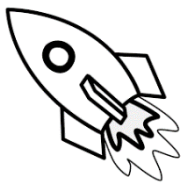
Gunnersbury Catholic School
Physics



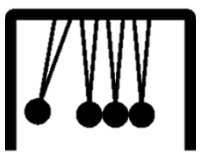
Space
- Formation of a solar system
- Life cycle of stars
- Planets, satellites and orbits
- The expanding universe
- The beginning and future of the universe

Assessments

Electromagnetism
- Magnetic fields
- Magnetic fields of electric currents
- Electromagnets in devices
- The motor effect
- The generator effect
- Transformers

Light
- Reflection
- Refraction
- Light and colour
- Lenses

Electromagnetic waves
- The electromagnetic spectrum
- Light, infrared, microwaves and radio waves
- More about infrared radiation
- Communications
- Ultraviolet waves, X-rays and gamma rays
- X-rays in medicine



Force and motion
- Force and acceleration
- Weight and terminal velocity
- Forces and braking
- Momentum
- Impact forces
- Safety
- Forces and Elasticity

Force and pressure
- Pressure and surfaces
- Pressure in a liquid
- Atmospheric pressure
- Upthrust and floatation

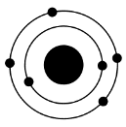
Wave properties
- Nature of waves
- properties of waves
- Reflection and refraction
- Sound waves
- Uses of ultrasound
- Seismic waves

YEAR 11

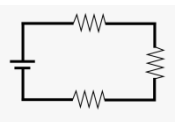
Forces in balance
- Vectors and Scalars
- Forces between objects
- Resultant forces
- Moments
- Levers and gears
- Centre of mass
- Resolving forces

Electricity in the home
- Alternating current
- Cables and plugs
- Electrical power and potential difference
- Electrical currents and energy transfer
- Appliances and efficiency

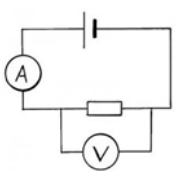
Motion
- Speed and distance-time graphs
- Velocity and acceleration
- Analysing motion graphs



Radioactivity
- Atoms and radiation
- Discovery of the nucleus
- Alpha, beta and gamma radiation
- Half-life
- Nuclear radiation in medicine
- Fission and fusion



YEAR 10



Electric circuits
- Electrical charges and fields
- Current and charge
- Potential difference and resistance
- Component characteristics
- Series and parallel circuits