:

Photographs are an important part of the book. What is your favourite photo? Explain your choice.

ART

Create an artistic marine environment in the classroom. For example:

- Mural: Paint a mural of the Great Barrier Reef for the classroom with every class member contributing.
- Mobiles: Get out the glitter and fluro pens to make mobiles of colourful sea creatures.
- Cartoons: Create a cartoon depicting an issue affecting the Great Barrier Reef.

ABOUT THE AUTHOR

Dr Mark Norman, a Senior Curator of Molluscs at Museum Victoria is a person of many talents – marine biologists, underwater cinematographer, teacher, award-winning author and documentary maker, collaborating on documentaries made by National Geographic and the Discovery channel. He enjoys getting up close and personal with his subject matter.