



# MATHS AND SCIENCE - A COLLABORATIVE APPROACH

# A project designed to develop a coherent and consistent mathematical journey for students in mathematics and science

This project focuses on participant teachers from maths and science departments from one school, working together with maths and science colleagues from other schools.

A project to explore the mathematical skills required in science before they are learned in mathematics - exploring when mathematical content is taught in addition to how it is taught.

## Who can take part?

Participants should be secondary school teachers of maths and science. Pairs of teachers from a school participate, with an expectation that they will work with other members of their departments at appropriate points.

#### What is involved?

The Work Group will follow a workshop – school-based work cycle, consisting of several workshops followed in each case by specific school-based work. Workshops will provide opportunities for teachers to develop a coherent and consistent mathematical journey for students in mathematics and science, to work collaboratively to develop pedagogical approaches to whole school teaching, and to evaluate and discuss this approach after teaching.

It is considered important that successful methods of learning mathematics are shared across disciplines leading to consistency of approach or at least an understanding of differences.

- Collaboration through the online Basecamp community
- Try out aspects of the Work Group back in school and record your reflections
- Contribute to the Maths Hub and NCETM final evaluation

#### Dates:

- Dates and times will be negotiated with participating schools
- Equivalent to 3 full days during this academic year



### What will you learn?

Participants and their departments will:

- Explore mathematical methods.
- Develop a greater awareness of the mathematical demands placed on students in other subjects.
- Teachers of mathematics will be better placed to frame mathematical content in unfamiliar, real-life contexts appropriate to student learning in other curriculum areas.
- Teachers of science will have a greater understanding of the mathematics taught and the representations used in their schools.

#### What is the cost?

The Maths and Science – A Collaborative Approach project is **fully funded** by the Maths Hubs Programme and so is **free** to participating schools.