

Subject:

# Physics (AQA 8463)



HECKMONDWIKE  
GRAMMAR SCHOOL

## KS4 - Year 10 Curriculum Overview

Topics being taught

What you will be assessed on

How you can support at home

Autumn Term

Hooke's Law  
Balancing Forces  
Momentum  
Pressure in Fluids

Term 1

Stepping Stones  
• Hooke's Law  
• Balancing Forces

Use the online PhET Hooke's Law Simulation

Use models and Jenga blocks to investigate how to change the stability of objects

Term 2

Milestone  
• Year 9 Physics  
• Hooke's Law, Balancing Forces, Moments

Use the online PhET Collision Lab simulation to investigate momentum

Research on how submarines are designed to sink and float

CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS

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Spring Term

Behaviour of Gases  
Thermal Physics  
Electromagnetic Waves

Term 3

Stepping Stones  
• Pressure in fluids  
• The Gas Laws

Use the online PhET Gas Properties simulation

Watch the Cosmos episode "Hiding In The Light"

Term 4

Milestone  
• Year 9 Physics  
• Hooke's Law, Balancing Forces, Moments, Pressure, Gases, Light

Research the work and life of Ibn Al-Haytham

Look around your home for the different uses of the EM spectrum

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

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Summer Term

Static Electricity  
Building Electrical Circuits

Term 5

Stepping Stones  
• Static Electricity  
• Circuits

Use the online PhET DC Circuit Lab to investigate circuits

Watch the documentary Shock And Awe by Jim Al Khalili

Term 6

Final Exam  
• Year 9 Physics  
• Year 10 Physics

Demonstrate static electricity at home with balloons and jumpers

Prepare flash cards and knowledge organisers for revision