Researching and referencing

Sometimes you are expected to consult a variety of sources of information when researching a topic, planning an experiments or developing an investigation. Sources can include books, periodicals and websites, as well as experts other than your teacher or tutor.

**TIP**

Keep a careful note of the details of any sources you consult – write them down at the time. This will save you trouble later on when you write your report.

A web search is often the best way to find resources, but the difficulty can be to find websites that give information at an appropriate depth for a post-16 chemistry course.

Websites

You can download the specification for your course and other supporting information from the GCE qualifications section of the Edexcel website: www.edexcel.com**.**

You can find all the chemical data you need about elements and compounds, including spectra, at the NIST Chemistry WebBook: http://webbook.nist.gov/chemistry. You can search the site by the name or formula of the chemical you are interested in. If the chemical is normally a solid or liquid, search under ‘Condensed phase’. If it is a gas, search under ‘Gas phase’. Learn to use the site by starting with a simple and familiar compound such as sodium chloride. Note that the site contains far more information than you need.

Another valuable source of chemical data is the WebElements website from Sheffield University: [www.webelements.com](http://www.webelements.com).

Two rich banks of online resources are:

* the National STEM Centre eLibrary: [www.nationalstemcentre.org.uk/elibrary](http://www.nationalstemcentre.org.uk/elibrary/)
* Learn Chemistry from the Royal Society of Chemistry: www.rsc.org/learn-chemistry.

Adding references to reports

Consulting reference material and seeking advice from other experts is not cheating. It is an essential part of planning, or finding out the background to, any experiment or investigation. You must, however, acknowledge all the sources that you consult. Scientific articles and papers always end with a list of references. Any report you produce should do so too.

Books

State the author, giving the last, or family, name followed by the initial. Then give the date of publication, the title of the book and the publisher. If you are word processing your report, you should show the title in italics. In handwriting, the title should be underlined. For example:

Ball, P (2005) *Elegant Solutions: Ten Beautiful Experiments in Chemistry*, Royal Society of Chemistry.

Periodicals

Give the author and date with the title of the article you consulted, then give the details of the magazine with the volume number and edition, plus the publisher. For example,

Briggs, C. (2014) ‘Could we live on Mars?’ in *Chemistry Review*, Volume 24 number 1, Hodder Education.

Websites

Give the title of the website, the web address and the date or dates on which you referred to the site. Give the web addresses of the parts of the site you consulted and not just the address of the home page. For example,

Royal Society of Chemistry Learn Chemistry, *Spectra School* www.rsc.org/learn-chemistry/collections/spectroscopy (Accessed 28 July 2015).