

TEACHER WEBINAR

NEW: TEACHING GCSE PHYSICS EFFECTIVELY 2: FORCES AND ENERGY

FOCUS

This course offers support and ideas to anyone who wants to improve their teaching of Forces and Energy at GCSE. Suitable to NQTs, RQTS and second subject teachers, this course aims to boost pedagogical knowledge of delivering the subject, practical ideas on how to deliver the curriculum and support subject knowledge while at the same time raising teacher confidence levels in teaching GCSE Physics. This is a fully interactive live online sessions

These webinar sessions are led by Physics teacher expert Mark Lawrenson, whose GCSE Physics lessons have been consistently graded Outstanding by Ofsted.

There are 3 webinars in the series. These are course codes 8226, 8227 and 8228. They can be bought as a series for £260 or standalone webinars for £110 each.

ABOUT THIS SESSION

In this session, we shall be focussing on how to teach two of the conceptual topics; forces and energy. We shall consider practical methods of delivery, misconceptions and how to develop students' skill sets to confidently tackle higher level questions.

PROGRAMME

	TIME
Teaching Forces – an overview <ul style="list-style-type: none"> ● Overview of forces curriculum ● Approaches to teaching, differentiation approaches for students of all abilities ● Developing a narrative using forces – resources to “tell the tale” ● Chunking the topic and examining the teaching order 	4.00 – 4.20pm
Forces – Misconceptions, Methodologies and Models <ul style="list-style-type: none"> ● Force is a vector – how to incorporate maths skills, drawing vector diagrams and common misconceptions ● Kinematics – teaching it practically – effective experiments to develop learning ● Newtons Laws – how they underpin so much of the forces topic and how to apply them in the classroom 	4.20 – 4.45pm
Energy – an overview <ul style="list-style-type: none"> ● Changes in emphasis – how energy pathways and energy stores have changed the way we think about energy and how to teach the concept ● When to teach energy – is it best to teach it at the beginning of a GCSE course? ● Visualising the invisible – how to quantify energy transfers 	4.45 – 5.00pm
Energy – Engagement, Explanations and Errors <ul style="list-style-type: none"> ● Practical Activities to excite and engage in the topic ● Energetic accounting – how energy all adds up ● Raising attainment across the board. How to truly stretch and challenge all and boost their grades with revision materials 	5.05 – 5.25pm
Review and Q&A	5.25 – 5.30pm

DATE

Monday 22 March 2021
Tuesday 22 June 2021

WEBINAR LEADER

As a highly experienced and dedicated science specialist, **Mark Lawrenson** has led a number of Science Departments as well as a number of Senior Leadership roles. His passion for science and science education have included working with a National STEM Learning Centre, ASE, A Level Physics examiner with a leading awarding body, amongst others. A finalist in the Rolls Royce Science Prize and keep physicist, Mark continues to develop his own teaching as well as others. His Physics lessons have consistently been graded Outstanding by Ofsted.

BENEFITS

- Effective, tried and tested teaching approaches, and techniques to teach Forces and Energy
- Key challenge points, ways to embed sound learning and understanding in students on these difficult topic areas
- Ways to ensure students retain knowledge on Forces and Energy and how to help them apply their knowledge accurately when answering exam questions on these topics
- Confidently tackle challenging questions, following expert guidance from the course leader
- Take away revision activities covering Forces and Energy
- Target higher grades with guidance on how to apply their knowledge in the exams
- Engage with a wider range of resources to engage, inform and challenge their thinking