Working with Scientific Literature

Teacher’s Guide
Working with Scientific Literature

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This pack provides a stimulating way of learning about scientific journal articles and highlights the difference between ‘research’ and ‘review’ papers (it relates to the new Scottish Advanced Higher Investigative Biology Unit 3, please see our Living ‘Links’ to Scottish Curriculum document for the relevant connections).

It is suggested that students start by watching a silent video (below) showing an unusual behaviour in capuchin monkeys; ‘anointing’. There are various hypothetical explanations for this behavior.


Students will first form their own ideas about why the capuchins behave in this way. Then they will be given a real published scientific ‘research’ paper (with a summary to guide them) describing an experiment on one aspect of the behaviour. Students will discuss whether this research demonstrates what the function of the behaviour is. Students will then read a published scientific ‘review’ paper (with a summary to guide them) that describes a historical body of research and evidence on the subject. Students will then discuss the difference between the two types of paper and how each presents evidence for various hypotheses.

On our website you will be able to download the following pieces of literature;

Research Article 1


Research Article 2 – Short Communication


Review Article

The popular media often report the findings of new studies out of the context of the larger body of research. In part two of this pack, students will critically examine a short video ‘documentary’ and a newspaper report that interprets some of the ideas on capuchin anointing for a general audience. They should also gather recent reports of scientific studies from newspapers, TV and internet news sites. They will then discuss how scientific ideas, hypotheses and findings are (and how they should be) reported in the popular media.
