



WELCOME TO THE SCIENCE HUB NEWSLETTER

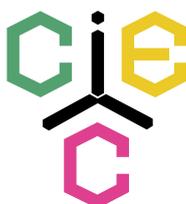
The focus of the hub is to support schools and individuals to develop their teaching of science in primary and secondary schools, and FE colleges across Lincolnshire.

All our programmes and projects are designed to have a positive impact on participants to ensure that we have a high impact on the science education of young people. To impact positively on young people we work with teachers and support staff working in science education across Lincolnshire to help improve subject knowledge, pedagogy and leadership.

LATEST NEWS...

CIEC - THE CENTRE FOR INDUSTRY EDUCATION

CIEC are putting the polishing touches to their new-look Children Challenging Industry programme for primary schools and there are opportunities for schools in our area to be involved (from January 2021).



The new interactive classroom sessions that CIEC and their industry partners have been preparing include new live and pre-recorded industry demonstrations, live Zoom-style Q&A sessions with scientists and engineers. They have a few places left in our area for this term (starting in October or November), so please email ciiec@york.ac.uk if you'd like your school to be involved and they will contact you with further details.

Other new resources from CIEC which would add to your science links to real life situations such as finding the most suitable material for fixing water pipes together etc can be found here

ciiec.org.uk/industry-at-home.html

STEM AMBASSADORS



The STEM Ambassador team have been reviewing their activities and found new ways of working. The opportunity to work virtually could include:

• INTERVIEW A STEM AMBASSADOR – WHAT'S MY JOB?

Would your children like to meet and talk to a microbiologist, a meteorologist or an RAF engineer via the power of the internet?

There are a range of STEM Ambassadors just waiting to virtually visit your classroom to open up your children's eyes to the exciting world of STEM. Each volunteer has created a powerpoint with picture clues about what they do which you can show to the children before the visit to generate discussion about what the volunteer does and get them to think of questions to ask. You could even ask them to draw what they think the visitor looks like - a great opportunity to dispel stereotypical ideas!

• SUPPORTING SCIENCE TOPIC WORK

Why not request a virtual visit from a STEM Ambassador to bring a particular science topic to life?

Our local STEM Ambassador contacts are:

Lincoln, South Lincolnshire and Rutland - Jo Winterbourne
joanna.winterbourne@leics-ebc.org.uk

North and North East Lincolnshire – Lesley Rollings
Lesley.rollings@leics-ebc.org.uk

"Thank you for an excellent day - incredibly useful and really engaging."

"Lots of ideas to make science teaching more relevant to everyday life and more enjoyable."

"It was all incredibly useful, massive range of ideas, books, resources and activities."

ISAAC PHYSICS

Teachers! Have you got Year 11 students studying Physics at GCSE or equivalent?

Isaac Physics Virtual GCSE Masterclass

Saturday 17th October 2020,
10am-1pm - Online via Zoom

This free 3-hour masterclass will be an intense workout to practise the physics concepts that students will need to get good grades in their GCSE exams. This is an ideal opportunity for Y11 students to spend quality time reviewing key topics so please encourage your students to sign up.

For Y11 UK students, studying Physics GCSE or equivalent in a state-maintained school

- Revise three topics in small groups with experienced tutors
- Students who use Isaac Physics regularly show evidence-based improvement in their exam grades and success in getting into good universities.

Please encourage your students to apply (they must apply themselves).

For further details and to book, visit:

isaacphysics.org/events/20201017_gcse_masterclass_virtual



Isaac are also offering a mentoring scheme to students in years 11-13. Students are set an assignment per week (taking about one hour).

There are tutorial videos and online mentoring from experienced physics teachers.

Please encourage your students to sign up to this free online support.

isaacphysics.org/pages/isaac_mentor

SCIENCE FOCUSED WEEKS

SPACE WEEK - 4th-10th October • TOMORROWS ENGINEER'S WEEK - 2nd-6th November

FARMVENTION



Farmvention is back, bigger, better and for longer. This year, the challenge is all about the problems that climate change creates for British farmers and how they are fighting it to become Climate Superheroes.

More details and ideas for investigations at our Autumn Networks.

www.farmvention.com



INSTITUTE OF PHYSICS

The IOP Domains CPD programme is now live and the videos are available to all. No login is required and this is not limited to IOP schools.

spark.iop.org/collections/iop-domains-forces-cpd

For information on the discussion sessions go to TalkPhysics:

www.talkphysics.org/events/domains-cpd-programme-2020-21

Teachers will get the most from this by watching (and reflecting) on the videos, and joining in with the coach-led discussions.

IOP Institute of Physics

PRIMARY SCIENCE SUBJECT LEADERS' MEETINGS

Each session has a focus and includes updates on resources, initiatives, grants, funding and the national picture and gives an opportunity to collaborate with colleagues and share best practice.



£50
each or
£100
for all 3

Please contact us
for more information
or to book

TO
ENSURE YOUR
FREE PLACE
book before the first
session and use the code
SLP2020QW100
for one of the
3 bookings

ONLINE REMOTE DELIVERY SESSIONS

- Monday 19th October 10am-12pm
- Wednesday 21st October 1.30pm-3.30pm
- Monday 2nd November 1.30pm-3.30pm
- Wednesday 4th November 1pm-3pm

FOR SPRING/SUMMER 2021 DATES PLEASE SEE OUR WEBSITE

PRIMARY OFSTED COURSES

TO BOOK VISIT OUR WEBSITE

£60
+VAT

Book
both courses
and get the second
HALF PRICE
Use the code
SLP2020TY50
against one
booking

OFSTED 2019 FRAMEWORK IN ACTION – VOCABULARY

Tuesday 3rd November 2pm-4pm
Long Sutton Primary School, Spalding PE12 9EP

Monday 9th November 2pm-4pm
The Keyworth Centre, Lincoln LN6 0EP

You will explore a range of strategies designed to improve children's ability to use scientific language. You will be able to maximise the opportunities for developing literacy skills and improving attainment in science by planning lessons in which children communicate science ideas, knowledge and understanding.

You will be able to:

- gain an awareness of the nature and breadth of opportunities for improving science vocabulary
- develop strategies for raising attainment in science through developing speaking, listening and application of those skills to communicate scientific learning
- begin to identify progression in science vocabulary.

SCIENCE, STEM & THE NEW OFSTED FRAMEWORK - DEEP DIVES

Tuesday 17th November 2pm-4pm
Long Sutton Primary School, Spalding PE12 9EP

Wednesday 18th November 2pm-4pm
The Keyworth Centre, Lincoln LN6 0EP

How to ensure the Ofsted 3Is are embedded in your primary science curriculum.

Let's put the spotlight back on science. Discuss key strategies to ensure that the intent, implementation and impact of your science curriculum is evident throughout school.

You will be able to:

- identify and develop a whole school vision for primary science (intent)
- describe strategies to ensure science is delivered effectively across the school (implementation)
- begin to develop strategies to evaluate pupil's success in science (impact)
- begin to prepare for a deep dive.

REMOTE CPD COURSES

Remote CPD courses have live, facilitator-led sessions and are not available for instant access. Please refer to the schedule of dates published for each course instance.



SUBJECT KNOWLEDGE ENHANCEMENT: PHYSICS KS4

Start your Key Stage 4 teaching with the tools and confidence to plan and teach effective learning for your physics classes. Sessions include making links between forces and motion using Newton's Laws and understanding electricity and magnetism using a stepped series of student-led activities.

4 SESSIONS WITH 3 GAP TASKS

- **Monday 9th November** 4pm-5pm
- **Thursday 12th November** 4pm-5pm
- **Monday 16th November** 4pm-5pm
- **Wednesday 18th November** 4pm-5pm

SCIENCE SUBJECT LEADERS' DEVELOPMENT MEETING ONLINE PROGRAMME

1 hour sessions with 15 mins questions afterwards (75 mins)
Time 4pm-5.15pm • Session 1: FREE, Sessions 2 & 3: £25 each



GCSE exam update

Martin Reece
Monday 19th October

With the recent statement from OFQUAL about the changes to GCSE for 2021, this session will give you the opportunity to discuss strategies and solutions to the challenges around preparing students for assessment, especially around practical work.

Managing Well-being & Mental Health: the Zero is Hero approach

Dr Andy Chandler-Grevatt
Tuesday 17th November

Based on his own experience and from supporting trainee teachers and NQTs, Andy has many practical strategies for managing mental health. In this session he will share his Zero is Hero approach, a mind set to move away from perfectionism and towards sustainable teaching. You will leave with confidence and practical approaches for supporting and maintaining good mental health and well-being in yourself and your colleagues.

Building in progression to your KS3-4 science curriculum - looking beyond Ofsted's 3Is

David Shakespeare
Wednesday 9th December

Moving your curriculum from its 'Intent' to its 'Implementation', this meeting will support a critical self-review of how effectively your school develops students skills and understanding from Y7 to Y11, and will provide an approach to enhancing it further.