

Subject:

Physics (AQA 8463)



HECKMONDWIKE
GRAMMAR SCHOOL

KS4 Year 9 Curriculum Overview

Topics being taught

What you will be assessed on

How you can support at home

Autumn Term

Wave Properties
Light Waves
Sound Waves
Energy Transfers

Term 1

Stepping Stones

- Wave Properties
- Reflection and Refraction

Check students know definitions – wavelengths, frequency etc...

Use simulations on PhET website to investigate sound and light

Term 2

Milestone

- Wave Properties
- Light and Sound

Investigate examples of light reflection and refraction in the home

Watch the documentary The Symphony of Physics by Helen Czerski

CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS

Topics being taught

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Spring Term

Power and Efficiency
Generating Power
Describing Motion
Resultant Forces

Term 3

Stepping Stones

- Energy Transfers
- Generation Methods

Use a smart meter to monitor home energy use

Look at the purchase and fuel costs of electric and petrol cars

Term 4

Milestone

- Wave Properties, Light and Sound
- Energy Transfers and Generating Power

Use the Energy Skate Park simulation on the PhET website

Investigate the life and work of James Joule

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

Topics being taught

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Summer Term

Forces and Motion
Newton's Laws of Motion
Stopping Distances

Term 5

Stepping Stones

- Motion Graphs
- Forces

Use the Forces and Motion simulation on the PhET website

Watch the documentary series Forces Of Nature by Brian Cox

Term 6

Final Exam

- All of Year 9 Physics

Research the life and work of Isaac Newton

Make flash cards and knowledge organisers for revision