Curriculum Overview: Triple Physics
Year group 11

- **What we are learning**: The topic or focus for the half term.
- **Key knowledge & skills**: What students should understand and be able to do.
- **How we assess learning**: knowledge checks, practical tasks, written responses and formal assessments.
- **Key words to know**: Vocabulary students will learn and use.

What your child will learn each half term
This overview shows the key topics, skills, and knowledge your child will be learning in Science across each year group. It helps families understand what's being taught, how it builds on previous learning, and how you can support your child at home.

- **How science works skills**
- Use and rearrange equations confidently.
- Link graphs and data to scientific models, drawing conclusions from evidence.
- Develop skills in planning, carrying out, and analysing required practicals.
- Apply practical skills: selecting equipment, measuring accurately, and identifying variables to control in an investigation.
- Communicate scientific ideas clearly in extended written answers, using correct terminology.

Half term	What we are learning	Key knowledge and skills	How we will assess learning in this unit	Homework	Key vocabulary for this unit
HT 1 and 2	P5c Force and motion P5d Pressure P6a Wave properties	• Force & motion (P5c): Newton's laws, motion graphs, acceleration, stopping distances. • Pressure (P5d): pressure in solids, liquids, gases, pressure-depth relationship, upthrust and floating. • Wave properties (P6a): transverse and longitudinal waves, wave equation, reflection, refraction.	Continuous formative assessment in lessons. End of topic tests. Question level analysis and feedback. Required practical assessment booklets.	Homework is set on a Monday and is due the following Monday. Homework will be set online using a website 'Educake' which pupils will receive their login details for.	Force, mass, acceleration, velocity, stopping distance, momentum, pressure, density, upthrust, transverse, longitudinal, amplitude, frequency, wavelength, wave speed, reflection, refraction.
HT 3 and 4	P6b The EM Spectrum P6c Light P7 Electromagnetism P8 Space	• P6b The EM Spectrum: Types of electromagnetic waves, wavelength, frequency, speed, uses and dangers of EM waves. Compare properties, explain uses, interpret wave diagrams. • P6c Light: Reflection, refraction, lenses, colour, dispersion, human eye. Draw ray	Continuous formative assessment in lessons. End of topic tests. Question level analysis and feedback.	Homework is set on a Monday and is due the following Monday. Homework will be set online using a	Electromagnetic, Wave, Wavelength, Frequency, Speed, Radio, Microwave, Infrared, Visible, Ultraviolet, X-ray, Gamma, Reflection, Refraction, Lens,

		diagrams, explain image formation, describe effects of lens changes. • P7 Electromagnetism: Magnetic fields, electromagnets, motors, induced voltage, generators. Draw fields, explain operation of devices, calculate induced voltage. • P8 Space: Solar system, planets, orbits, gravity, life cycle of stars, galaxies, redshift. Describe motions, explain gravity effects, interpret astronomical data.	Required practical assessment booklets.	website 'Educake' which pupils will receive their login details for.	Convex, Concave, Dispersion, Colour, Image, Ray diagram, Magnet, Magnetic field, Electromagnet, Motor, Generator, Induced voltage, Solar system, Planet, Orbit, Gravity, Star, Galaxy, Redshift, Universe.