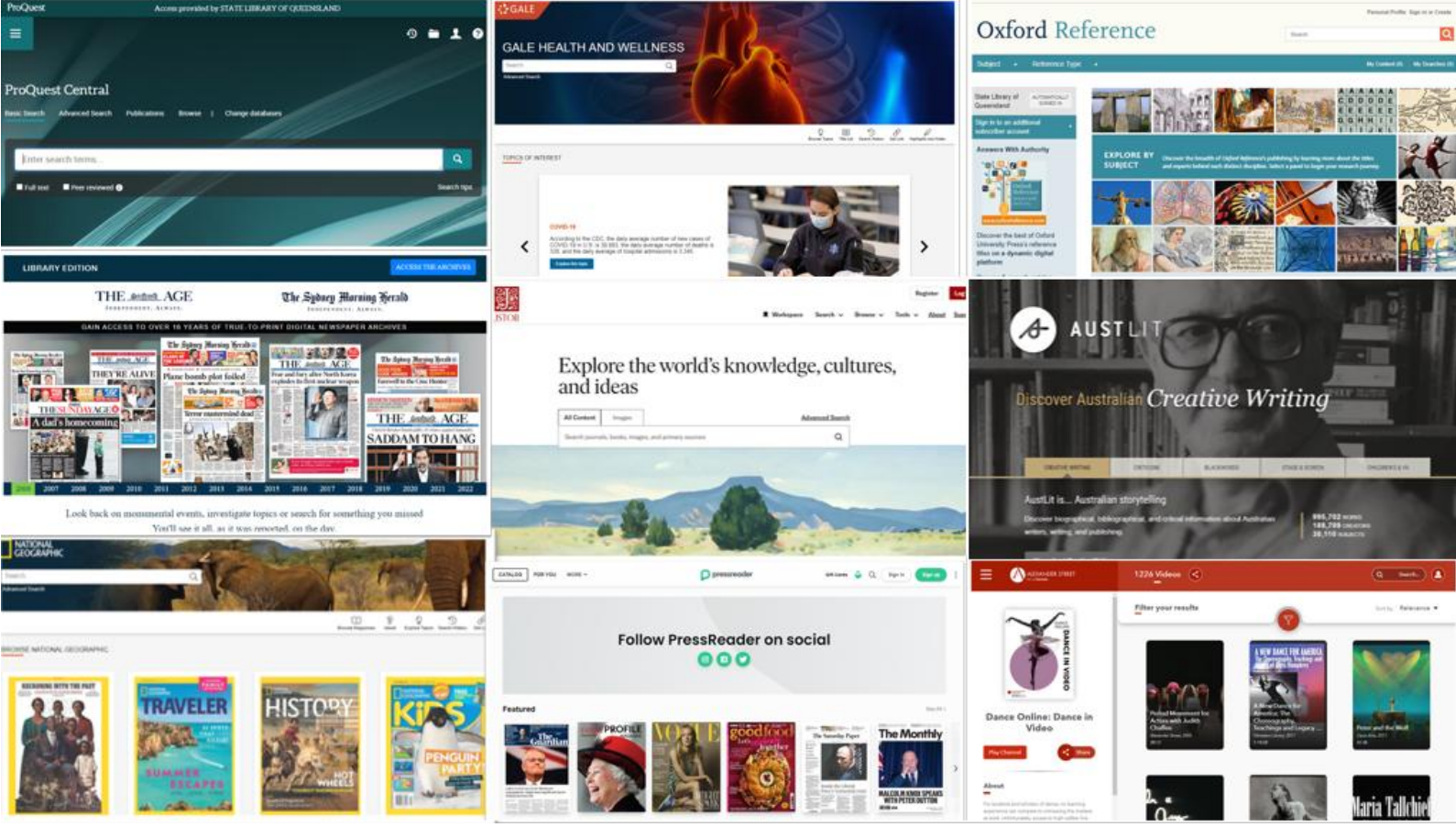


STATE LIBRARY
QUEENSLAND

Year 8
Chemical 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

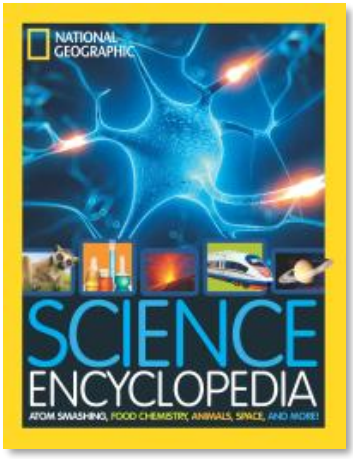
Overview

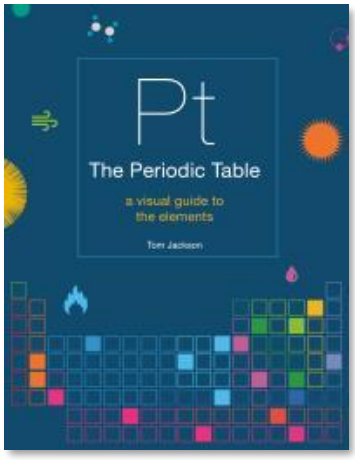
As Queensland's leading research library, State Library is a great place to find information to complete your research-based assessments. State Library's One Search catalogue is the gateway to an extensive suite of national and international journals, databases, eBooks, encyclopedias, newspaper archives, and collections of thousands of historical images, letters, artworks, diaries, and artefacts to interrogate as sources.

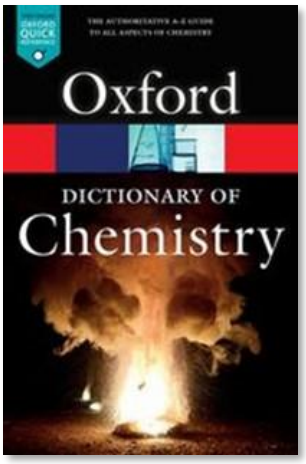
Before you get started

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

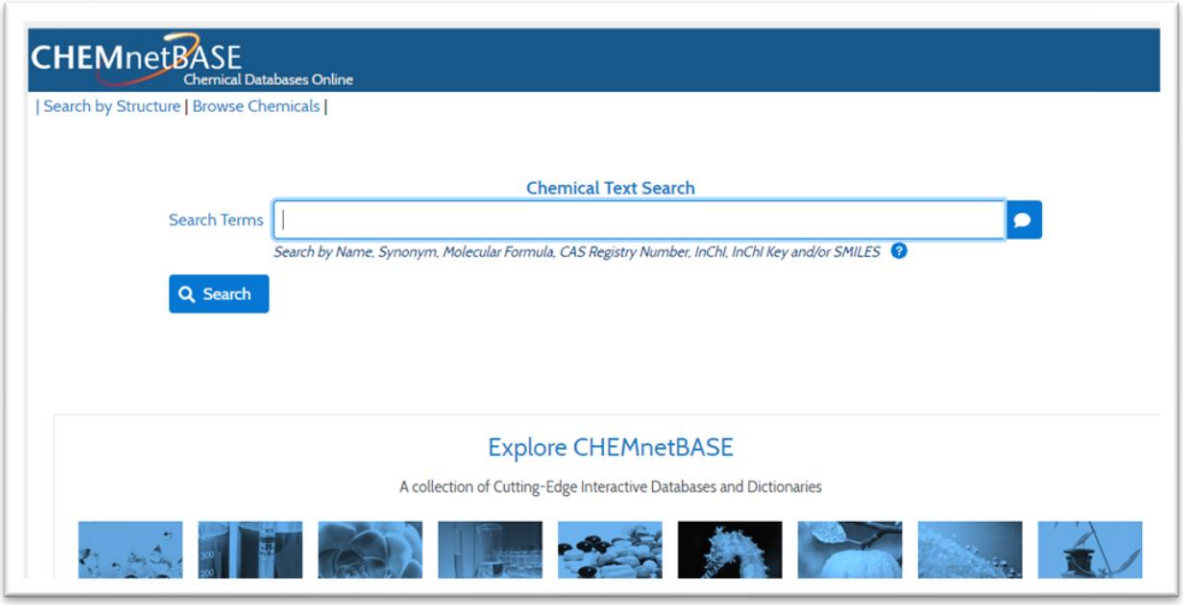




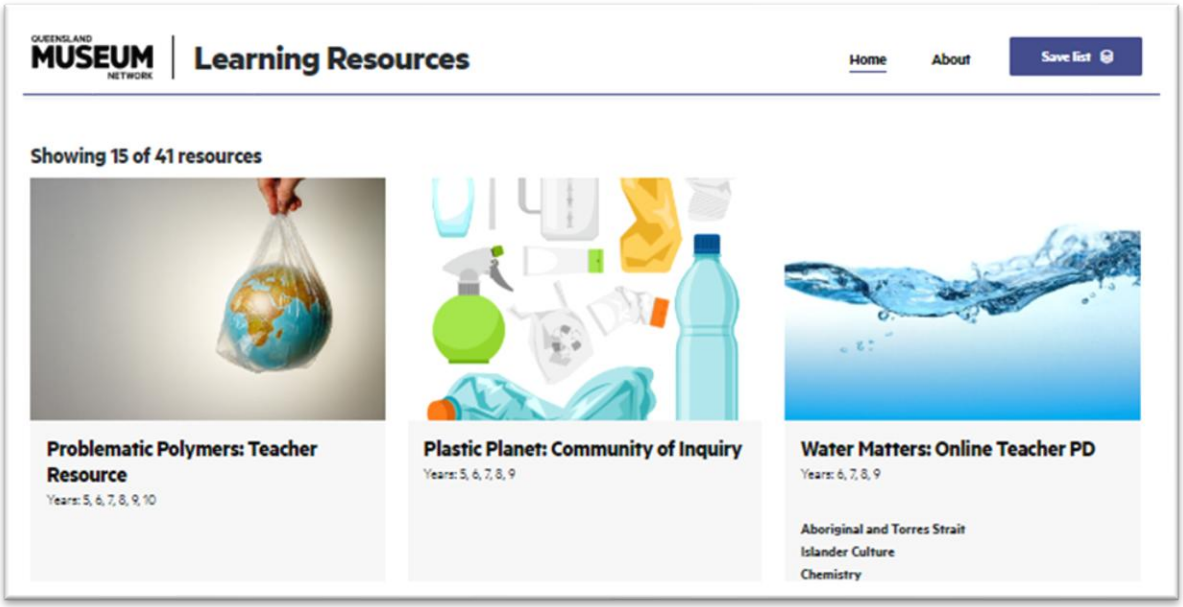


Featured Databases

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.

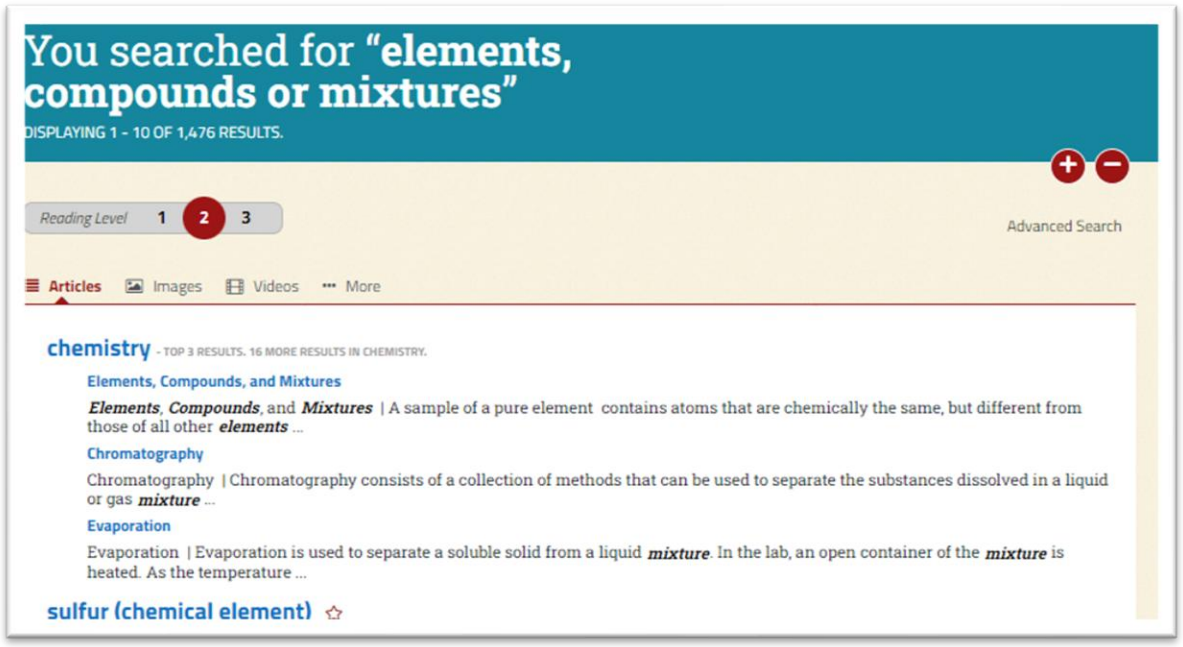


Classifying Matter

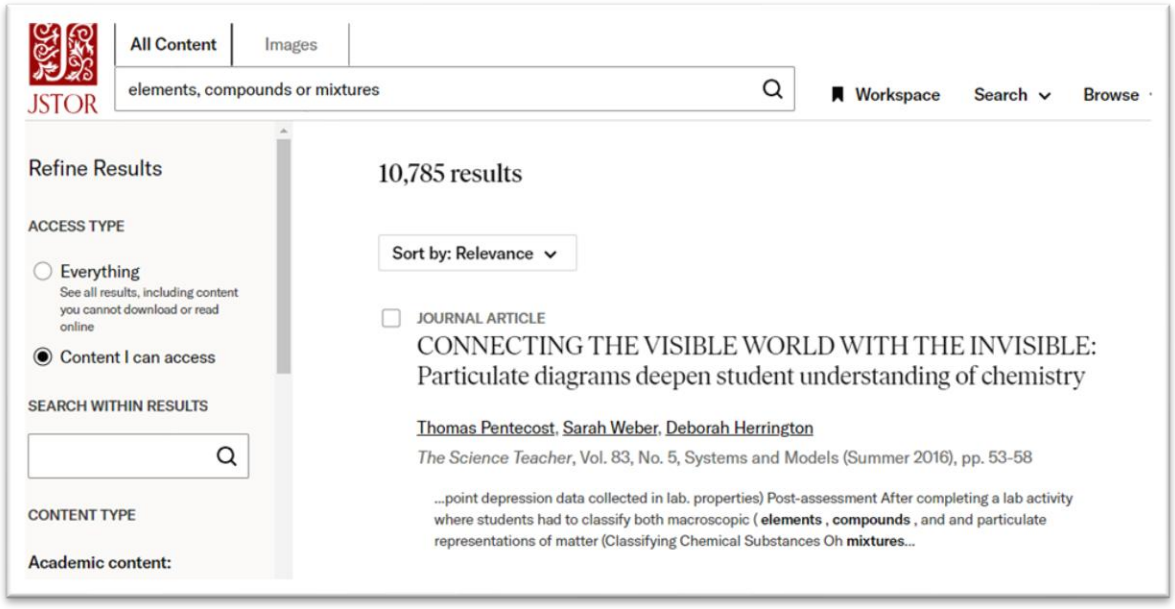
Classify matter as elements, compounds or mixtures and compare different representations of these, including 2-dimensional and 3-dimensional models, symbols for elements and formulas for molecules and compounds.

- Using virtual and physical models to distinguish between elements and compounds in terms of types of atoms.
- Examining how Dmitri Mendeleev arranged the elements in the first version of the periodic table and comparing his arrangement with the current version.
- Explaining why elements are represented by symbols, compounds and molecules by formulas and mixtures by percentages.
- Using representations to show the classification of matter as elements, compounds and different types of mixtures such as solutions, suspensions and colloids.
- Examining the information conveyed by different types of representations of elements and compounds and identifying where and why these different representations are used.
- Creating a timeline or models to show how the concept of an element has changed over time from Democritus to John Dalton.

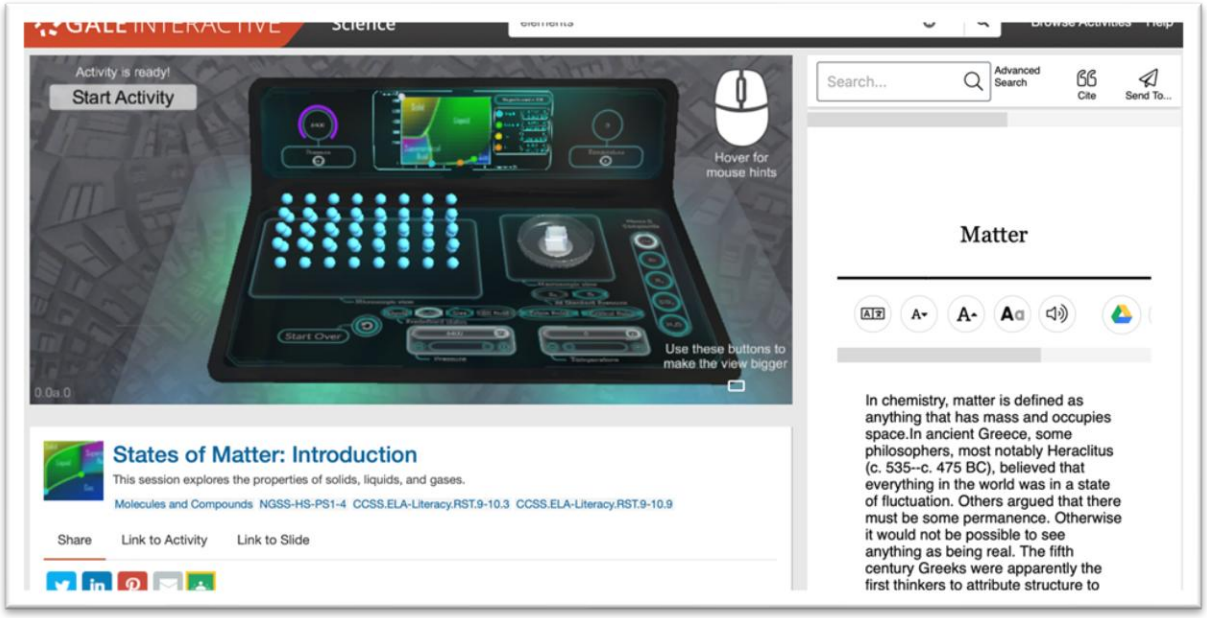
The Britannica Library has articles, images and more, with a selection of resources especially for teenagers.



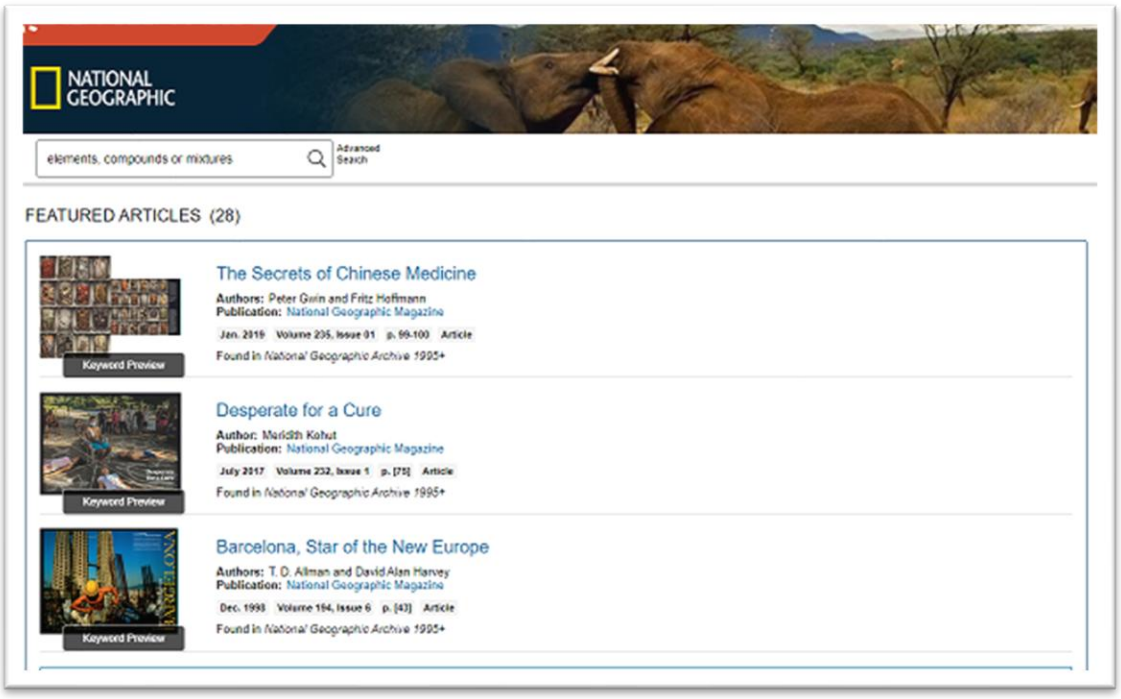
JSTOR provides access to more than 12 million scholarly journal articles and eBooks, and is especially good for primary sources.



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.

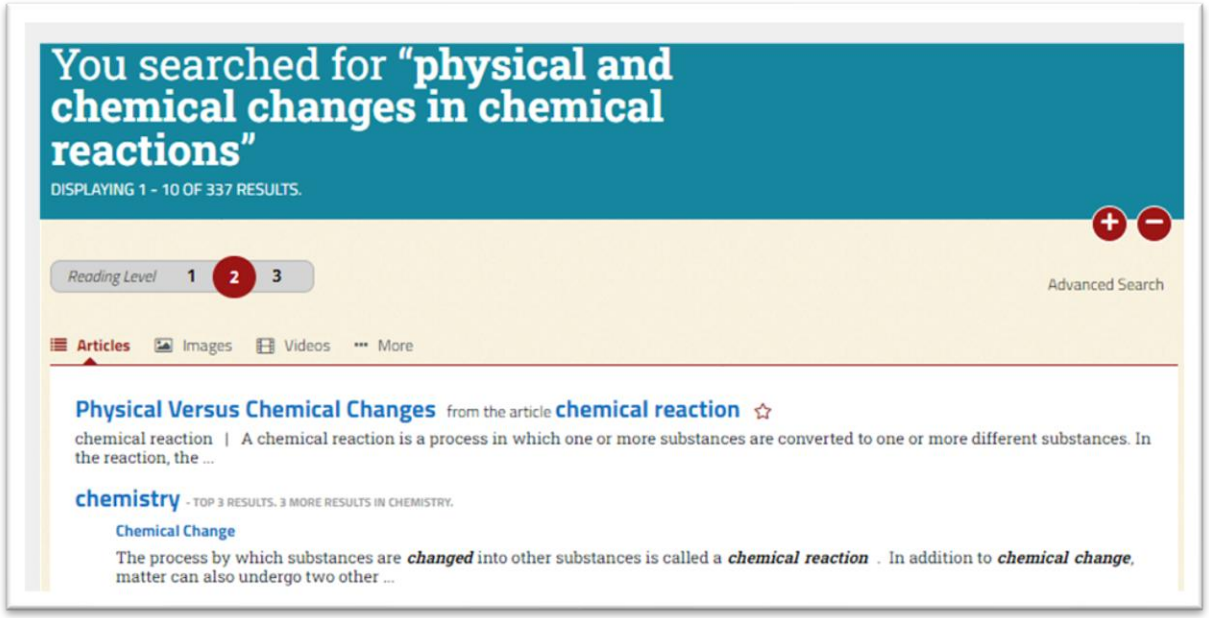


Energy Change in Reactions

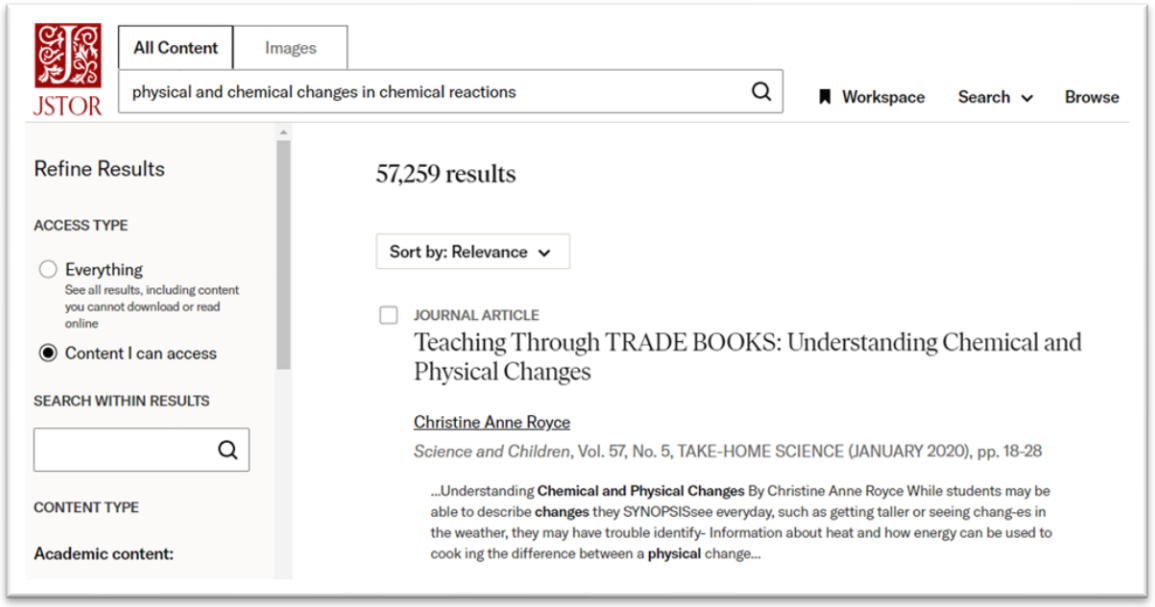
Compare physical and chemical changes and identify indicators of energy change in chemical reactions.

- Performing simple chemical reactions to identify the indicators of chemical change such as gas production, solid production, colour change and temperature change.
- Analysing and interpreting data on the properties of substances before and after the substances interact to determine if a chemical or physical change has occurred.
- Investigating and identifying energy changes in different chemical reactions such as differences in temperature.
- Examining how the physical and chemical properties of a substance will affect its production or use.
- Discussing where indicators of chemical change are used for identifying the presence of particular substances, such as in soil, water and medical testing kits.

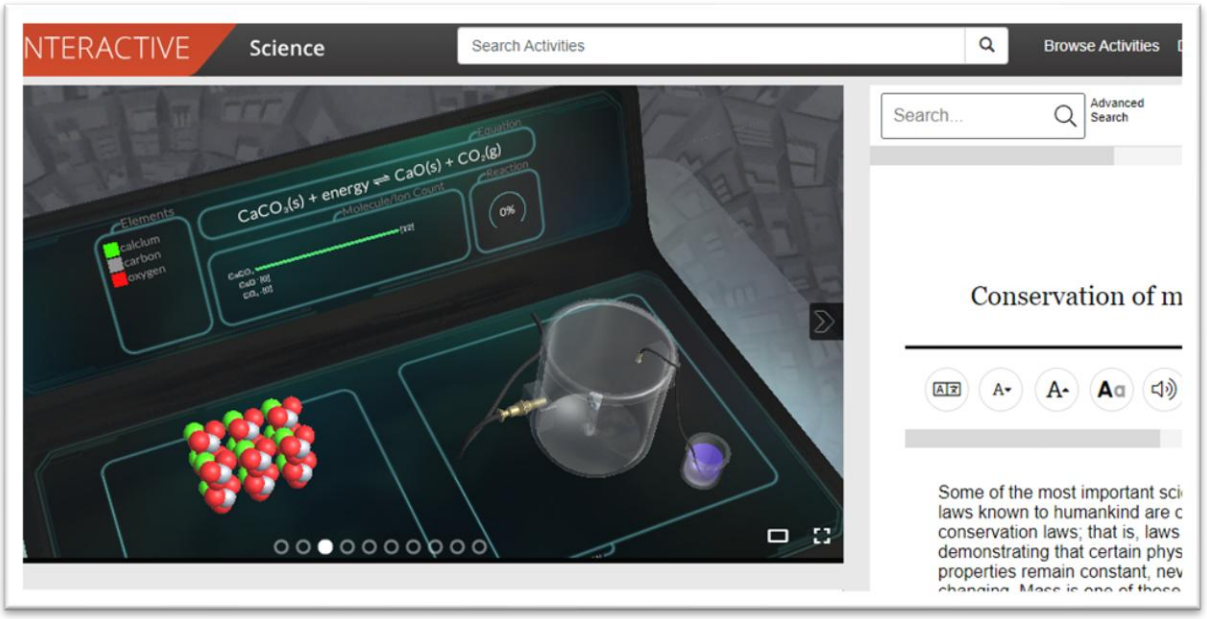
The Britannica Library has articles, images and more, with a selection of resources especially for teenagers.



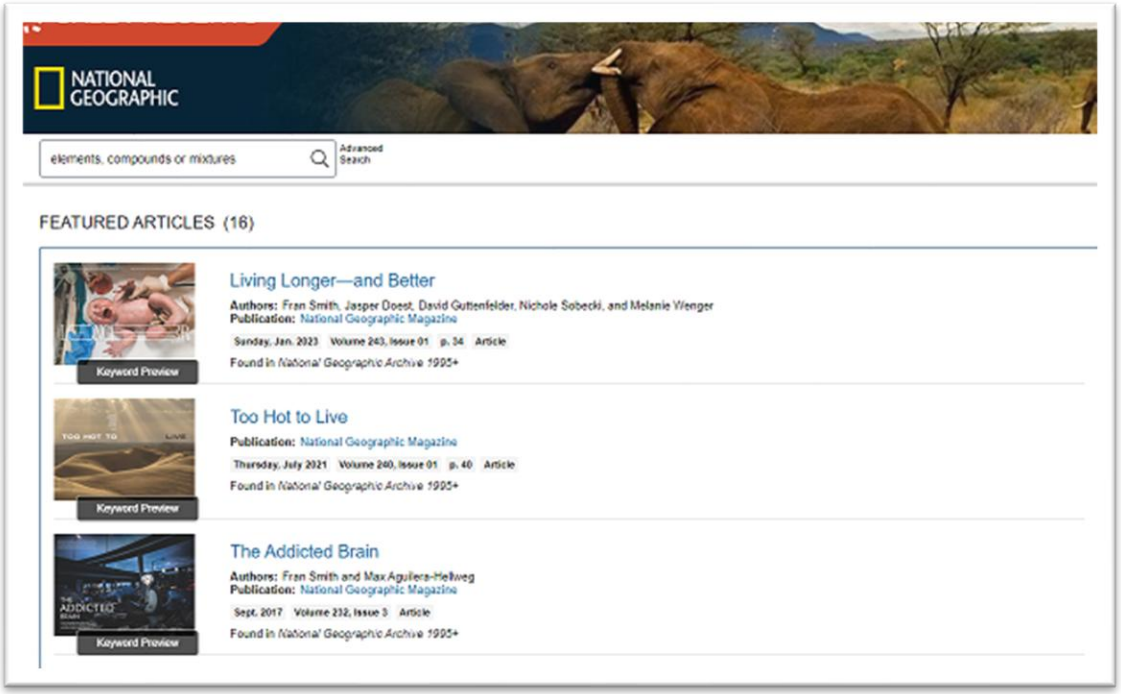
JSTOR provides access to more than 12 million scholarly journal articles and eBooks, and is especially good for primary sources.



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.



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.