# **GATEWAY SCIENCE PHYSICS A J249**



# **Support highlights**

We know teaching has been greatly disrupted in 2020, so to support you we've collated together some of our most useful resources below for you. This includes resources to help you focus your teaching towards individual abilities of students, resources to help determine your students' capabilities and above all resources to help save you time, enabling you to quickly get back up to speed in the classrooms and support your students in preparing for exams. Many more resources are available from the OCR website.

# **Summer Highlights**

Download the Summer Highlights from 2018 and 2019

Our Summer Highlights documents summarise the common mistakes that students make in GCSE Science examinations. The documents are an excellent revision aid for students. They also help the teacher to identify common misconceptions students have. Teachers can use this concise information to prioritise teaching time. Teachers may also wish to identify their own students' strengths and areas for improvement in Physics by using our range of multiple-choice quizzes and our end of topic tests.



# **Delivery Guides**

## **Download our Delivery Guides**

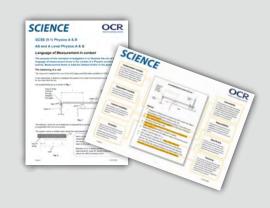
New teachers will find our delivery guides very useful. The guides have been produced to provide teaching ideas and online resources to cover each GCSE teaching module from the <u>specification</u>. They can be used together with the <u>Scheme of work</u> documents to plan the delivery of the course. We also offer online <u>Transition guides</u> which help bridge the learning between the key stages.



# Language of measurement in context

## Download the Physics Language of measurement resource

Students must be able to recognise and use the terminology of measurement. Are the results accurate and/or precise? Is the experiment repeatable and/or reproducible? This resource puts the terminology in the context of a physics experiment. This helps the students relate the correct terms directly to a practical environment.









# You may also like

### Scheme of work

Plan the delivery of the course with <u>suggested teaching times and lesson plan</u> <u>suggestions</u>.

#### **Practical Skills booklets**

Contains activities which cover the practical skills criteria.

## How to answer 6 mark LOR questions

A useful <u>resource</u> to help students answer extended response questions with confidence.

## Transition guides for Key Stage 3 to Key Stage 4

These <u>resources include checkpoint tasks</u> to judge the depth of understanding of KS3 topics.

### **Mathematical Skills Handbook**

Use the <u>handbook</u> together with our <u>math skills check-in</u> document to ensure students have the mathematical skills required to succeed in the examinations.

## Assessment materials

Access past papers, mark schemes and examiners' reports from the OCR website.

# New resources to support you

### Student revision checklist

<u>RAG</u> rating of the specification content for students to self-evaluate with. This can be useful to inform themselves and teachers of gaps and where to focus revision.

#### **Exam hints for students**

<u>Summer highlights from past examiners' reports</u> to help students pick up valuable marks in the exams.

## ExamBuilder guide to writing an end of topic test and exemplar

<u>Instruction</u> to help teacher use ExamBuilder to create end of topic tests to use to assess the gaps in students' knowledge. An <u>exemplar end of topic test</u> also comes with the instructions. *Please note Interchange access is required to download the topic test*.

### Remote teaching additions to Schemes of work for P1-P8

Helpful websites with resources for use in remote or flip learning. To help teachers cover the specification content and any gaps in knowledge as well as saving you time

## Women in science poster

This <u>resource</u> exemplifies the work of prominent female scientists and how this work links to the content in our specifications. You and your students can relate the achievements of these scientists to the work you do in the classroom.

# **Professional Development**

# Improving your Delivery: Resources for GCSE Gateway Science J247-J250 and Twenty First Century J257-J260 (Q&A)

An online Q&A session focusing on the resources available from OCR. Highlighting the different resources we have and how to use them. There will be an opportunity to discuss future potential resources that teachers would like.

# Understanding the Assessment: Exam preparation for GCSE Physics J247, J250, J257, J260

This online surgery will give teachers some approaches to general Science examination preparation, as well as Physics specific examination preparation tips. Areas of significance for teachers will be highlighted, discussing the approaches taken by candidates to previous series questions and advising how this can be used to better support your students.

# Improving your Delivery: Practical question skills for GCSE Gateway Science J247-J250 and Twenty First Century J257-J260 (Q&A)

An online Q&A session focusing on practical questions skills. Giving support to help the answering of the practical questions in the examination.

### Find an event

All of these CPD events will be available as part of our 2020-2021 programme. Details for booking will be coming soon.

*Please note all 2020-2021 CPD events will be online.* See our range of professional development courses using the <u>'Find an event'</u> search tool.

# **Cambridge Assessment resources**

# **Resource Plus from Cambridge International**

These <u>digital resources</u> are now available to all OCR teachers free of charge. Resource Plus gives you access to high quality videos, ready-made lesson plans and teaching materials that you can use to help your students learn and prepare for their exams. We also offer Resource Plus materials that are designed for you to share with your students.

You may like the video demonstrations for <u>Physics practical activities</u> that feature many of the GCSE Physics practical skills. These could be of use in the classroom if practical work is difficult when you return to school.

# **Publisher materials**

# **Cambridge University Press**

## **Cambridge Elevate**

IGCSE Physics Enhanced Elevate edition – This <u>digital learning experience</u> provides a range of digital resources/textbooks that would suit this qualification. This is a paid for service, but a 30 day trial is available. A selection of these resources are also freely available via our enhanced Schemes of work. *Coming soon*.

Resources that may be particularly useful include an online bank of videos and animations, a digital textbook and short self-marking end of topic quizzes that students can complete online. Please note, there may be some content differences due to this being written for the IGCSE Syllabus.

## **Oxford University Press**

GCSE Sciences skills pack - Maths skills support and web quests research exercises - with lots of links to follow up.

<u>Kerboodle</u> - An online bank of resources, activities and online assessment package, and access to online textbooks. There is free access for Kerboodle until September 2020.

# Other resources

## **BBC Bitesize**

A <u>useful resource for students</u> to refer to.

### Stem learning

A number of <u>practical activities</u> that GCSE students can do at home.

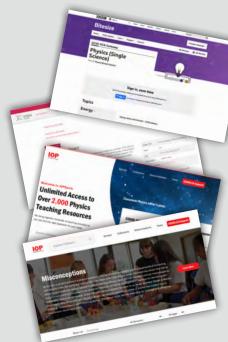
## The Institute of Physics

The <u>IOP spark</u> site is an excellent site with lot of resources for Physics students and teachers of all ages. The <u>misconceptions</u> students have are particularly useful.











# **Keep connected**

# **Useful resources for Remote learning**

A <u>blog</u> with some useful links for remote learning for the Sciences.

# **Practical Science at home**

A blog to highlight some practical activities students can do remotely.

# Supporting you during Corona virus

OCR webpage - the latest guidance for teachers for all subjects.

# Get in touch



John Dewis
Subject Advisor for
Physics

science@ocr.org.uk 01223 553998 @OCR\_Science

# www.ocr.org.uk

OCR Customer Support Centre

#### **General qualifications**

Telephone 01223 553998

Facsimile 01223 552627

Email general.qualifications@ocr.org.uk



OCR is part of Cambridge Assessment, a department of the University of Cambridge. For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored.

© OCR 2020 Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England. Registered office The Triangle Building, Shaftesbury Road, Cambridge, CB2 8EA. Registered company number 3484466. OCR is an exempt charity.

