The Ogden Trust

making physics matter

PRIMARY PHYSICS PROFESSIONAL LEARNING

11 July 2019 • 9.15am–3.00pm

in partnership with

The King's School Canterbury

PARTNERSHIPS

Join us for a packed day of professional learning delivered by physics and primary science specialists. Ideal for science co-ordinators.

Magnetic mathematics

This practical problem-solving workshop demonstrates how maths skills can be developed through teaching the primary science topic of forces and magnets. Delegates will learn how the maths curriculum can be brought to life and made relevant through problem-solving in a science context, providing greater opportunities for children to become immersed in their scientific learning. We will share a number of strategies and resources that can be taken back to school.

Electrifying English

This workshop focuses on how English skills in reading and writing can be developed and practised through the primary science curriculum. Delegates will be shown strategies to support English learning while providing opportunities for children to secure and embed their ideas about electricity and working scientifically. A central theme throughout the workshop will be how different types of scientific enquiry work provide opportunity for developing skill and confidence in reading and comprehension as well as more formal, non-fiction writing styles.

Physics focus – light and sound

This interactive lecture will cover the key concepts of light and sound required by the Key Stage 2 curriculum. Easy to replicate demonstrations will provide the hooks for engaging pupils and delegates will develop skills to deepen their understanding through practical investigations and using questions to promote challenge. The workshop will model many strategies to ensure that 'working scientifically' skills are developed within this subject area.

Creative cosmos

This session shows how to use space as a context for cross-curricular projects. Space is a topic that fascinates our pupils and we will look at ways of incorporating art, creative writing, design & technology, computing, English and maths in this context. Resources will be provided to help you plan a whole school 'Space Week'.

Curriculum focus points

Mathematics curriculum focus

- Measuring knowledge and skills related to science enquiry
- Developing confidence in statistics knowledge and skills through science enquiry
- Drawing and interpreting graphs and charts
- Providing opportunities for learners to apply their knowledge of shape to problems in scientific contexts
- Linking Year 6 algebra learning to scientific contexts

English curriculum focus

- Using age appropriate fiction texts to provide children with opportunities to become immersed in their science learning
- Exploring how texts are used by children in research enquiries to develop reading and comprehension skills
- Exploring how scientific enquiry work can provide an opportunity for children to develop non-fiction writing styles and skills
- Exploring how science can be used as a context for a variety of writing genres: report writing, letter writing, argument texts, explanation texts, instructions
- Identifying specific areas of grammar, presentational devices and punctuation that can be developed through science writing
- Identifying opportunities for Year 6 learners to use the passive voice in their science writing

Broader curriculum focus

Ideas for developing science learning across the broader curriculum through:

- **Creative writing**
- **Design & technology**
- **Art**
- **Computing**
- **Drama**

Science curriculum focus

- Exploring how light travels, reflects and how shadows are formed
- Investigating how sound travels and the relationships between sound vibrations, volume and pitch
- Understanding our solar system
- Investigating magnetic materials and comparing the strength of magnets
- Exploring how forces are used in the world around us
- Identifying and classifying conductors and insulators
- Analysing simple circuits and investigating how changing voltage affects the behaviour of components in an electric circuit

Course costs funded by King's School

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#P3L2019

To book a place, please visit:
https://forms.gle/AkhdmTWffJgvjeWp7