

Sparx Science Baseline Assessment 2025

Guidance and Information

What is the aim of the Baseline Assessment?

The aim of the Baseline Assessment is to highlight to teachers any knowledge gaps that students may have from Key Stage 2, particularly in topics which underpin large amounts of science content delivered in Key Stages 3 and 4.

When should the Baseline Assessment be used?

The assessment has been designed to be used at the start of September. This ensures that teachers are informed of any gaps in student knowledge early in the new academic year, allowing for gaps to be filled ahead of related new content being covered in the classroom.

What topics are included in the Baseline Assessment?

The assessment focuses on Key Stage 2 topics, which are prerequisites for many topics taught in Key Stages 3 and 4. We split this by students' knowledge of the relevant scientific principles (their substantive knowledge) and scientific skills (their disciplinary knowledge). There is a maximum of 50 marks available on the assessment, with a 50:50 split between substantive and disciplinary knowledge. The topics we include in each of these areas are:

| Substantive knowledge | Disciplinary knowledge |
|---------------------------------------|-----------------------------|
| Living and non-living things | Planning scientific enquiry |
| Plants | Accuracy and precision |
| Food chains | Repeatability |
| States of matter | Risk |
| Physical properties of materials | Equipment |
| Reversible and non-reversible changes | Measurement |
| Forces | Units |
| Behaviour of light | Tables |
| Electricity | Graphs |
| | Conclusions |

Is the assessment tiered?

The assessment is not tiered; instead, we have written a single assessment for all students, allowing for useful comparisons across an entire cohort. We use a combination of question types (including multiple choice, filling out tables and short-answer questions) and careful ramping to ensure all students can experience success in demonstrating what they do or don't know.

What reporting features will be available?

Alongside the assessment, we will be providing a QLA. This will allow teachers to generate student, class and cohort level reports, providing students, teachers and school leaders with crucial insights on both a question and topic level.