

Complete teaching ideas

Education in Chemistry

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rsc.li/2tBSMXI

These teaching ideas accompany the article [‘Check my working’](#).

In your class

For students, understanding peer review is an important part of understanding how scientists work: evidence isn't always clear and sometimes scientists disagree until eventually, after lots of experimentation, a consensus is reached.

During peer review, scientists check whether results are interpreted correctly, controls are appropriate, conclusions are supported by the data, and sample size is sufficient and representative. Essentially peer review is about spotting bad science and making good science even better.

Download the text of this article, and all the related worksheets from the *Education in Chemistry* website at rsc.li/2tBSMXI

Practice peer feedback

Student peer review worksheet, ages 14–16

There are many aspects of peer review that students could practice for themselves. For example, they could carry out an experiment to test the effect of the size of marble chips on the rate of reaction. They could write up their results in the form of a scientific poster with sections for the introduction, methods, results and conclusion. Then, their peers could give feedback and suggest improvements using a checklist of questions scientists would use to check each others' work.

Download a checklist from the *Education in Chemistry* website rsc.li/2tBSMXI

Evaluate the evidence

Student discussion activity, ages 14–16

Make the peer review process relevant to students with a scenario they are familiar with and ask them to evaluate evidence presented using a checklist.

Download an example scenario based on a real discussion between students about a veterinary treatment from the *Education in Chemistry* website with a checklist of questions: rsc.li/2tBSMXI. It should get students talking!