

DMITRI MENDELEEV/PERIODIC TABLE RESOURCES

Recommended Reading

- Aldersey-Williams, Hugh. *Periodic Tales: A Cultural History of the Elements, from Arsenic to Zinc*. London: Viking Press, 2011.
- Asimov, Isaac. *The Search for the Elements*. New York: Basic Books, 1962.
- Ball, Philip, *A Very Short Introduction to the Elements*. Oxford: Oxford University Press, 2004.
- Ball, Philip. *The Ingredients: A Guided Tour of the Elements*. Oxford: Oxford University Press, 2002.
- Emsley, John. *Nature's Building Blocks: An A to Z Guide to the Elements*. Oxford: Oxford University Press, 2001.
- Gray, Theodore . *The Elements: A Visual Exploration of Every Known Atom in the Universe*. New York: Black Dog & Leventhal Publishers, 2009.
- Sacks, Oliver. "Everything in its Place: One Man's Love Affair with the Periodic Table." *New York Times Magazine*, 1999.
<http://www.nytimes.com/library/magazine/millennium/m1/sacks.html>
- Scerri, Eric R. *The Periodic Table: A Very Short Introduction*. Oxford: Oxford University Press, 2011
- Scerri, Eric R. *The Periodic Table: Its Story and its Significance*. Oxford: Oxford University Press, 2007.

Interactive Periodic Tables on the Web

The Internet is filled with Periodic Tables designed to appeal to every need and taste, from the highly technical to the whimsical. Here are just a few that are worth checking out:

The Photographic Periodic Table

A visually arresting Periodic Table, it includes rotating images of samples of most of the elements, plus many more photographs of objects made from these elements, all from Theo Gray's remarkable collection of artifacts. Also available as an iPad app.



<http://periodictable.com>

The Royal Society of Chemistry

Developed by Britain's Royal Society of Chemistry and its magazine, *Chemistry World*, this table is an interactive delight, offering audio podcasts, videos, art, and a wealth of information about each element and its history, uses and chemical properties.

<http://www.rsc.org/periodic-table/>

The Periodic Table of Videos

This table offers a YouTube video about each element, most of them hosted by wild-haired Sir Martyn Poliakoff of the University of Nottingham in England.

<http://www.periodicvideos.com/>

It's Elemental!

Clicking on each element in this table brings up an essay about that element, originally published in the American Chemical Society's *Chemical and Engineering News*, by authors like Roald Hoffmann and Oliver Sacks.

<http://pubs.acs.org/cen/80th/elements.html>

Data-Rich Tables

These two tables offer an abundance of information about each element:

<http://webelements.com/>

Clicking on each element box brings up information about the element's history and uses, as well as a wide range of chemical properties, from electronegativity to bond enthalpies.

<http://www.ptable.com/>

Clicking on each element box brings up a long Wikipedia article about the element, rich in chemical detail.

Simpler Tables

Less technical than the previous two, and better suited to younger students, these tables devote less attention to chemical properties and more to the history, sources and uses of each element.

<http://periodic.lanl.gov/index.shtml>

<http://education.jlab.org/itselemental/>

<http://www.elementsdatabase.com/>

And this one, developed by *Nature Chemistry* magazine, brings up very basic information and a few fun facts about each element. Some boxes also link to a magazine article about the element.

<http://www.scientificamerican.com/article.cfm?id=chemistry-the-elements-revealed-interactive-periodic-table>

PBS Learning Periodic Table

This table includes game-like activities for kids.

<http://mass.pbslearningmedia.org/resource/phy03.sci.phys.matter.ptable/periodic-table-of-the-elements/>

Other Websites of Interest

Chemical Heritage Foundation article on the Path to the Periodic Table

<http://www.chemheritage.org/discover/online-resources/chemistry-in-history/themes/the-path-to-the-periodic-table/>

Wikipedia article on the History of the Periodic Table

http://en.wikipedia.org/wiki/History_of_the_periodic_table

Wikipedia article on the Periodic Table

http://en.wikipedia.org/wiki/Periodic_table

Website of Eric Scerri, prolific author on the Periodic Table

<http://www.ericscerri.com/>

For Serious Students

Gordin, Michael. *A Well-Ordered Thing: Dmitrii Mendeleev and the Shadow of the Periodic Table*. New York: Basic Books, 2004.

Jensen, William B., ed. *Mendeleev on the Periodic Law: Selected Writings, 1869-1905*. Mineola, New York: Dover Publications, 2002.

Mazurs, E., *Graphic Representation of the Periodic System During One Hundred Years*. Tuscaloosa, AL: Alabama University Press, 1974.

Mendeleev, Dmitri. *Principles of Chemistry*, translated by G. Kamensky, 5th Edition, vol. 2. London: Longmans, Green, and Co., 1891.

Scerri, Eric R. *A Tale of Seven Elements*. New York: Oxford University Press, 2013.

Scerri, Eric, R., *Selected Papers on the Periodic Table*, London: Imperial College Press, 2009.

van Spronsen, J. W. *The Periodic System of Chemical Elements*. Amsterdam: Elsevier, 1969.

Weeks, Mary Elvira. *Discovery of the Elements*. Easton, Pa.: *Journal of Chemical Education*, 1968.