



## STEM Learning's mathematics CPD support for teachers of science

### Mathematics and science teachers working together

An opportunity for one teacher from the mathematics department and one teacher from the science department to jointly attend our face-to-face, residential continuing professional development (CPD) programme at the National STEM Learning Centre, in York.

#### Developing shared approaches to maths in science and science in maths

One teacher of GCSE mathematics and one teacher of GCSE science working together over three days will:

- understand the similarities and the differences between requirements of the two specifications
- consider approaches to teaching mathematical topics common to the mathematics and science curricula
- develop and implement practical, sustainable models for departments working together
- create a joint action plan to be implemented back in school

[> More information](#)

## A level mathematics and A level physics working collaboratively

One teacher of A level mathematics and one teacher of A level physics working together over two days will:

- explore how mathematics pedagogy may be applied in physics
- consider how the use of graphing technology can be used consistently in the teaching and learning of each subject
- the benefits of using simple practical activities in the mathematics classroom
- consider how best to support A level physics students who are not studying A level mathematics

> [More information](#)

## Mathematics support for teachers of A level science

Our series of mathematics subject knowledge and pedagogy for A level teachers of science as part of our face-to-face continuing professional development (CPD) programme at the National STEM Learning Centre, in York.

### Maths for A-level biology

For teachers of A level biology working over two days will:

- explore how to support students apply their level 2 mathematics knowledge in a level 3 context
- the interpretation of logarithmic scales in graphs
- understand why statistical tests are used in biology
- chi-squared test
- t-tests
- Spearman's rank correlation

> [More information](#)

### Maths for A-level chemistry

For teachers of A level biology working over two days will:

- explore how to support students apply their level 2 mathematics knowledge in a level 3 context
- use of graphs in A level chemistry
- the use of log base 10 in the pH scale
- the use of natural logs in the Arrhenius equation
- techniques to develop mathematical reasoning, problem solving and resilience

> [More information](#)

### Maths for A-level physics

For teachers of A level physics working over two days will:

- explore how to support students apply their level 2 mathematics knowledge in a level 3 context
- use of graphs in A level physics
- effects of differentiation and integration
- teaching mechanics
- logarithms and exponential functions

> [More information](#)

Our Science Learning Partnerships (SLPs) combine local expertise in teaching and learning in science, facilitating CPD, and providing school-to-school support.

Further mathematics support for teachers of science, from support with graphs to rearranging equations, is available through by your local Science Learning Partnership.

 [You can find your local Science Learning Partnership here](#)