PHYSICS - Years 9, 10 and 11

GCSE CURRICULUM ROADMAP

BEDE'S AMBITIOUS ACADEMIC FACULTIES

KEY

- Topic + end-of-topic test
- Required practical (RP)
- Exam or milestone
- What you will learn
- ★ Separate (Triple) only
- 11 revision phase

Exam technique & past papers Timed papers, 6-mark answers, maths skills

GCSE EXAMS Physics Papers 1 & 2, from mid-May

Post 16+

WHERE PHYSICS CAN TAKE YOU

A Level Physics
Engineering Architecture
Medical physics & radiography Renewable energy Astrophysics & space Computing & data science

Y11

SUMMER TERM — NEXT STEPS

Interleaved reteach Papers 1 & 2 mixed, from mock targets

MOCK 2 Paper 2 (late January)

PATHWAY REVIEW Separate or Combined Science

MOCK 1 Paper 1

Use every mock to find your gaps, then close them in the reteach lessons.

Mock 2 feedback + targeted reteach

Paper 2 reteach Topics 5–8

Mock 1 feedback + targeted reteach

Paper 1 reteach Topics 1–4

SPRING TERM — AUTUMN TERM

FINAL EXAM ENTRIES Confirmed by 21 February

RP REVIEW All 10 required practicals

Y10 MOCK EXAM Paper 2: Topics 5–8, then 2 feedback lessons

TOPIC 7: Magnetism & electromagnetism
Magnets & magnetic fields
The motor effect Induction & transformers ★

TOPIC 8: Space physics ★
Solar system & life cycle of stars
Orbits & satellites Red-shift & the Big Bang

SUMMER TERM

TOPIC 6: Waves
Wave properties
Electromagnetic spectrum
Sound & seismic waves ★
Lenses & light ★ Black body radiation ★
RP 8 Waves RP 9 Reflection & refraction ★ RP 10 Infrared radiation

TOPIC 5: Forces
Forces, work & elasticity
Moments, levers & gears ★
Pressure in fluids ★ Motion & Newton's laws Momentum
RP 6 Force & extension
RP 7 Acceleration

Every topic ends with a test. Keep your feedback: it becomes your Year 11 revision map.

SPRING TERM — AUTUMN TERM

Y10

GCSE Physics starts here! Biology, Chemistry and Physics take turns, so Physics comes back every few weeks.

TOPIC 1: Energy
Energy stores & transfers
Conservation & efficiency
Energy resources
Link: Biology: Bioenergetics · Chemistry: Energy changes
RP 1 Specific heat capacity
RP 2 Thermal insulation ★

TOPIC 4: Atomic structure
Atoms & isotopes Radioactive decay & half-life Hazards & uses of radiation ★ Fission & fusion ★ *Link: Chemistry: Atomic structure*

Y9

AUTUMN TERM — SPRING TERM — SUMMER TERM

TOPIC 2: Electricity
Current, p.d. & resistance
Series & parallel circuits
Mains electricity & power
Static electricity ★
RP 3 Resistance RP 4 I–V characteristics

TOPIC 3: Particle model of matter
Density & changes of state
Internal energy & latent heat
Gas pressure ★
RP 5 Density

Y9 MOCK EXAM Paper 1: Topics 1–3, with revision & feedback lessons (Topic 4 comes in Year 10)

EXAM BOARD: AQA