

Caveman Chemistry

Years 9-10

Extracting metals, making alloys and using non-metallic tools helped prehistoric humans move out of caves. In this engaging, hands-on program students make, examine and test properties of some ancient (and more modern) materials. *Caveman Chemistry* addresses aspects of the Level 6 Science, Knowledge and Understanding and Science at Work Victorian Essential Learning Standards.

Students investigate

- How to make metals caveman-style.
- What are some general properties of metals?
- Which metals were cavemen able to use?

How can you change the properties of a metal?

- What are the differences between properties of different metals?
- When are modern materials are better than metals?

DETAILS:

Years 9-10, 90 minute duration

| Location | Cost per session | Maximum students per session | Minimum cost per day |
|---|------------------|------------------------------|----------------------|
| School of Chemistry Melbourne University | \$190 | 30 | n/a |
| At your school (Metropolitan) | \$230 | 30 | \$490 |
| At your school (Regional) | \$265 | 30 | \$640 |



VICS is a multi-campus institute comprised of Chemistry Schools at Melbourne and Monash Universities, and the discipline of Applied Chemistry at RMIT University. The Victorian Government, CSIRO and ARC Free Radical Centre of Excellence proudly sponsor the Outreach Program.

Cost Structure:

A 2-tier cost structure operates for VICS travelling programs. There is a cost per session and a minimum cost per day - whichever is the greater will apply.

VICS and CSIRO Education attempt to fit as much of a program into as few days as possible.

If a program runs for more than one day or with more than one presenter (because it will not fit into one day), a reduced minimum cost per day will apply for the second and subsequent days or presenters. The minimum cost per day for subsequent days is \$380 metro/\$530 regional.

If a school opts to spread their program over more days and/or with more presenters than necessary, the full minimum cost per day will apply for each day and presenter.

Regional Schools: Please call to discuss tour details and availability of programs.

GST: All prices listed above include 10% GST.

PROGRAM REQUIREMENTS:

- access to the presentation room 1 hour prior to the first session
- 10 tables or equivalent bench space
- 2 power points
- a sink
- enough space to comfortably sit 30 students
- students will need to bring a pen or pencil

This program is best run in a science lab. One experiment requires access to a functioning fume hood – if unavailable, the program will proceed without this experiment.

Bookings: CSIRO Education, phone (03) 9252 6387, fax (03) 9252 6256.

Further Information: Mick Moylan, phone (03) 8344 6465, email mmoylan@unimelb.edu.au