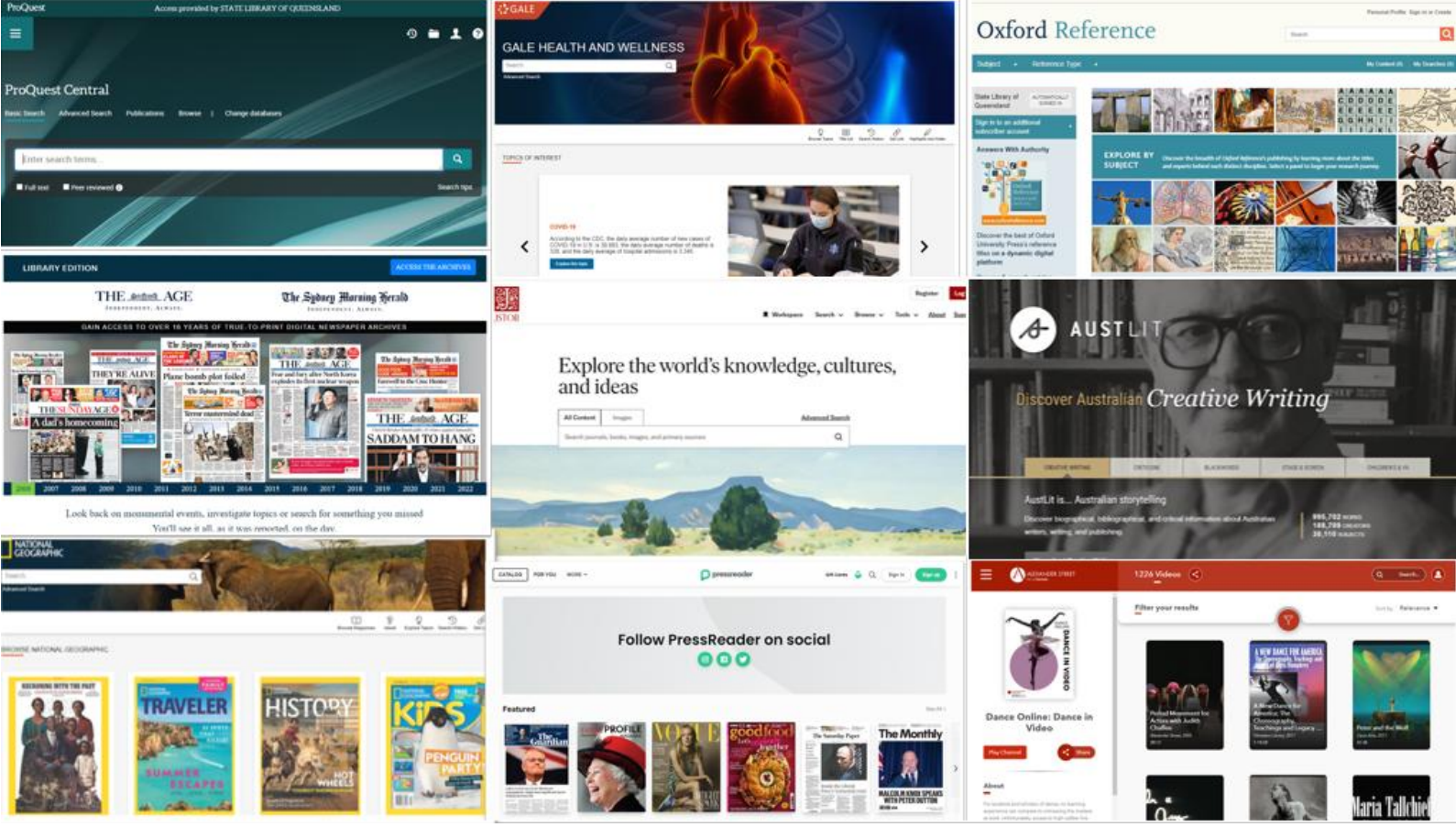



STATE LIBRARY
QUEENSLAND

# Year 9

# Earth Sciences

Cover: Selection of databases available through State Library, 2023.


**Date prepared:** 04 March 2026

**Copyright information for teachers**

This research guide is designed for individual use by students.

Please note, due to licensing arrangements, State Library's subscription databases and eBooks are for private research and study purposes only. They may not be used as teaching resources in classroom environments in schools or other educational institutions and students must not be required to access specific databases or eBooks as part of the curriculum.

Teachers can advise students on State Library's resources and encourage their use to help with their studies and research. Students are encouraged to access State Library's resources at school, but not during class time.

Teachers are most welcome to advise students what is available via State Library, and to encourage students to make use of eBooks and databases to help with their studies. It is permissible for a teacher to demonstrate the use of State Library's catalogue, and to point out how various online material can be accessed.

It is also permissible for students to access State Library's online resources at school – but this must not be during class time. An example of permitted use might be where students have a spare period when they work on assignments or homework, and they are accessing databases as private members of the State Library. Information about joining the State Library is here.

Please also note that State Library has digitised a range of material such as diaries, and out of copyright publications held in our collections. There are no restrictions on the use of this material as part of a teaching program – and no requirement to be a member of the library to use this material. They are easily findable searching our catalogue using the "SLQ digitised collections" option in the dropdown menu.

For other information visit Understanding copyright or contact State Library at copyright@slq.qld.gov.au

## Overview

As Queensland's leading research library, State Library is a great place to find information to complete your research-based assessments.

State Library's One Search catalogue is the gateway to an extensive suite of national and international journals, databases, eBooks, encyclopedias, newspaper archives, and collections of thousands of historical images, letters, artworks, diaries, and artefacts to interrogate as sources.

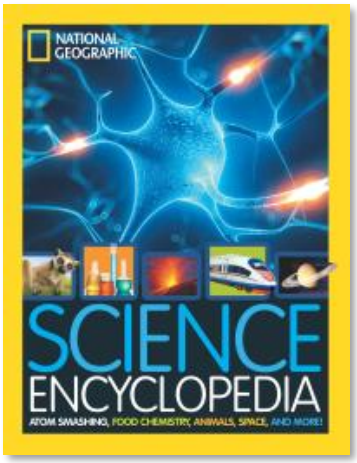
## Before you get started

Become a member of State Library of Queensland (it's free!).

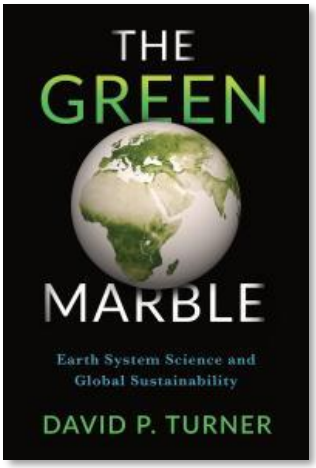
Once you have joined State Library, log in to your account in One Search so you can use the links in this research guide to access the featured collection items.

You can search our OneSearch catalogue or begin exploring by clicking on some of the featured items contained in this research guide.

## E-Books







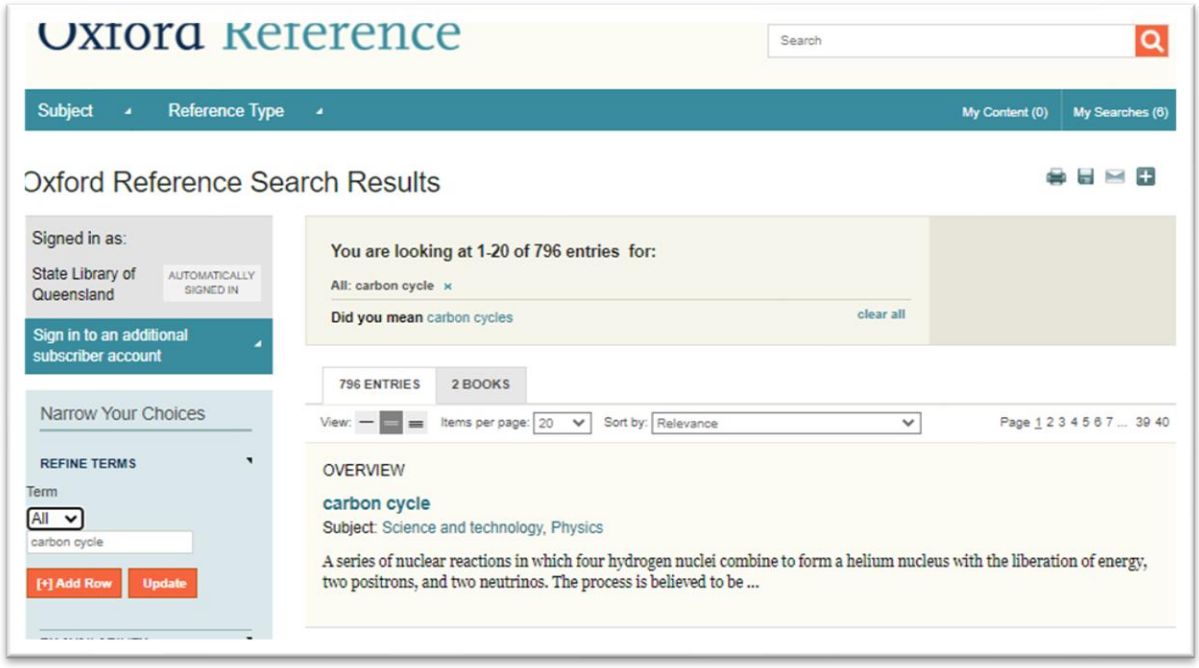

This is an advanced reading resource

# The Carbon Cycle

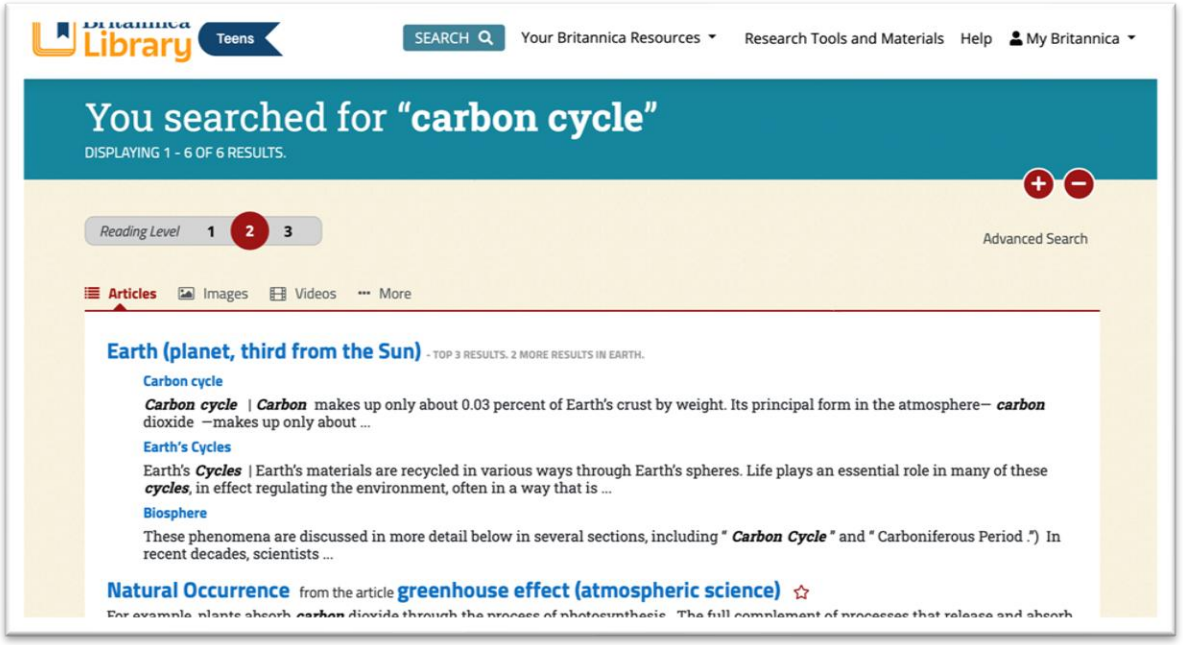
Represent the carbon cycle and examine how key processes including combustion, photosynthesis and respiration rely on interactions between Earth's spheres (the geosphere, biosphere, hydrosphere and atmosphere).

- Identifying Earth as a system, describing Earth's spheres and discussing examples of interactions between different spheres.
- Examining the carbon cycle using diagrams, animations or simulations and explaining the role of photosynthesis and respiration in that cycle.
- Identifying the impact of combustion reactions as a result of human activity on the carbon cycle.
- Investigating the greenhouse effect and relating it to the role carbon dioxide plays in maintaining temperatures that support life on Earth.
- Conducting a field investigation to evaluate carbon sequestration in an ecosystem, such as measuring tree biomass, deadwood, leaf litter and soil depth, and using formulas to calculate approximate carbon storage.
- Investigating how First Nations Australians use fire-mediated chemical reactions to facilitate energy and nutrient transfer through the practice of firestick farming.
- Investigating how First Nations Australians are reducing Australia's greenhouse gas emissions through the reinstatement of traditional fire management regimes.
- Identifying how carbon dioxide is captured and stored naturally or through the use of technologies.
- Calculating an individual's carbon footprint, examining the impact of human activities and suggesting strategies to reduce carbon dioxide emissions.

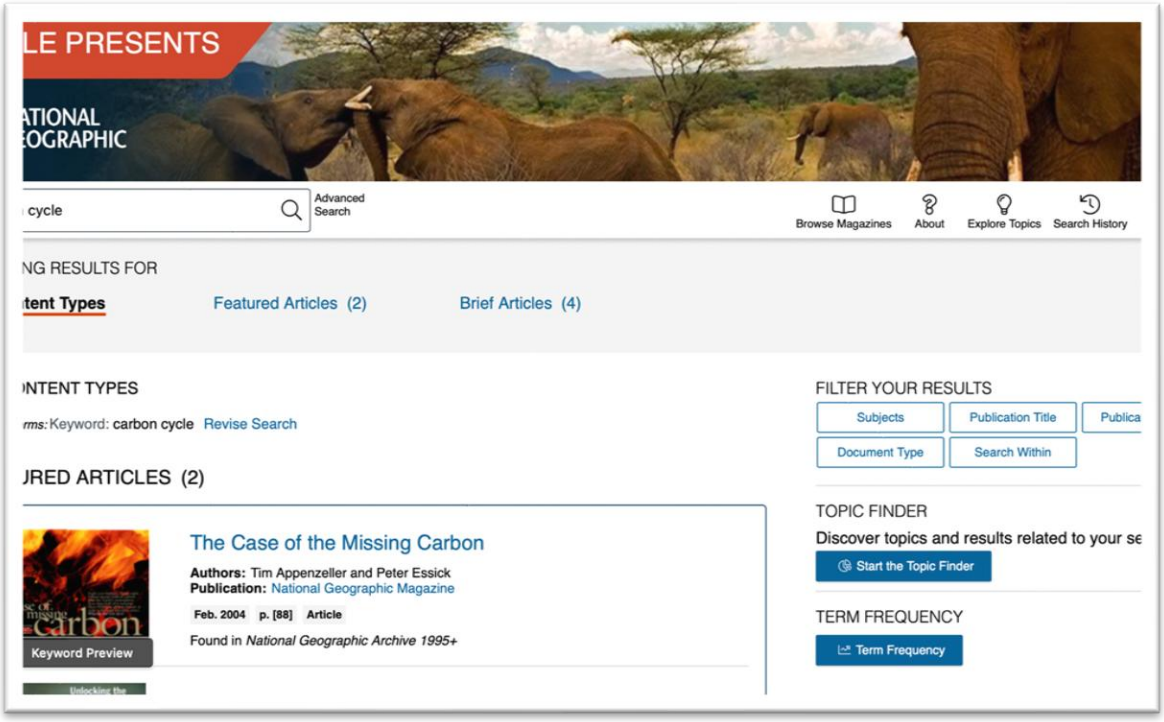
Oxford Reference spans 25 different subject areas, bringing together 2 million digitised entries across Oxford University Press's dictionaries, companions, and encyclopedias.



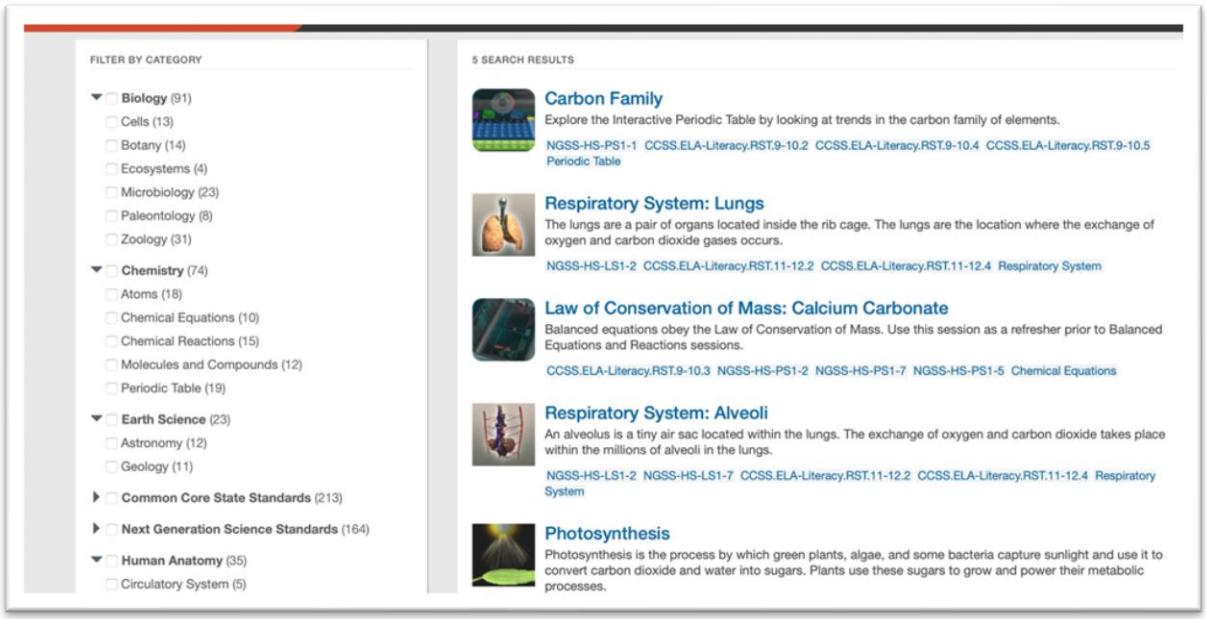

The Britannica Library has articles, images and more, with a selection of resources especially for teenagers.



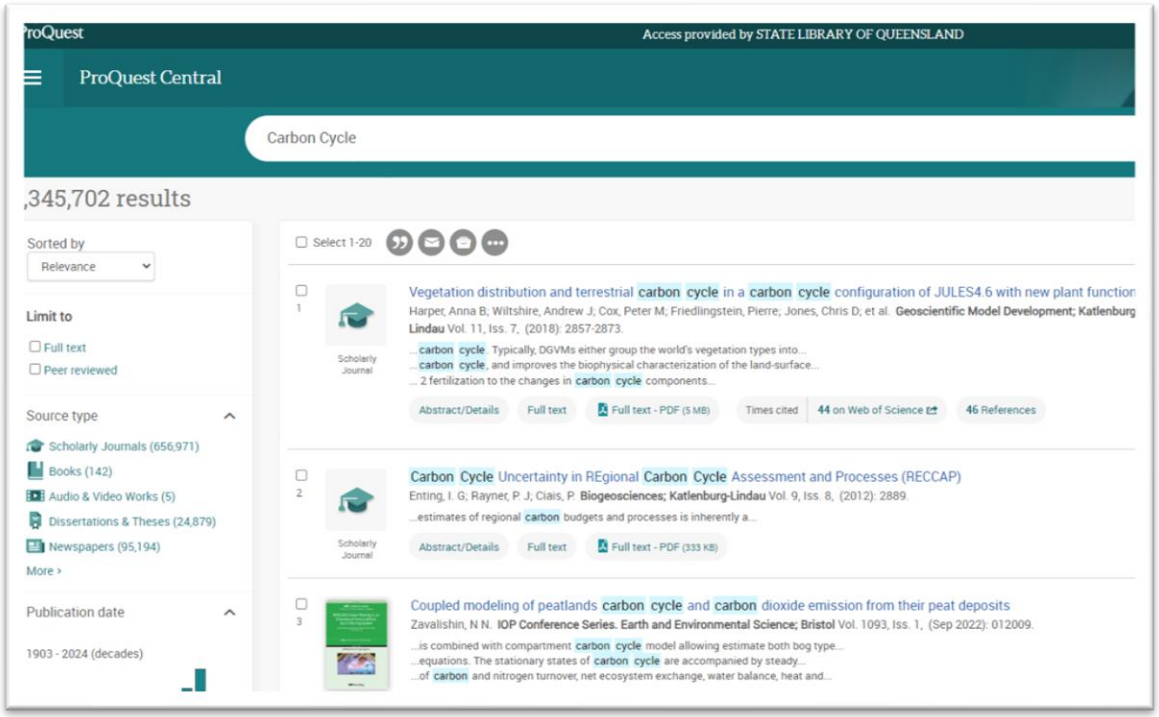
National Geographic Virtual Library is a powerful tool for research offering access to over 100+ years of magazines and hundreds of books, maps, videos, and images.



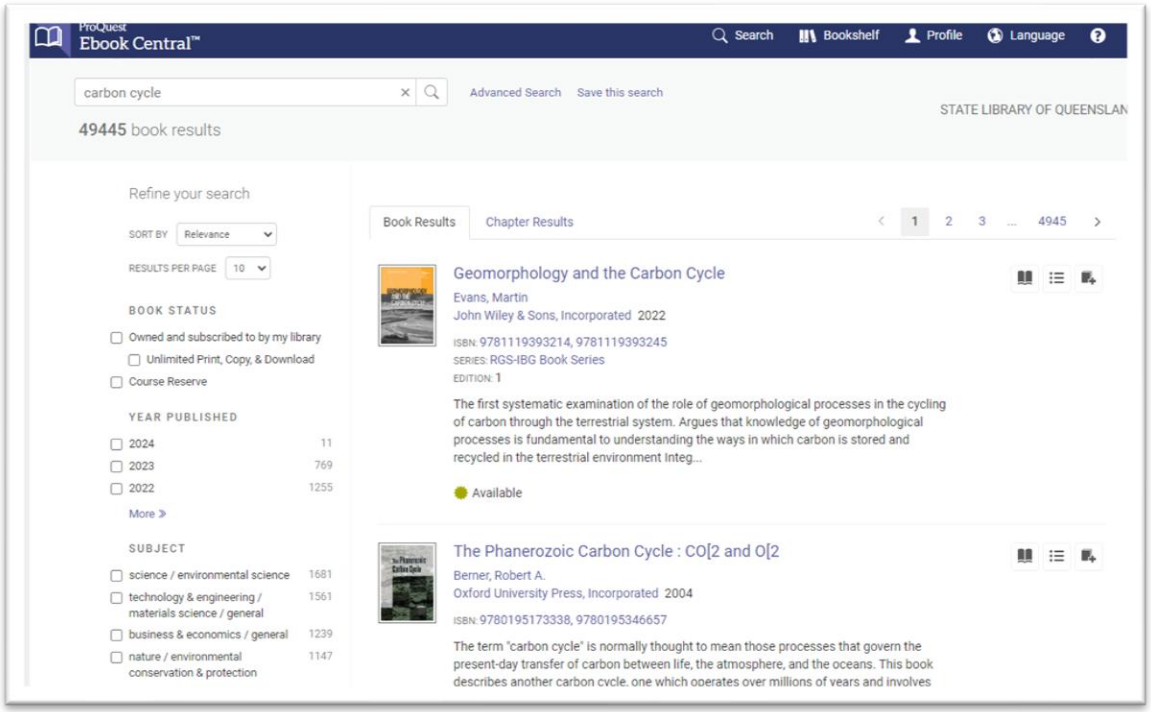

Gale Interactive: Science provides a comprehensive view of the most-studied science subjects. Authoritative, high-quality digital content is paired with interactive 3D models.



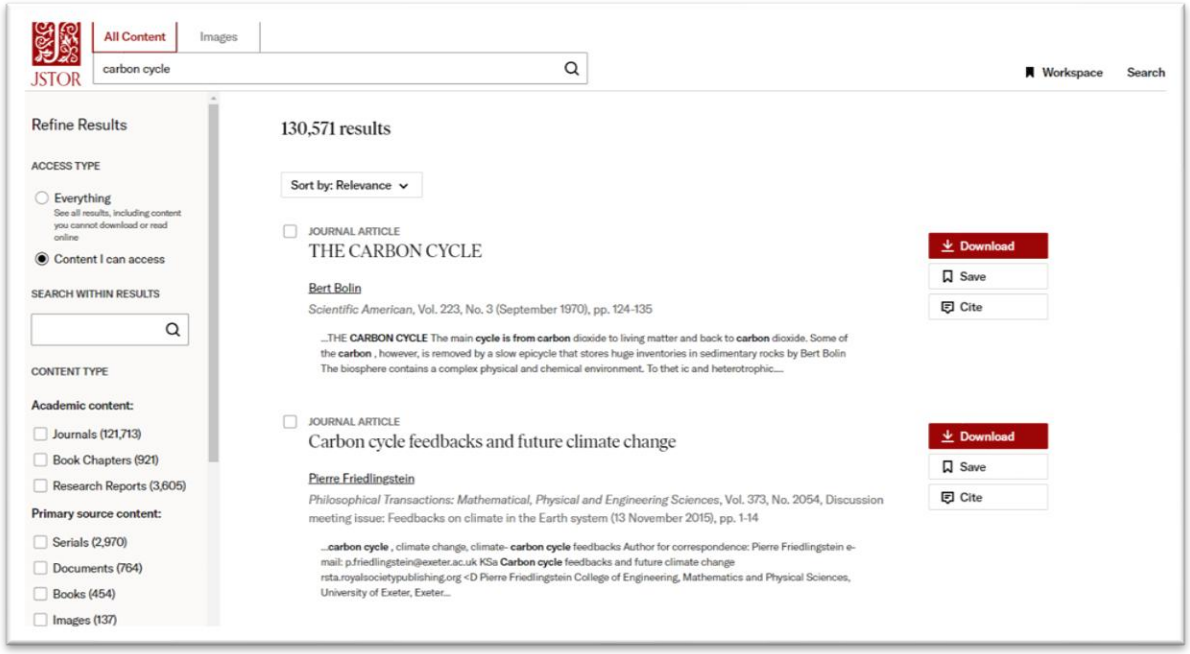
ProQuest Central brings together 47 databases across 175 subject areas, providing easy intuitive access to an incredibly broad and comprehensive range of content.



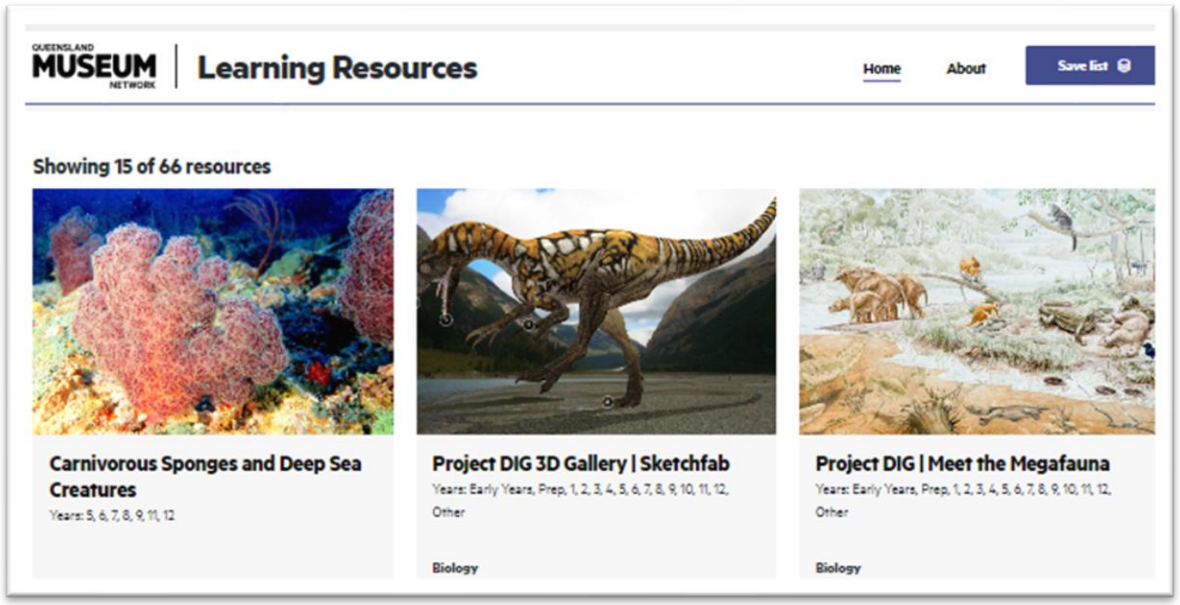

ProQuest Ebook Central Compiles a library of topic specific ebooks for you to access free through your SLQ membership.



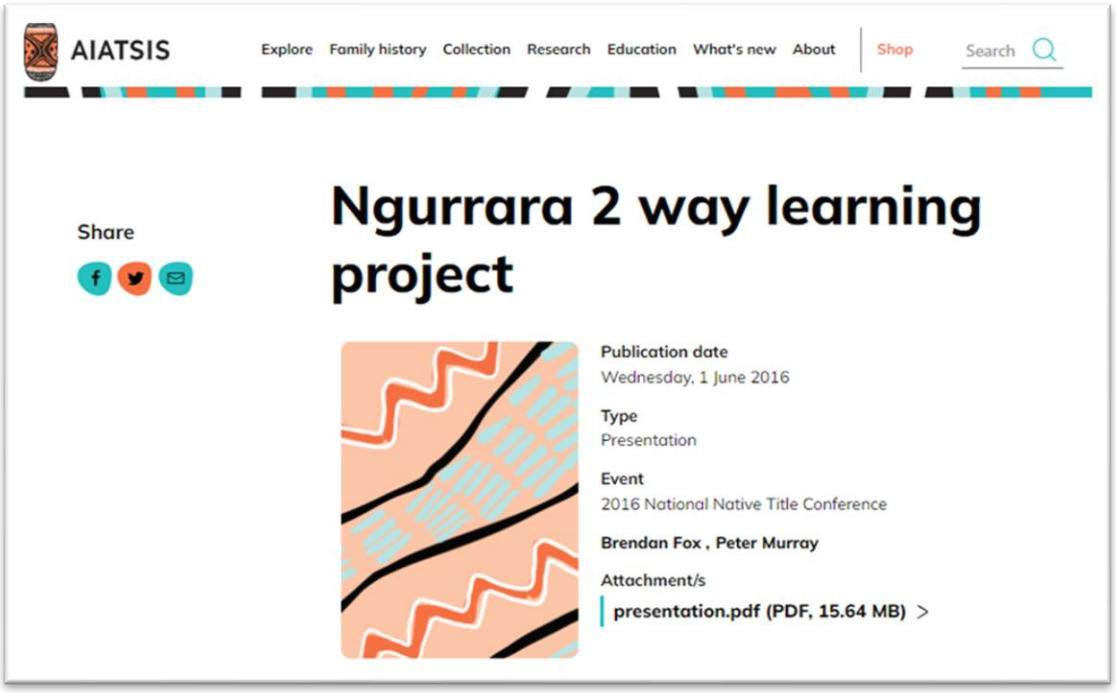
JSTOR provides access to more than 12 million scholarly journal articles and eBooks, and is especially good for primary sources.




Queensland Museum provide Learning Resources website students with many activities, fact sheets, images, and videos.



The Australian Institute Aboriginal and Torres Strait Islander Studies is a powerful tool for First Nations reading and research. Their online database and research projects can provide incredible insight into science from the First Nations perspective.




### Borrow items.

Order items online through State Library's One Search catalogue and borrow items from State Library's collections when you visit us onsite.

### Ask a librarian

Ask one of State Library's expert librarians for help with your research inquiry.