The best teaching draws on the best evidence.
Research-evidence informed resources...

...to help students make progress in understanding **key concepts** in science education.

...and to help teachers develop **evidence-based practice**.
Progression without levels

A progression toolkit for each key concept helps you to test and develop understanding.

A research-informed progression pathway of learning steps describes what students should be able to do as their understanding of the key concept develops.
Diagnose misunderstandings

Research-informed diagnostic questions help you to collect:

- evidence of preconceptions and misunderstandings
- evidence of learning
- evidence of where your students are in their conceptual progression.

They provide feedback from student to teacher, and can be used formatively to decide what happens next.
Promote metacognition and meaning making

Research-informed response activities:

• facilitate metacognitive talk and dialogue
• encourage meaning making
• promote group discussion and purposeful practical work.

They help to challenge misunderstandings and overcome barriers to conceptual development.
Evidence-informed practice

Teacher notes for every resource summarise the underpinning research evidence.
Developing understanding

The BEST resources can be incorporated into existing schemes of learning...

...or use our research-informed maps to sequence key concepts to build understanding of the big ideas of science.
The resources have been developed from the best available research evidence on:

- sequencing and teaching of key concepts
- effective formative assessment
- constructivist approaches to building understanding.

The resources are being developed by the University of York Science Education Group in collaboration with science teachers and the Salters’ Institute.

We are providing FREE online access to the resources in collaboration with STEM Learning to support science teaching.