Physics Knowledge Journey

Career Paths

Physics can open doors to future careers in engineering and construction

Skills

Analysis • Attention to Detail • Communication • Cultural Understanding • Empathy • Literacy • Organisation Problem solving • Research • Patience • Logical Thinking

Interest

A continued passion and love of learning about Science

REVISION & EXAMS

Continued Targeted Support

YEAR 11

Electro-Magnetic Waves and Light
- ❑ X-Rays in Medicine
- ❑ Light and Colour
- ❑ Communications
- ❑ Using Lenses
- ❑ The Electro-Magnetic Spectrum

Electro-Magnetism and Space
- ❑ Magnetic Fields
- ❑ Formation of the Solar System
- ❑ Transformers
- ❑ The Motor Effect
- ❑ Planets, Satellites and Orbits

Wave Properties
- ❑ Reflection and Refraction
- ❑ Seismic Waves
- ❑ The Properties of Waves

Force and Pressure
- ❑ Pressure and Surfaces
- ❑ Pressure in a Liquid at Rest
- ❑ Upthrust and Flotation

Force and Motion
- ❑ Velocity and Acceleration
- ❑ Speed and Distance Time Graphs
- ❑ Weight and Terminal Velocity
- ❑ Forces and Acceleration
- ❑ Forces and Breaking
- ❑ Momentum
- ❑ Using Conservation of Momentum
- ❑ Impact Forces
- ❑ Safety First

Forces in Balance
- ❑ Moments at Work
- ❑ Vectors and Scales
- ❑ Forces Between Objects
- ❑ Resolution of Forces
- ❑ Resultant Forces

Radioactivity
- ❑ The Discovery of the Nucleus
- ❑ Inside Atoms
- ❑ Alpha, Beta and Gamma
- ❑ Activity and Half Life
- ❑ Nuclear radiation in Medicine
- ❑ Nuclear Fission
- ❑ Nuclear Issues

YEAR 10

Electric Circuits
- ❑ Component Characteristics
- ❑ Electrical Charges and Fields
- ❑ Parallel Circuits
- ❑ Current and Charge
- ❑ Series Circuits
- ❑ Potential Difference and Resistance

Electricity in the Home
- ❑ Cables and Plugs
- ❑ Alternating Current
- ❑ Electrical Power and Potential Difference
- ❑ Appliances and Efficiency

Molecules and Matter
- ❑ Gas Pressure and Volume
- ❑ Specific Heat Capacity
- ❑ Internal Energy
- ❑ Density

YEAR 9

Energy
- ❑ Gravitational Energy
- ❑ Kinetic Energy
- ❑ Energy Transfers
- ❑ Efficiency
- ❑ Renewable and Non-Renewable Energy

Motion and Pressure
- ❑ Speed and Motion Graphs
- ❑ Pressure in Gasses
- ❑ Pressure in Solids
- ❑ Pressure in Liquids
- ❑ Turning Forces

Energy
- ❑ Work, Energy and Machines
- ❑ Energy and Power
- ❑ Energy Resources
- ❑ Conduction and Convection
- ❑ Radiation
- ❑ Energy Transfer Particles
- ❑ Energy Adds Up
- ❑ Energy and Temperature

YEAR 8

Light
- ❑ Light
- ❑ Reflection
- ❑ Refraction
- ❑ The Eye
- ❑ The Camera
- ❑ Colours

Space
- ❑ The Night Sky
- ❑ The Solar System
- ❑ The Earth and the moon

Introduction
- ❑ Data
- ❑ Communication
- ❑ Evidence

Electricity
- ❑ Series and Parallel
- ❑ Electromagnetism
- ❑ Circuits and Current
- ❑ Healthy Diet
- ❑ Potential Difference
- ❑ Magnets and Magnetic Fields

YEAR 7

Sound
- ❑ Waves
- ❑ Loudness and Pitch
- ❑ Echoes of Ultrasound
- ❑ Detecting Sound

Forces
- ❑ Representing Forces
- ❑ Drag Forces and Friction
- ❑ Forces
- ❑ Stretching and Squashing

An Introduction to Physics
- ❑ Recording Results
- ❑ Scientific Questions
- ❑ Data
- ❑ Analysis and Evaluating

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CREATING BRIGHT FUTURES FOR ALL