

What's the purpose?

Education in Chemistry

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To help you pinpoint the reasons for doing a practical with your students, ask yourself these questions. They will help you distil the purpose so you can focus the session in class.

Identify the intended learning outcome of a practical

Why have you chosen to use a practical activity to teach this part of the topic?

Consider the options. A demonstration may suffice if you want students to concentrate on the process or if the results of the experiment, or the data you produce, are the most important aspect at this point. Think about safety too. A hands-on practical gives students the opportunity to not only see an experiment, but to experience and plan it, as well as developing laboratory skills and familiarity.

What is the focus of this practical?

- Investigation
- Observation
- Measurement
- Demonstrating a concept or idea
- Learning to use apparatus, such as microscopes
- Improving dexterity with apparatus, such as glassware
- Increasing familiarity with a particular process
- Developing skills, such time management or team work
- Experiencing the unpredictability of a reaction, as well as observing the expected outcome

Will this practical:

- Develop students' understanding of the scientific approach to enquiry?
- Develop students' knowledge and understanding of the natural world?
- Motivate and engage students?
- Teach them how to use a piece of equipment?
- Teach them how to follow a practical procedure?

What is the intended learning outcome? How will you measure it? Which aspect of the practical is most important for this? Will you share this focus with your students?