STATE LIBRARY
QUEENSLAND

Year 10
Chemical Sciences

Student research guide

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Copyright information for teachers

This research guide is designed for individual use by students.

Please note, due to licensing arrangements, State Library of Queensland'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 State Library. Information about joining 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. This type of material can easily be found, searching State Library's One Search catalogue using the "SLQ digitised collections" option in the dropdown menu.

For more information about the use of copyright materials visit Understanding copyright.

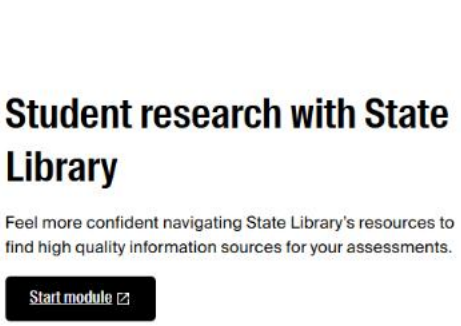
Overview

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

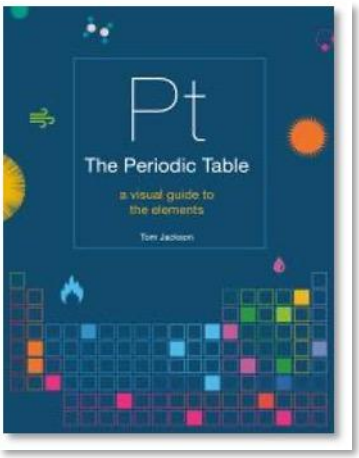
State Library's One Search catalogue is the gateway to an extensive suite of national and international journals, databases, ebooks, encyclopedias, newspaper archives, and collections of thousands of historical images, letters, artworks, diaries, and artefacts to interrogate as sources.

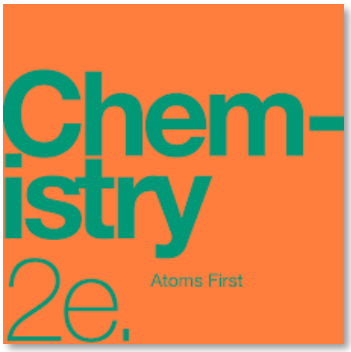
Before you get started

- 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.
- Complete the Student research with State Library module for a guide to navigating State Library's resources. Or visit the One Search help page for tips & tricks for searching One Search.
- You can search our OneSearch catalogue or begin exploring by clicking on some of the featured items contained in this research guide.



Featured ebooks





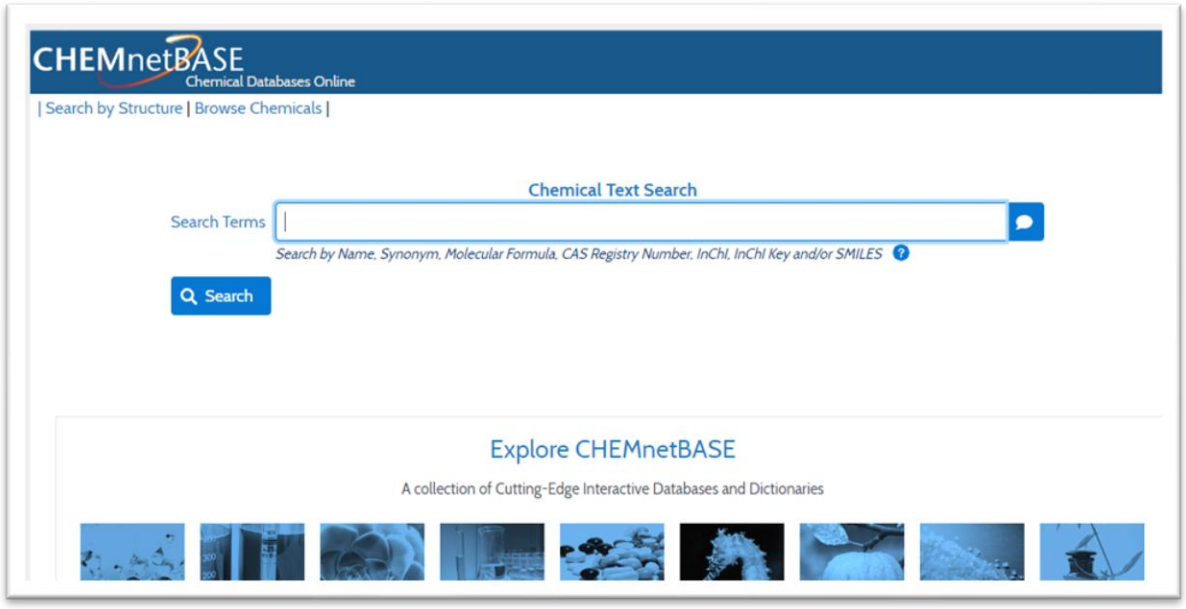
Atoms and the Periodic Table

Explain how the structure and properties of atoms relate to the organisation of the elements in the periodic table.

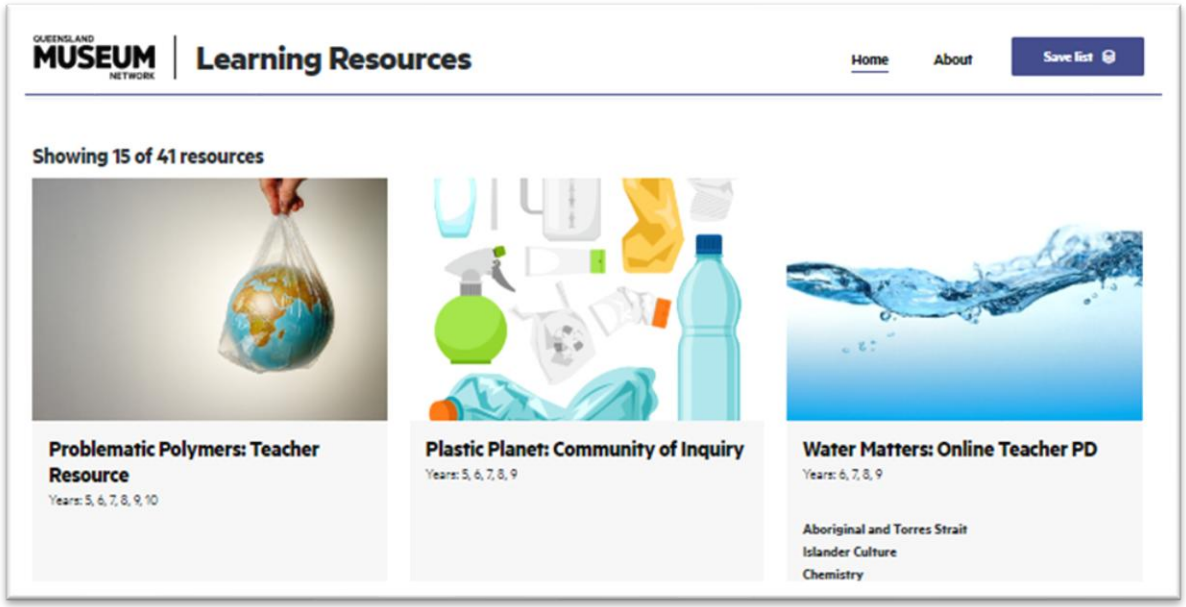
- Examining how elements are organised in the periodic table and analysing patterns to discern that elements in the same group of the periodic table have similar properties.
- Investigating the physical properties of some metals and non-metals.
- Using the bohr model of the atom to describe the structure of atoms in terms of electron shells and relating this to their properties and position in the periodic table.
- Deducing that repeating patterns of the periodic table reflect patterns of electrons in outer electron shells.
- Conducting flame tests for a selection of elements and examining emission spectra.
- Examining how the development of the spectroscope led to further development of the model of the atom.

Featured databases

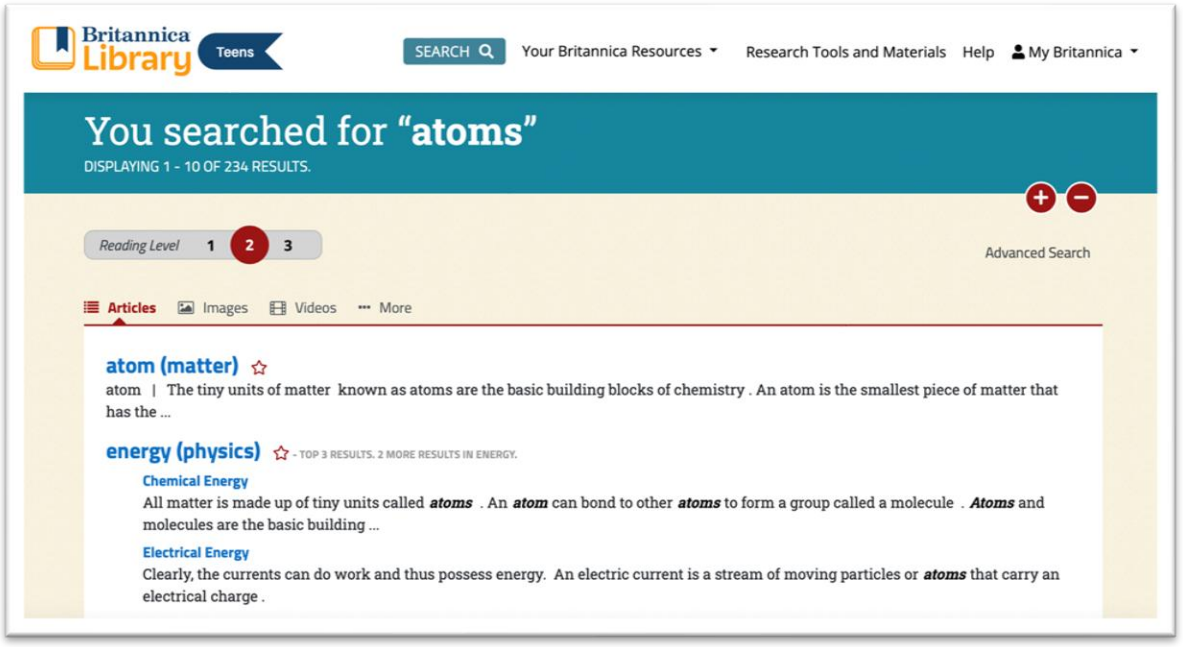
CHEMnetBASE provides a comprehensive database of chemicals and their uses, as well as chemical equations and properties.



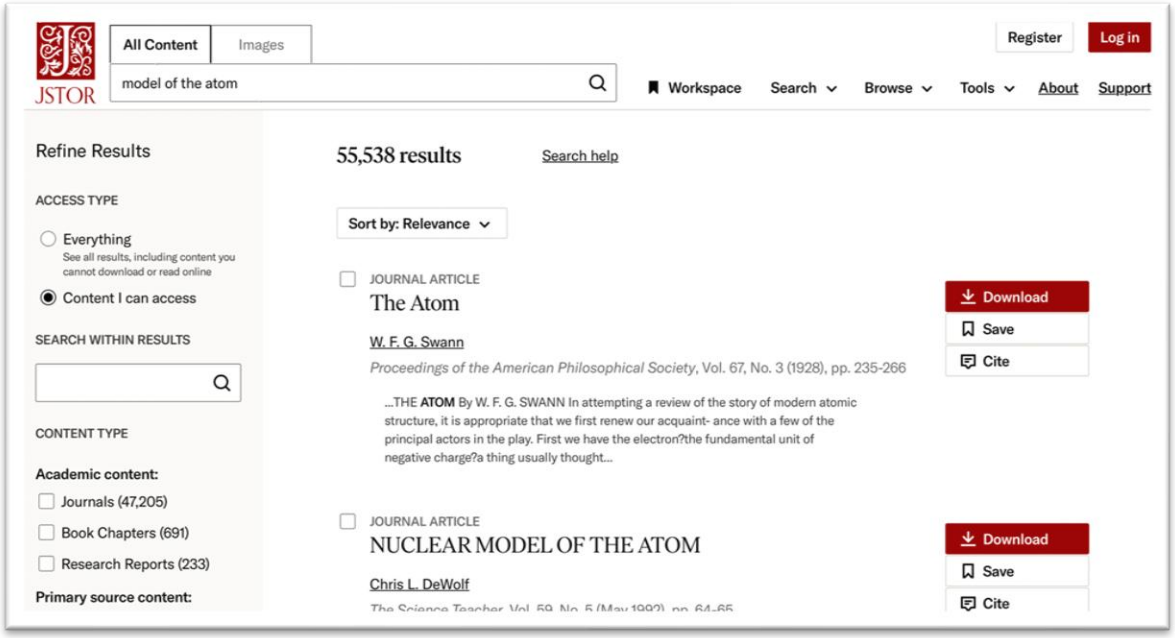
Queensland Museum provide Learning Resources website students with many activities, fact sheets, images, and videos.



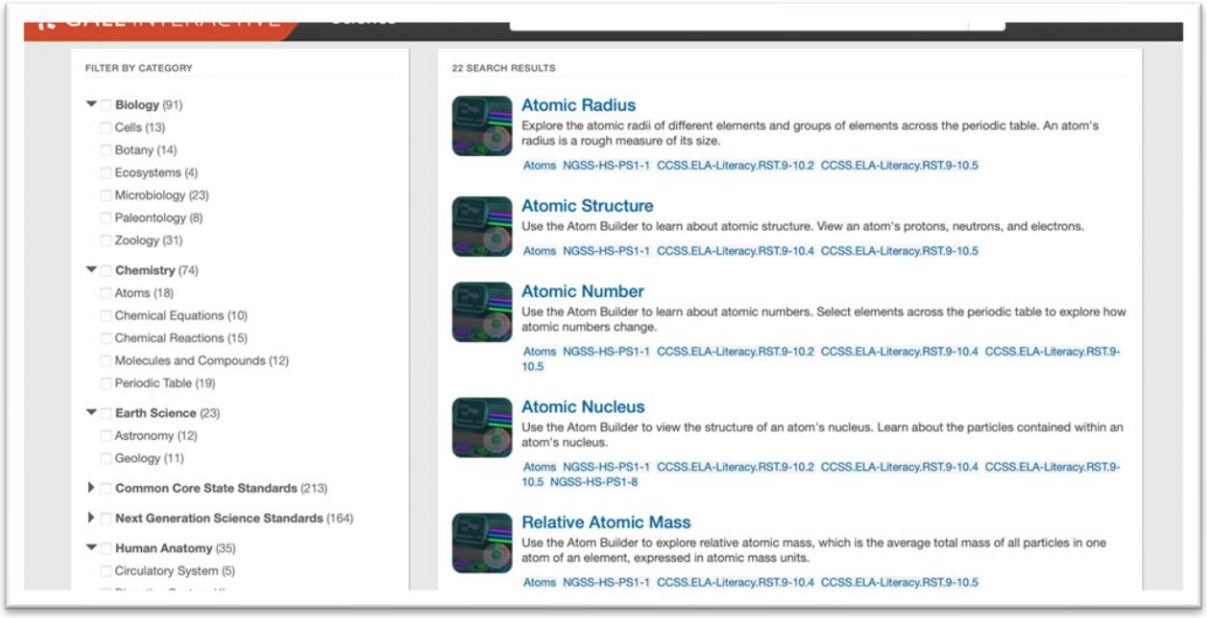
The Britannica Library has articles, images and more, with a selection of resources especially for teenagers.



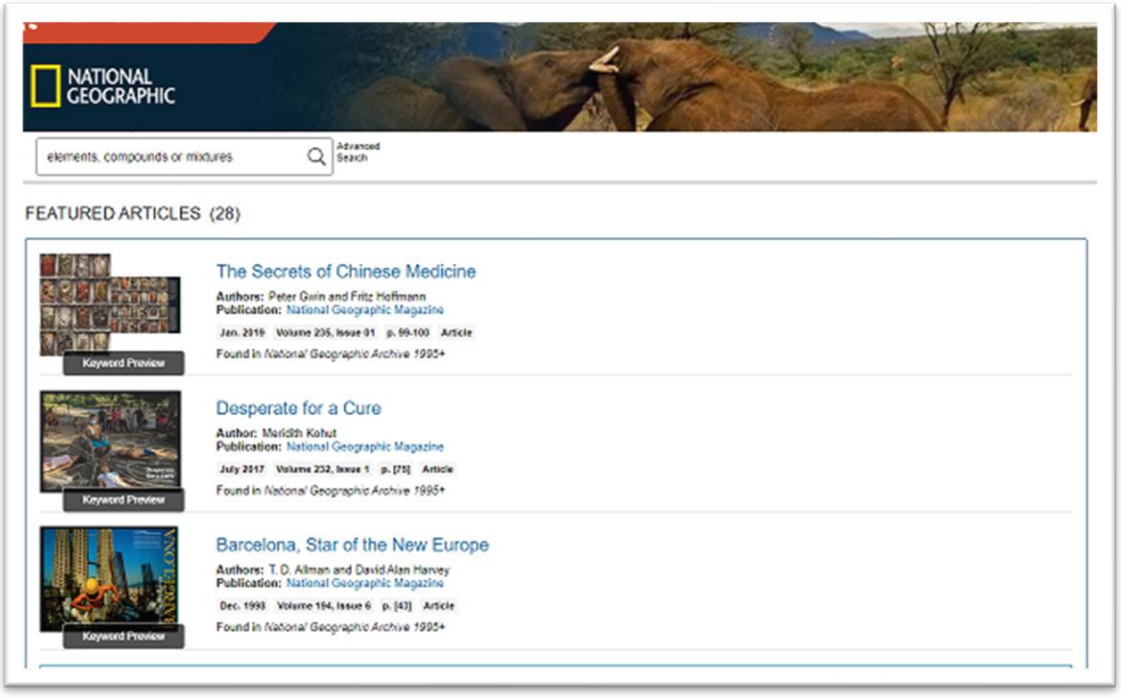
JSTOR provides access to more than 12 million scholarly journal articles and ebooks, and is especially good for primary sources.



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



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.



More research

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

State Library staff are available to advise on keywords and search strategies and suggest databases to help you carry out independent research.

Please note that librarians can guide and support your research process, but they cannot complete your assessment, select sources for you or provide answers to assessment questions.

Visit State Library with your class

Ask your teacher to bring your classroom to State Library and explore exhibitions, research for your assessments or undertake independent study.