

Sequencing practical work

This resource accompanies the article **Sequencing for success** in *Education in Chemistry* where you will find more support, examples and tips for using these tools: rsc.li/3qXcNdf.

Step one: purpose

The first step in sequencing disciplinary knowledge is to determine the purpose of a practical activity. Consider the following questions:

Practical activity:
What prior knowledge, both substantive and disciplinary, is needed?
What knowledge will learners develop during the activity? This is its purpose.
How will you know the practical was successful? This is the assessment.
What comes next to build on this learning?

Pupil-centric sequencing

Use this approach to determine what is expected of the typical learner by the end of the academic year.

What equipment should learners be confident using?

What practical skills and disciplinary knowledge should they have mastered?

What practical activities are in your scheme of learning and how will these activities develop learners' knowledge and understanding?

**What opportunities are there to deepen and revisit learners' disciplinary knowledge?
What activities could be used to fill learning gaps?**

How does this link to future learning?

Practical-centric sequencing

Use this approach to deconstruct practical activities to evaluate what prior knowledge and understanding learners need to be successful.

What is the purpose of the practical activity? (Refer to page one)	
What procedural and disciplinary knowledge do learners need to undertake the activity?	What equipment do learners know, perhaps with lower levels of precision?
	What equipment and techniques are new?
Where has your scheme of learning covered prior knowledge and has it been revisited or deepened?	Are there any gaps? What activities could you use to fill them?
	What knowledge or understanding is being developed, deepened or consolidated?
How does this activity link to future learning?	