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](https://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:

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

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

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| **What equipment should learners be confident using?** | |
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| **What practical skills and disciplinary knowledge should they have mastered?** | |
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| **What practical activities are in your scheme of learning and how will these activities develop learners’ knowledge and understanding?** | |
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| **What opportunities are there to deepen and revisit learners’ disciplinary knowledge? What activities could be used to fill learning gaps?** | |
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| **How does this link to future learning?** | |
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Practical-centric sequencing

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

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| **What is the purpose of the practical activity? (Refer to page one)** | |
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| **What procedural and disciplinary knowledge do learners need to undertake the activity?** | **What equipment do learners know, perhaps with lower levels of precision?** |
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| **What equipment and techniques are new?** |
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| **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?** |
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| **What knowledge or understanding is being developed, deepened or consolidated?** |
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| **How does this activity link to future learning?** | |
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