

**HAMPSHIRE & DORSET
SCIENCE LEARNING PARTNERSHIP**

SECONDARY SCIENCE COURSES

SPRING TERM

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HAMPSHIRE & DORSET SLP

Science Learning Partnerships are your local curriculum hubs for Science. Hampshire and Dorset SLP is led by Thornden School in Hampshire, which is part of HISP Multi-Academy Trust. As a SLP we work collaboratively with schools across the region, combining local expertise in primary, secondary and post-16 teaching and learning in science, facilitating CPD, and providing school to school support.

More information can be found at:

<https://www.thornden.hants.sch.uk/sciencelearningpartnership>

WELCOME FROM STEVE SMITH

Welcome to the Hampshire and Dorset Science Learning Partnership Spring Term face to face CPD overview. We'd like to thank everyone who engaged with us last term both face to face and remotely through our network meetings and training programmes.

This term we are expanding our offer in terms of both the types of CPD programmes and the locations of delivery so that we can hopefully meet more science colleagues across the large region we cover as an SLP. As well as the face to face CPD we'd also like to draw attention to the extensive online CPD offer we are running in collaboration with Oxfordshire and Reading, Sussex and Surrey and Kent and Medway SLPs.

To find information about our programmes, including how and which courses are subsidised through the use of teacher release payments, we suggest checking out our webpage Science Learning Partnership (thornden.hants.sch.uk) and to follow us on Twitter [@hantsdorsetslp](https://twitter.com/hantsdorsetslp). Please also get in touch by emailing c.langley@hispmat.org if you would like any bespoke science CPD for your school or MAT.

Wishing you all the best for the new term and I hope to be welcoming you on one of our training events this term.

Steve Smith

Hampshire and Dorset SLP Lead



SCIENCE TECHNICIAN CONFERENCE

MONDAY 6 FEBRUARY | 10am - 3pm

Join us for the 2023 Hampshire & Dorset conference for science technicians. The conference involves a full day of guidance and support for science technicians including a keynote speech and a choice of workshop sessions across the sciences.

Work towards successfully implementing the new skills and knowledge acquired. Describe and apply policies, procedures and actions that will lead to an effective and efficient technical service. Describe and explain safety implications and how to address them.



Face to Face Course

4

For more information, email c.langley@hispmat.org

SUBSIDY of

£100
available*



Please note:

- Full agenda will be announced soon
- Lunch and refreshments will be provided

Location: Thornden School, Chandler's Ford, Eastleigh, SO53 2DW

Cost: Maintained £50* | Non-Maintained £100

BOOK NOW

*Teachers at maintained schools can access a **£20 subsidy** which is paid back directly by STEM Learning after attending the conference.

Please use the following discount code at the time of booking: **TRP2223**

For full course range visit, www.thornden.hants.sch.uk/sciencelearningpartnership

5

USING THE OFSTED RESEARCH REVIEW:

SCIENCE TO MOVE YOUR CURRICULUM TOWARDS EXCELLENCE

WEDNESDAY 18 JANUARY or WEDNESDAY 22 MARCH | 10am - 3pm

Identify key messages from the Ofsted Research Review: science and evaluate and develop your own curriculum provision.

Following the publication of the Ofsted Research Review: science in 2021, this course is designed to enable participants, from any phase, to review their curriculum against the key messages. The course will highlight the key findings and provide a facilitated forum for sharing ideas with peers. Participants will work together, evaluating their curriculum against Ofsted's findings and planning the next steps in the development of their curriculum.



By attending this session you will:

- Become familiar with the key findings of the OFSTED Research Review: science
- Discuss implications with peers within and across phases
- Be able to review their curriculum against the findings
- Begin, with support if required, to develop their curriculum in the light of the evidence presented.

WEDNESDAY 18 JANUARY	Tanners Brook Primary School, Elmes Drive, Millbrook, Southampton, SO15 4PF	10am - 3pm	BOOK NOW
WEDNESDAY 22 MARCH	Highcliffe School, Parkside, Highcliffe, Christchurch, BH23 4QD	10am - 3pm	BOOK NOW

Cost: Maintained: £185* | Non-Maintained: £370

*Teachers at maintained schools can access a **£100 subsidy** which is paid back directly by STEM Learning after attending the course.

Please use the following discount code at the time of booking: **TRP2223**

National Apprenticeship Week

6th–12th February

NAW 2023



NATIONAL CAREERS WEEK

6 - 11

MARCH 2023

IT'S NATIONAL CAREERS WEEK 2023

National Careers Week

NCW

Headline Partner:



SUPPORTING TEACHERS WITH GCSE REQUIRED PRACTICALS

This training day aims to support science teachers with the effective teaching of GCSE Required Practical's. Prior to the day, participants will be able to select the specific Required Practical's they wish to cover during the day so that it is personalised to their needs. They will be supported by a walkthrough of the identified RPs, including the advice and resources to support the planning, setting up, and delivery of these.

You will be able to:

- Be more confident in the teaching of GCSE Required Practical's.
- Teachers will develop an understanding of what makes an effective practical experience for students so that it isn't just a 'tick box exercise'

THURSDAY 12 JANUARY | 10am - 3pm



Face to Face Course

Location: Thornden School, Chandler's Ford, Eastleigh, SO53 2DW

Cost: Maintained £95 | Non-Maintained £190

BOOK NOW

For full course range visit, www.thornden.hants.sch.uk/sciencelearningpartnership

TEACHING TRIPLE SCIENCE AT GCSE

This training day aims to support science teachers with the effective teaching of GCSE Required Practical's. Prior to the day, participants will be able to select the specific Required Practical's they wish to cover during the day so that it is personalised to their needs. They will be supported by a walkthrough of the identified Required Practical's, including the advice and resources to support the planning, setting up, and delivery of these.

You will be able to:

- Be more confident in the teaching of triple science at GCSE.
- Teachers will be confident in setting up and running the Required Practical's to run these back in school.

THURSDAY 2 FEBRUARY | 10am - 3pm



Face to Face Course

Location: Thornden School, Chandler's Ford, Eastleigh, SO53 2DW

Cost: Maintained £95 | Non-Maintained £190

BOOK NOW

SUBJECT KNOWLEDGE ENHANCEMENT FOR SECONDARY SCIENCE NON-SPECIALISTS

This face-to-face full day session is aimed at non specialist, Secondary Science teachers who wish to develop their confidence in understanding and teaching various areas of Biology, Chemistry and Physics. 2 Professional Development Leads will be available to provide personalised subject knowledge enhancement that suit the needs of the participants, with participants able to specify their requirements prior to attending the session.

You will be able to:

- Develop confidence in your understanding of specific areas of the curriculum of your choosing.
- Identify various approaches to teaching subject content.
- Identify and rectify and misconceptions that may arise in the classroom.

TUESDAY 28 FEBRUARY | 10am - 3pm



Face to Face Course

Location: Tanners Brook Primary School, Southampton, SO15 4PF

Cost: Maintained £95 | Non-Maintained £190

BOOK NOW

SUPPORTING PUPILS WITH SEN IN MAINSTREAM SCHOOLS: SECONDARY SCIENCE

This course will explore and summarise the recommendations from the EEF's SEN in mainstream schools guidance report, and the Whole School SEND teacher handbook, in a science context.

Over the course of the day we will exemplify and provide an overview of strategies to use in the secondary science classroom to support pupils with SEN. Themes will include:

- Creating an inclusive environment
- Strategies to scaffold learning
- Evidence informed teaching strategies
- Working effectively with Teaching Assistants

THURSDAY 2 MARCH | 10am - 3pm



Face to Face Course

Location: Tanners Brook Primary School, Southampton, SO15 4PF

Cost: Maintained £95 | Non-Maintained £190

BOOK NOW



Stand out from the crowd

Inspiring young people to gain skills through research



Contact us at stem.org.uk/
[nuffield-research-placements](https://nuffield-research-placements.org/)



supported by



Primary Engineer Programmes
...the first step®



IF YOU WERE an ENGINEER What would you do?®

Engineering is a diverse and exciting field open to more young people than is often thought. 'If you were an engineer, what would you do?' is a free annual, national, competition that celebrates every single entry!



PRIMARY ENGINEER® LEADERS AWARD COMPETITION

One of our national competitions, the Leaders Award, asks the question; "If you were an engineer, what would you do?"

The competition encourages pupils from the ages of 3-19 across the UK to identify problems in the world around them and come up with creative solutions for them, embedding within them through the whole process that creative problem solving is a key part of being an engineer.

This helps kickstart an interest and passion for engineering and through our industry partners we are able to introduce pupils to the real life professionals that lead the industry forward, giving them first-hand experience of what it means to be an engineer.

Every pupil who takes part receives a graded certificate from a real life engineer!

GET INVOLVED

Register to access the lesson plans, pupil log-books, guides, curriculum mappings and entry submission information. Resources are also available in Welsh. When you register you can access the live online engineer interview schedule to book.

We can accept entries to this year's competition up to 22nd March 2023.

Register here: www.leadersaward.com



ENGINEERS IN THE MAKING



@LEADERSAWARD
WWW.LEADERSAWARD.COM



STEM
OPPORTUNITIES IN AVIATION

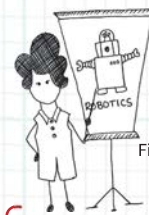


Primary Engineer® Programmes
...the first step



IF YOU WERE an ENGINEER What would you do?®

2.



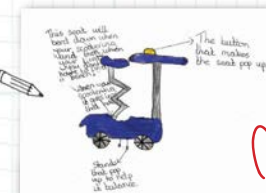
Find an engineer to come to your school to discuss engineering and to be interviewed by pupils or ...

3.



Pupils each identify a problem that affects them, their family, their neighbourhood or the whole world

4.

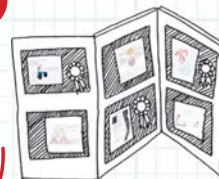


Pupils illustrate and annotate their design. They must also provide a letter to persuade engineers to build their design.

5.

SEND ENTRIES TO:
LEADERS AWARD FLOOR 2
AMS OFFICE TOWER,
AMS TECHNOLOGY PARK,
BILLINGTON ROAD,
BURNLEY
BB11 5UB

7.



Winners are selected and entries are shortlisted for exhibitions.

PASS
MERIT
DISTINCTION

6.



All entries are then marked by engineers and are graded pass, merit or distinction

8.



University partners will select a design to build.

IF YOUR SCHOOL WOULD LIKE TO TAKE PART IN THIS EXTRAORDINARY COMPETITION PLEASE CONTACT:
INFO@LEADERSAWARD.COM
FOR MORE INFORMATION VISIT WWW.LEADERSAWARD.COM



@LEADERSAWARD
#IfYouWereAnEngineerWhatWouldYouDo?

ONLINE SCIENCE SUBSCRIPTION FOR YOUR SCIENCE DEPARTMENT

Brought to you by your local Science Curriculum Hubs (SLP's)

We are delighted to be launching a comprehensive package of Science CPD support to schools across South East. The package can be accessed by your **whole science department and other colleagues teaching science in your school** to support your CPD needs.

The package of support is from January 2023 to July 2023 offering great value for money Science CPD support.

ONLINE PACKAGE

**RRP: £1,000+
CPD PER TEACHER**

- Narrowing the Gap (Education recovery)
- Health & Safety for Technicians
- Subject Knowledge Enhancement KS3/KS4 Chemistry
- Subject Knowledge Enhancement KS4 Physics (Forces and Motion, Electricity – OHM's Law, Nuclear Radiation and Hooke's Law)
- Teaching in Science (enriching science pedagogy)
- How to teach A-level Chemistry (SKE KS5 Chemistry)
- Secondary Science ECT Planning Series
- Subject Knowledge Enhancement KS5 Physics
- Subject Knowledge Enhancement KS3/4 & KS5 Biology
- Secondary Design
- Online Technician Conference plus many more to be announced a minimum of 20 courses available during the period.

Cost: £450 (*Subsidy available of £250)

Actual cost: £200 (ex-vat) available to all maintained schools

PURCHASE ONLINE PACKAGE

ENHANCED PACKAGE

**RRP: £1,500+
CPD PER TEACHER**

Access to all online CPD support mentioned plus:

- Personalised needs analysis for your science department conducted by Science CPD Expert
- 2-hour bespoke science department CPD
- 25% discount for face-to-face courses delivered by South East SLP's.

Cost: £700 (*Subsidy available of £350)

Actual cost: £350 (ex-vat) available to all maintained schools

PURCHASE ENHANCED PACKAGE



= **Part of the online subscription package**
(you will see this icon throughout the brochure).

PleaseFor any questions or queries please contact James Bennett via e-mail: james.bennett@canterbury.ac.uk



***Please note subsidy payments will be paid directly to your school from STEM Learning.**



WELCOME TO THE NEW TERM SECONDARY NETWORK MEETING

Here at Hampshire & Dorset SLP your local science curriculum hub launch the upcoming Secondary CPD offer for the new term.

We hope you can join us for this FREE webinar to hear about how we can support you and your science team.

In addition, hear from many network partners about different opportunities upcoming up in the new term for your school including your local STEM Ambassador Hub to talk about the enrichment courses, upcoming live talks, getting ready for BSW and much more.

We hope you can join us for this virtual twilight session.

TUESDAY 10 JANUARY | 4.15pm - 4.45pm

VIRTUAL



Remote Online Platform: Zoom

Cost: FREE

BOOK NOW



GETTING READY FOR BRITISH SCIENCE WEEK

Our annual Getting Ready for British Science Week to bring you a session will full of ideas and resources to support your school on getting involved with British Science Week 2023 taking place on 10th to 19th March 2023.

This year's theme is connections.

'Connections' as a theme offers a huge range of topics to delve into as part of your British Science Week 2023 activities, which links with multiple areas across science, technology, engineering and maths.

This CPD session will be supported by STEM Ambassador Hub Central South England.

WEDNESDAY 25 JANUARY | 4pm - 5pm



Remote Online Platform: Microsoft Teams

Cost: FREE

BOOK NOW

SUBJECT KNOWLEDGE ENHANCEMENT: PHYSICS KS4



Develop the background subject knowledge required to help planning and teaching physics for key stage 4. It will build on your knowledge from undertaking the key stage 3 physics course. Start your key stage 4 teaching with the tools and confidence to plan and teach effective learning for your physics classes.

You will explore ways of building student understanding, taking into account misconceptions and common issues in teaching these concepts.

WEDNESDAY 25 JANUARY	Forces and Motion	4pm to 5pm
WEDNESDAY 1 FEBRUARY	Electricity - ohm's law	4pm to 5pm
WEDNESDAY 8 FEBRUARY	Nuclear radition	4pm to 5pm
WEDNESDAY 22 FEBRUARY	Hooke's Law	4pm to 5pm



Remote Online Platform: Zoom

Cost: Maintained School £100 | Non-maintained School £200

BOOK NOW

SECONDARY SCIENCE EARLY CAREER TEACHER 'HOW I PLAN AND TEACH' KS3 SCIENCE SERIES

This FREE online 'How I plan and teach...' training programme aims to support Early career teachers with the planning and teaching of specific KS3 Biology, Chemistry and Physics concepts. Experienced science teachers will model the thought processes involved in the planning and teaching of various topics, as well as sharing tips, ideas and signposting useful resources.

This support cpd series will support you in your development of:

- Subject knowledge
- Effective short, medium and long-term planning
- Scientific explanations
- Teaching strategies

THURSDAY 26 JANUARY	Biology: Digestion and Nutrition Physics: Forces	4pm to 5pm	BOOK NOW
THURSDAY 9 MARCH	Biology: Photosynthesis Chemistry: Chemical Reactions	4pm to 5pm	BOOK NOW
THURSDAY 4 MAY	Chemistry: Acids and bases Physics: Electricity	4pm to 5pm	BOOK NOW
THURSDAY 15 JUNE	Biology: Ecology Physics: Light and Sound	4pm to 5pm	BOOK NOW

Remote Online Platform: Zoom

Cost: FREE

VIRTUAL

BOOK ECT PLANNING SERIES

BIG BIOLOGY EDUCATORS DAY



Theme: Sustainability

7th JULY 2023

VENUE: Colchester Zoo

£100 state maintained school £200 independent school *

* Freelance facilitators/ambassadors please email m.king@setsa.info for 100% discount code



Who is this aimed at?

Biology teachers
Biology facilitators
STEM ambassadors
STEM network
partners
SLP Leads
Learned societies



<https://tinyurl.com/mpkhrzwr>



EDUCATION RECOVERY: SUPPORTING DISADVANTAGED LEARNERS IN SCIENCE



School closures due to COVID-19 have impacted more negatively on disadvantaged learners than non-disadvantaged peers. This course brings together the findings from research on the barriers to the progress of disadvantaged learners and identifies the areas where are likely to have impact in the classroom. Strategies to support learners with aspects of literacy, scientific reasoning and metacognition are explored with participants also sharing their own good practice.

You will be able to:

- Increase familiarity with the research evidence linked with supporting disadvantaged learners
- Develop strategies and resources to support disadvantaged learners in science
- share good practice and identify actions to best support disadvantaged

TUESDAY 28 FEBRUARY & 28 MARCH | 4pm - 5pm



Remote Online Platform: Microsoft Teams

Cost: Maintained School £60 | Non-maintained School £120

BOOK NOW

LEADING ON SECONDARY SCIENCE CURRICULUM DESIGN



Consider what makes an effective curriculum. Progression in content and skills are explored and also how we can plan to support long term learning at curriculum level. External influences on curriculum development are considered and participants will explore development of schemes of learning to suit their own setting and identify next steps.

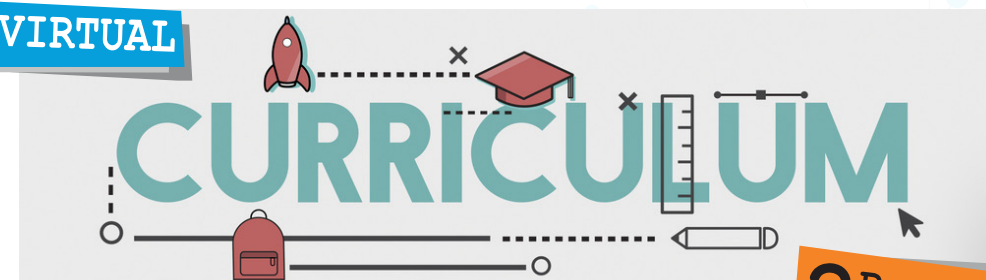
You will be able to:

- consider and begin to apply principles of effective curriculum design to develop the science curriculum in your school
- plan content as a sequence of progression and provide rationale
- plan for progression in practical skills through a secondary curriculum
- critique examples of schemes of learning and identify good practice for your own setting

Below is the schedule of the course which consists of 2 sessions:

TUESDAY 20 JUNE	Applying principles of curriculum design to turn curriculum aims into a long term curriculum mode.	2pm - 5pm
TUESDAY 27 JUNE	Planning progression in content	4pm - 5pm

VIRTUAL



Remote Online Platform: Zoom

Cost: Maintained School £100 | Non-maintained School £200

BOOK NOW

HOW TO TEACH A-LEVEL CHEMISTRY

Looking to improve your confidence in teaching A-Level Chemistry? Ben Griffin Smith is running six sessions between January and March covering main themes of the A-level syllabus. He will tailor the session to ensure delegates are able to best access the content.



MONDAY 30 JANUARY	PERIODICITY	5pm - 6pm
MONDAY 6 FEBRUARY	BONDING AND SHAPE	5pm - 6pm
MONDAY 27 FEBRUARY	QUANTITATIVE CHEMISTRY	5pm - 6pm
MONDAY 13 MARCH	REDOX CHEMISTRY	5pm - 6pm
MONDAY 20 MARCH	ORGANIC CHEMISTRY	5pm - 6pm
MONDAY 27 MARCH	ORGANIC CHEMISTRY 2 (MECHANISMS)	5pm - 6pm

Remote Online Platform: Zoom

Cost: Maintained School £120 | Non-maintained School £240

BOOK NOW

TECHNICIANS: HEALTH AND SAFETY



Technicians are at the heart of every science department, playing a crucial role in supporting effective practical work. With this comes a role in ensuring that the department is safe. Develop a good foundation for carrying out effective health and safety, to support you in your job, but also to support teachers and students.

You will be able to:

- understand the key areas of concern in science departments
- identify good practice in risk assessments for technician and teacher activities
- use good practice to audit labs, prep rooms and stores

For this course you must have a CLEAPSS username and password. If you are unsure of what this is please contact your school or ITT provider for more information.

THURSDAY 19 & 26 JANUARY | 1.30pm - 2.30pm

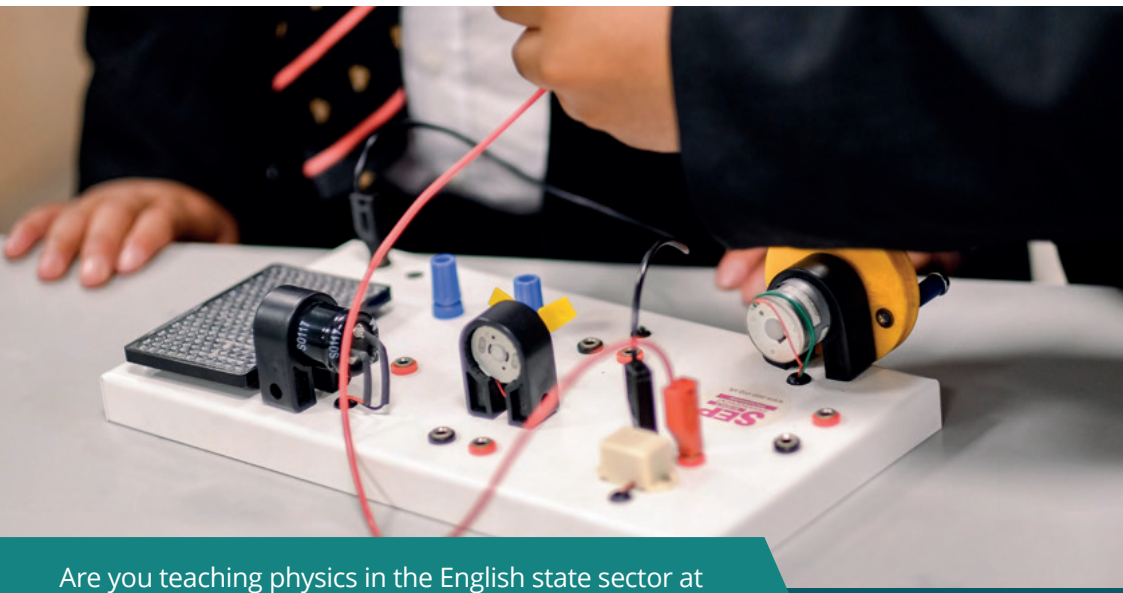


Remote Online Platform: Microsoft Teams

Cost: Maintained School £60 | Non-maintained School £120

BOOK NOW

Subject Knowledge for Physics Teaching



Are you teaching physics in the English state sector at KS3 or KS4 without physics specialism?

Do you want to develop your subject knowledge, pedagogy & confidence in the classroom?

FREE subject knowledge CPD

In completing SKPT, teachers will:

- develop skills & confidence in delivering lessons that bring physics to life in their classroom.
- consider mathematical problem solving, conceptual challenges, practical work & pedagogical reflections.
- be part of a supportive learning network led by experienced physics teachers & trainers.



Find out more about the programme and the modules available www.ogdentrust.com/SKPT

The **SKPT** programme comprises six modules. A selection of modules will be available each term; build your professional portfolio with the modules you need.

Each **SKPT** module will require up to 20 hours of learning over approximately eight weeks.

Modules will be led by a subject specialist & will include face-to-face sessions, online tutorials & independent learning.

On completion of a module, a £200 bursary will be available to the school (subject to conditions) as a contribution towards teacher cover costs & participants will be awarded digital badges.

October – December 2022

ELECTRICITY



WAVES



February – April 2023

MATTER & SPACE



ENERGY



May – July 2023

ATOMIC PHYSICS



FORCES



The delivery of the SKPT course has been brilliant. The in-person sessions and all the support online has been thought-provoking and enabled me to reflect on my current strengths and weaknesses and to approach improvement head-on.

Helen Assinder, Teacher of Science, La Retraite Roman Catholic Girls' School

Visit www.ogdentrust.com/SKPT for more information about the programme and to sign up.



Delivered by



SUBJECT KNOWLEDGE ENHANCEMENT CHEMISTRY KS4 SERIES



The Subject Knowledge Enhancement Chemistry series will help you to prepare for teaching the topics of Structures & Bonding, Organic Chemistry and Chemical Changes.

It is aimed at KS4 chemistry teachers, however if you are looking to improve your subject knowledge then they are suitable for chemistry teachers teaching at KS3 and KS5. Ideal for non-specialists (those teaching chemistry outside their degree specialism), early-careers teachers, NQTs, trainees are also welcome looking to deepen their understanding.

These 3 workshops will help you gain confidence in your understanding of chemistry and your ability to teach it engagingly. You will be introduced to lots of ideas and resources to help in your teaching and you will have the opportunity to ask questions.

Book for all 3 to gain real immersion in the subject or pop into individual workshops for help with a particular topic.

Cost for maintained schools:
£20 per course or £50 for all three courses

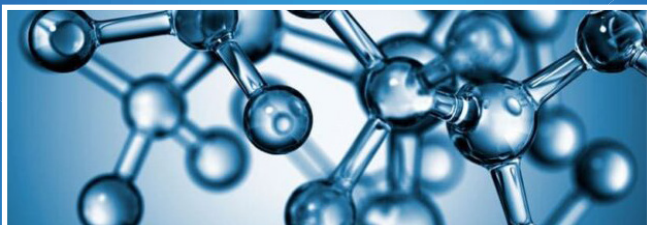
Taking place virtually using
Zoom

VIRTUAL

BOOK CHEMISTRY KS4 SERIES

Structures & Bonding Workshop 1:

MONDAY 23 JANUARY | 4pm - 5pm



In this workshop we will look at the different models and strategies used to teach ionic, covalent and metallic bonding. We will explore how these different types of bonding and structures are related to the properties of substances, unpicking some common misconceptions along the way.

BOOK NOW

Organic Chemistry Workshop 2:

MONDAY 30 JANUARY October | 4pm - 5pm

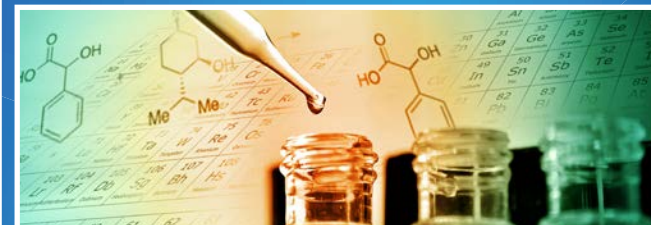


The processing of crude oil to produce fuels, polymers and various other useful substances requires an understanding of several chemistry concepts, linking several areas of the GCSE syllabus. In this workshop we will look at how crude oil is separated by fractional distillation, the structures and properties of different hydrocarbons, and how cracking produces smaller, more useful molecules.

BOOK NOW

Chemical Changes Workshop 3:

MONDAY 6 FEBRUARY | 4pm - 5pm



In this workshop we will look at the process of electrolysis, including the electrolysis of molten ionic compounds, extracting metals, and the electrolysis of aqueous solutions. This will include how to represent the reactions at the electrodes as half equations.

BOOK NOW

SUBJECT KNOWLEDGE ENHANCEMENT PHYSICS KS5 SERIES



The Subject Knowledge Enhancement Physics series will help you to prepare for teaching the topics of Waves, Fields and Particle Physics.

It is aimed at teachers at all stages of their teaching physics including teachers new to teaching at KS5 and especially teaching an area of KS5 not covered before. Ideal for non-specialists (those teaching physics outside their degree specialism), early-careers teachers, NQTs, trainees are also welcome looking to deepen their understanding, refreshing your skills and teachers who wish to develop their teaching at KS4.

These 3 workshops will focus on the subject knowledge needed to teach the content. You will explore ways of building student understanding, taking into account misconceptions and common issues in teaching key concepts. It will enable you to gain confidence in your understanding of physics. You will be introduced to lots of ideas and

Book for all 3 to gain real immersion in the subject or pop into individual workshops for help with a particular topic.

Cost for maintained schools:
£30 per course or £75 for all three courses

Taking place virtually using
Zoom

VIRTUAL

BOOK PHYSICS KS5 SERIES

PHYSICS FIELDS Workshop 1:

TUESDAY 21 FEBRUARY | 4pm - 5.30pm



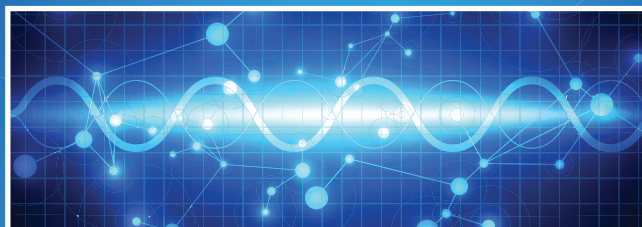
In this session will help you to prepare for teaching fields and will focus on the subject knowledge needed to teach the content.

You will explore ways of building student understanding, taking into account misconceptions and common issues in teaching key concepts.

BOOK NOW

PHYSICS WAVES Workshop 2:

TUESDAY 28 FEBRUARY | 4pm - 5.30pm



In this session will help you to prepare for teaching the topic of electricity and will focus on the subject knowledge needed to teach the content.

You will explore ways of building student understanding, taking into account misconceptions and common issues in teaching key concepts.

BOOK NOW

PARTICLE PHYSICS Workshop 3:

TUESDAY 7 MARCH | 4pm - 5.30pm



In this session will help you to prepare for teaching the topic of Particle Physics and will focus on the subject knowledge needed to teach the content.

You will explore ways of building student understanding, taking into account misconceptions and common issues in teaching key concepts.

BOOK NOW

ENRICHING SCIENCE PEDAGOGY SERIES



This course series explores and exemplifies some of the key recommendations from the EEF's 'Improving secondary science' and 'Metacognition and self-regulated learning' guidance reports, as well as the 'Cognitive science approaches in the classroom' systematic review.

These 3 workshops aimed at KS3/4 science teachers. Participants will develop an understanding of evidence informed approaches they can use back in the classroom to refine their practice.

VIRTUAL

Book for all 3 to gain real immersion in the enriching science pedagogy or pop into individual workshops for help with a particular focus.

Cost for maintained schools:
£20 per course or £40 for all three courses

Taking place virtually using

**BOOK ENRICHING SCIENCE
PEDAGOGY SERIES**

Metacognition

THURSDAY 16 MARCH | 4pm - 5pm



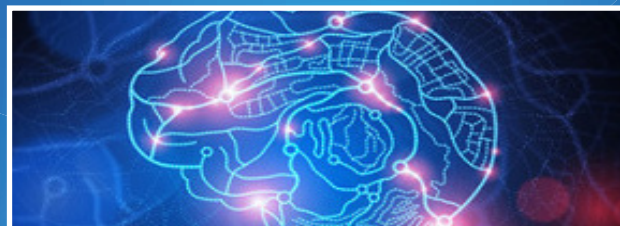
By the end of the session you will have a greater understanding of:

- What metacognition and self-regulation means
- Strategies to help pupils direct their own learning
- How to promote metacognitive talk in the classroom

BOOK NOW

Memory & Cognitive Science

THURSDAY 23 MARCH | 4pm - 5pm



By the end of the session you will have a greater understanding of:

- How to support pupils to retrieve and retain knowledge
- How to manage cognitive load
- Approaches to working with schemas

BOOK NOW

Misconceptions and modelling

THURSDAY 30 MARCH | 4pm - 5pm



By the end of the session you will have a greater understanding of:

- How to identify and address pupil misconceptions
- Using models to support understanding
- Effective approaches to feedback

BOOK NOW

Secondary Science CPD courses

‘National Chemistry Network Meeting (Teachers)’



Our keynote speaker Professor Vanessa Kind will be speaking about “beyond appearances” and student misconceptions in conceptual areas of Chemistry. Vanessa will suggest ways of supporting students to replace their previous misconceptions with correct concepts.

Professor Vanessa Kind is currently working at Leeds University, Professor Kind has written *Beyond Appearances: Students’ Understandings of Basic Chemical Ideas* for the Royal Society of Chemistry and a resource file *Building Success in GCSE Science: Chemistry*.

Date and time: 22nd February 2023, 4:00-5:00pm

Venue: remote

Fee: £0 / £20*

Book online or search code RH219 HC3
at <https://www.stem.org.uk/secondary/cpd>

Science Learning Partnership: covering West Herts, Bucks, Slough, Maidenhead and Windsor. If you have any questions, please contact Mandy, Kim or Karine Hubs@scd.herts.sch.uk



VIRTUAL NETWORK MEETINGS

EARLY CAREER TEACHER NETWORK MEETING

TUESDAY 21 FEBRUARY | 3.45pm - 4.45pm

VIRTUAL

Developing effective classroom management

The aim of this network is to contextualise the 5 core areas of the Early Career Framework - 'What does this look like in the science classroom?'. These webinars will provide the opportunity to reflect on and refine your practice, share good practice, network with other science ECTs across the South / South East region, and to signpost you to useful resources.

Remote Online Platform: Zoom

Cost: FREE*

BOOK NOW

HEAD OF SCIENCE NETWORK MEETING

TUESDAY 7 FEBRUARY | 4pm - 5pm

VIRTUAL

If you are new or an established Head of science then please come and join us for our virtual Heads of Science online meeting.

This will be an opportunity to discuss and share best practice in addition each meeting will focus on several themes relevant to all Head of Science teachers.

Remote Online Platform: Microsoft Teams

Cost: FREE*

BOOK NOW

*Please note if you do sign-up and do not attend there is a £25 non-attendance charge (unless you inform us prior to the meeting).

TOP TIPS FOR SOUTH EAST TECHNICIANS

WEDNESDAY 8 FEBRUARY | 1.45pm - 2.45pm

VIRTUAL

The technician network has expanded recently working collaboratively with Science Learning Partnership's across the South East. These will be taking place virtually every term and providing local face-to-face meetings across the South East working towards an blended approach.

The technician network is FREE to attend* and we welcome any technicians who would like to attend.

The agenda will be announced nearer the time.

Remote Online Platform: Microsoft Teams

Cost: FREE*

BOOK NOW

POST-16/ FURTHER EDUCATION NETWORK MEETING

THURSDAY 9 MARCH | 3.45pm - 4.45pm

VIRTUAL

This is an opportunity to collaborate with your peers so you can share information, ideas, resources and strategies to develop your teaching. You will be provided with expert help from science practitioners and consultants to identify priority issues, signpost support and will be able to develop solutions, drawing on the expertise of others within the group.

The network will explore various topics in different meetings, focusing on current and emerging priorities. It is suitable for anyone involved with delivering and/or leading science courses within the post 16/further education sector.

Remote Online Platform: Microsoft Teams

Cost: FREE*

BOOK NOW

*Please note if you do sign-up and do not attend there is a £25 non-attendance charge (unless you inform us prior to the meeting).



Secondary Assembly Talk: THE REALLY BIG, REALLY SMALL SHOW

Fri 27th Jan 2023 | 8.40 – 9.10am | Cost: FREE

Virtual Talk – Platform: MS Teams Live | Aim: KS3 /4

Join STEM Ambassador Andrew, from the National Physical Laboratory for a live talk describing how some new words (prefixes) can be used to describe some of the biggest and smallest things in science and engineering that affect your everyday life.

You will also meet some real scientists who investigate the very big and the very small, every day.

This live talk, aimed at secondary students, will be informative and engaging, with time to ask questions afterwards.

TO BOOK YOUR PLACE, VISIT

<https://reallybigreallysmallsecondary.eventbrite.co.uk>

High-quality CPD and support for primary and secondary teachers

The National Centre of Computing Education (NCCE) is funded by the Department for Education



Your local computing hubs

The South East is well served by four NCCE computing hubs, at **Bohunt School**, **Dartford Grammar School**, **Maidstone Grammar School for Girls** and **Newstead Wood School**.

Working with schools and colleges across the South East, the hubs offer an exciting programme of professional development and subject support across primary and secondary key stages 1 to 5.

Contact your local hub to find out how our expert team can support your school or trust.



Dartford & East Sussex

teachcomputing@dartfordgrammarschool.org.uk
@NCCESouthEast



London, Surrey & West Sussex

teachcomputing@newsteadwood.co.uk
@teachcomp_se



Maidstone & Kent

teachcomputing@mggs.org
@CompHubKent



West Sussex & Hampshire

teachcomputing@bohunt.hants.sch.uk
@BohuntNCCEHub



High-quality CPD

Teachers gain nationally recognised certificates with subsidies available to enable participation



Curriculum resources

The Teach Computing curriculum has everything you need to teach computing at key stages 1 to 4.



Physical computing kits

Teach Crumble, Micro:bit or Raspberry Pi in your classroom with one of our loan computing kits.



Free needs analysis

Meet with one of our subject matter experts and create an action plan for your school.

Who could benefit from the Stimulating Physics Network:

- early career teachers teaching physics
- technicians who would like more support
- schools that have no physics specialist in their school
- teachers who wish to develop their subject knowledge in physics
- teachers who would like to progress further in their physics teaching career
- teachers wanting to encourage more people to enjoy physics
- teachers who want to have more interesting ways of teaching the physics curriculum



SECONDARY

Getting started guide

Develop your students' project skills and make science personally relevant to them with CREST Bronze, Silver and Gold. **Typical age: 11-19**

A project based on the principle that all pupils should have a high-quality experience in science by improving the teaching of physics to:



improve participation in physics



improve attainment in physics



reinvigorate physics in schools

Your school will work with a dedicated physics coach and your support will typically include:

- a range of teacher CPD activities
- approaches to address issues of gender balance and inclusion
- complementary pupil engagement activities

There is **no cost to the school or its teachers** because the programme is fully funded by the DfE.

There is no commitment at this stage but please get in touch - we can discuss bespoke support for all the teachers of physics in your school.

Interested? Contact SPN@stem.org.uk
www.stem.org.uk/stimulating-physics-network



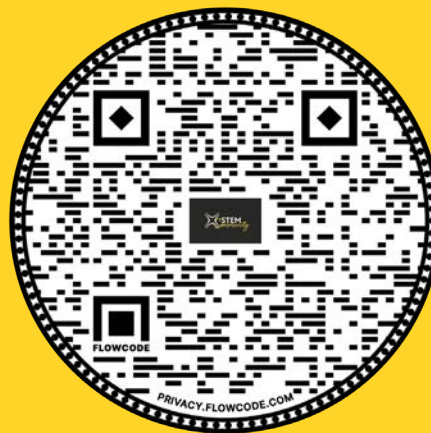
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REIMAGINE

Clean energy competition



Hands up if you want to join a supportive network of thousands of teachers and technicians...



community.stem.org.uk



#STEMcommunity

Great Science Share for SCHOOLS

NEW THEME for 2023

SCIENCE AROUND US

What are your pupils curious about?

#GSSfS2023

THE BIG BANG COMPETITION

GOT A STEM PROJECT YOU WANT TO SHARE?

ENTER

THE BIG BANG COMPETITION NOW

STEM CLUBS WORKSHOP

Local STEM Club Champion across England are delivering FREE CPD workshops for state-maintained secondary schools and FE colleges. Delivering CPD both face-to-face and remotely, they offer local support to your school to sustain and grow STEM-related clubs out-of-timetable for students. Lunchtime, after school, weekend and holiday clubs enhance and enrich the curriculum.

GETTING STARTED

THURSDAY 16 FEBRUARY | 4pm - 5.30pm

STEM Clubs are an ideal opportunity to enrich secondary schools' student learning, understanding and enjoyment of STEM subjects, helping to improve skill sets through fun and creative extra-curricular sessions. Utilising the knowledge of experienced club leaders, this workshop explores best practice, ideas, opportunities, hints, tips and advice that will assist new and inexperienced club leaders to maximise the benefits a STEM Club can bring to students, schools and themselves.

Remote Online Platform: Microsoft Teams

Cost: FREE

BOOK NOW

VIRTUAL

SURVIVING AND THRIVING

MULTIPLE DATES (Online - Self paced)

Course attendees will conduct a club audit to identify both strengths and weaknesses and use the information to create a club improvement plan that is supportive of the school improvement plan and STEM agenda.

The course has 6 modules including: reflecting on your club, developing engaging activities, stretching students' capabilities, being visible, funding and measuring impact.

Remote: Online - Self paced course

Cost: FREE

BOOK NOW

VIRTUAL

50+ STEM ACTIVITIES FOR ANY SECONDARY CLASSROOM



A selection of activities that can be done in any classroom, with very little equipment. These can be run outside of normal curriculum time, or as part of a science, mathematics, or D&T lesson



STEM AMBASSADORS

SUPPORTING STEM ACTIVITIES IN YOUR SCHOOL

STEM Ambassadors use their enthusiasm and commitment to encourage young people to engage with, and enjoy, STEM subjects.

They open the doors to a world of opportunities and possibilities which come from pursuing STEM subjects and careers.



**Take them to a world
beyond the classroom**

STEM Ambassadors are here to help you bring STEM subjects to life
Invite a STEM Ambassador into your lesson **today**



CLASS ROOM	STEM CLUBS	CAREER TALKS	DRAGONS DEN	ASSEMBLY TALKS
Practical activities (30-60mins)	Ambassadors acts as judges (30mins)	10 minute input with questions	Ambassadors acts as judges or consultants (60mins)	20 mins

- ✓ Log in or register an account: www.stem.org.uk/dashboard
 - ✓ Give an exact date and time when you want the STEM Ambassador to arrive
 - ✓ Give a specific year group
- Be as clear as possible with what you want the STEM Ambassador visit to achieve.
- What do you want the Ambassador to do?
 - Will they need to bring things?
 - What will they need to know about the class?
 - What are your intended outcomes?
- ✓ Prepare any necessary risk assessment for the activity taking place
 - ✓ Please ensure there are parking arrangements in place
 - ✓ Ensure that communication with the STEM Ambassador is maintained through the website

Request a STEM Ambassador on the go

With the STEM Teacher app ▶



BESPOKE TRAINING

Schools can always ask for a bespoke training session, tailored specifically to their school's needs. This could take the form of:

- A staff meeting, e.g. raising the profile of science, sharing ideas on science capital (what it is and how to improve learners' science capital), or a working scientifically reminder session
- A network event for a group of schools
- An in-house INSET day

Please contact us to discuss your requirements and we will arrange to meet you and customise your training.

We can also work with a subject leader on their action plan, or provide 1:1 support in school on resources, monitoring or conducting pupil voice activities.

"Great Signposting to other ideas and resources, opportunities to network and discuss ideas with others."

Teacher

"Science made accessible and simple to understand"

Teacher

"Super Practical activities, fantastic training, and thank you."

Teacher

"Loved the conference - pitched perfectly!"

Teacher



<https://www.thornden.hants.sch.uk/sciencelearningpartnership>

Contact Details for SLP:

Candice Langley: c.langley@hispmat.org

02382 145528

Follow us on twitter: [@hantsdorsetslp](https://twitter.com/hantsdorsetslp)

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