



# PHYSICS KEY STAGE 5 SCHEDULE

# 2022-2023

## MODULES/UNITS

### A-LEVEL PHYSICS (7408)

1. Measurements and their units
2. Particles and radiation
3. Waves
4. Mechanics and materials
5. Electricity
6. Further mechanics and thermal physics
7. Fields and their consequences
8. Nuclear physics
9. Astrophysics

12 required practical activities distributed across the two years.

## EXAMINATIONS

## WHEN

A-LEVEL	
PAPER 1 (34%): (SECTIONS 1-5 AND PERIODIC MOTION)	JUNE 2023
PAPER 2 (34%): (THERMAL PHYSICS AND SECTIONS 7 & 8)	JUNE 2023
PAPER 3 (32%): PRACTICAL SKILLS AND DATA ANALYSIS, ASTROPHYSICS	JUNE 2023

## PROJECTS/SCHEME OF WORK/TOPICS

## DURING

MEASUREMENTS AND THEIR ERRORS  
(SI units, prefixes, errors, uncertainty)  
PARTICLES AND RADIATION  
(Quarks, leptons, electrons, photons, quantum physics)  
WAVES  
(Refraction, diffraction, interference, superposition)

AUTUMN TERM Y12

MECHANICS AND MATERIALS  
(Force, momentum, solid properties, Young modulus)  
ELECTRICITY  
(Potential dividers, emf and internal resistance)

SPRING TERM Y12

FURTHER MECHANICS (Circular motion)  
ASTROPHYSICS (Classifying stars, stellar evolution, black holes)

SUMMER TERM Y12

ASTROPHYSICS (Cosmology, exoplanets, telescopes,)  
FURTHER MECHANICS (Simple harmonic motion)  
THERMAL PHYSICS (Ideal gases, kinetic theory)

AUTUMN TERM Y13

FIELDS AND THEIR CONSEQUENCES  
(Gravitational, electric and magnetic fields, e.m. induction)  
NUCLEAR PHYSICS (Decay, mass and energy, fission)

SPRING TERM Y13

## OTHER INFORMATION

**Examination Board:** AQA

**Specification:** Physics A-level (7408)

Physics AS-level (7407)

**Textbooks:** AQA Physics (OUP) – provided electronically

**Past papers:** these are available as electronic versions

**Schemes of work:** these are available as electronic versions

**Equipment:** A full scientific calculator should be brought to every lesson.

**Visits:** Y13 – CERN Particle Physics Laboratories, Geneva (February half-term)

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