

Year 12 Physics Preview Sheet

Exam Board: AQA Physics Year 12

Measurement and Errors

- SI units and prefixes
- Limitations of physical measurements
- Estimation of Physical Quantities

Particle Physics

- Constituents of the Atom
- Stable and Unstable Nuclei
- Particles, antiparticles and Photons
- Interactions and Classification
- Quarks and antiquarks
- Electromagnetic Radiation and the photoelectric effect
- Collision, Scattering and Energy Levels
- Wave Particle Duality

Waves

- Progressive Waves and Stationary Waves
- Longitudinal and Transverse Waves
- Superposition of Waves and Interference
- Interference
- Diffraction
- Refraction and TIR

Force, Energy and Momentum

- Scalars and Vectors
- Moments
- Motion in a straight line
 - Projectile motion
 - Newton's Laws of Motion
- Momentum
- Work, Energy and Power
- Conservation of Energy
- Materials
- Young Modulus

Electricity

- Basics of Electricity
- I-V Characteristics
- Resistivity
- Circuits
 - The potential Divider
- EMF and internal resistance