

Subject:

# Physics (OCR H556)



HECKMONDWIKE  
GRAMMAR SCHOOL

## KS5 - Year 12 Curriculum Overview

Topics being taught

What you will be assessed on

How you can support at home

Autumn Term

Foundations of Physics  
Work, Energy and Power  
Material Science

Charge and Current  
Energy in Circuits

Term 1

Stepping Stones  
• Electrical Charge and Current  
• Work, Energy and Power

Review GCSE work on energy, Hooke's Law and electrical circuits

Use the online Phet DC Circuit Builder

Term 2

Milestone  
• Electrical Properties  
• Work, Energy and Power  
• Materials

Research the use of a material in an area of interest to you

Watch Shock and Awe by Jim Al-Khalili

CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS

Topics being taught

What you will be assessed on

How you can support at home

Spring Term

Describing Motion  
Forces in Action

Electrical Circuits  
Wave Motion  
Wave Behaviour

Term 3

Stepping Stones  
• Forces and Motion  
• Wave behaviour

Review GCSE work on motion, forces and waves

Watch the Cosmos episode "When Knowledge Conquered Fear"

Term 4

Milestone  
• As Autumn Term  
• Forces and Motion  
• Wave Behaviour

Use the online PhET Wave Interference Simulation

Investigate the work and life of Thomas Young

EASTER HOLIDAYS - EASTER HOLIDAYS - EASTER HOLIDAYS - EASTER HOLIDAYS - EASTER HOLIDAYS

Topics being taught

What you will be assessed on

How you can support at home

Summer Term

Newton's Laws of Motion  
Momentum

Quantum Physics

Term 5

Stepping Stones  
• Newton's Laws  
• Quantum Physics

Review GCSE work on forces and momentum

Use the online PhET Collision Lab simulation

Term 6

Milestone  
• All Year 12 Content

Watch "The Mind-bending Theory of Quantum Physics" by Jim Al-Khalili

Prepare flashcards and knowledge organisers