physical quantities and units  Wish known and watery presents and except presents and present	Subject/ Exam Board OCR	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Year 12	work done and energy Recording results and straight lines Measurements and uncertainties/ Derived units  Conservation of energy A3/ Physics Data Sheet/ Scalars and Vectors  Kinetic and GPE  Adding vectors Resolving vectors  Power and efficiency  More vectors Distance, speed  Progressive waves  Displacement, velocity Acceleration  Wave properties  More velocity/time graphs Equations of motion  Reflection and refraction  Car stopping	Diffraction and polarisation  Projectile motion  Force, mass, weight  Intensity  Centre of mass  Free body diagrams  Electromagnetic waves  Drag, terminal velocity  Moments, equilibrium  Polarisation of EM waves  Couples, torques  Triangle of forces  Refractive index  Density, pressure  Archimedes  Total Internal Reflection	Superposition of waves  Newton's 2nd law  Impulse  Interference  Collisions in two dimensions  Current and charge  Young Double Slit  Moving charges  Kirchhoff 1st law  Stationary waves  Mean drift velocity  Circuit symbols  Harmonics  Potential difference and EMF  The electron gun  Stationary waves - Air columns	The Photon model  Diodes  Resistance and Resistivity  The Photoelectric effect  Thermistor  LDR  Einstein's P/E equation	Wave particle duality  Kirchhoff's laws and circuits  Combining resistors  Springs and Hooke's law  Analysing circuits  Internal Resistance  Elastic potential energy  Potential divider circuits  Sensing circuits  Deforming materials	REVISION

	Considia latout la sat			
	Specific latent heat			
Angular velocity and the	The kinetic theory of gases	Quarks		
radian	Can laws	Beta decay		
Centripetal acceleration	Gas laws	Radioactivity		
Exploring centripetal forces	Root mean square speed	Nuclear decay equations		
Oscillations and simple	Understanding magnetic fields	Half life and activity		
harmonic motion	Charged particles in	Radioactive decay calculations		
Capacitors	magnetic fields	Modelling radioactive decay		
Capacitors in circuits	Electromagnetic induction	Radioactive dating		
Energy stored by capacitors	Faraday's laws and Lenz's	Einstein mass-energy equation		
Disabassina as a "	law	Binding energy		
Discharging capacitors	The Boltzmann constant	Nuclear fission	Spectra	
Analysing simple harmonic motion	Transformers	Nuclear fusion	Analysing starlight Stellar luminosity	
Simple harmonic motion		X-rays	Astronomical distances The Doppler effect	
and energy	Gravitational fields	Interaction with X-rays	Hubble's law The Big Bang theory	
Damping and driving	Newton's law of gravitation	CAT scans	Evolution of the universe	
Resonance	Gravitational field strength for a point mass	The gamma camera		
Charging capacitors	Kepler's law	PET scans		
Uses of capacitors	Satellites	Ultrasound		
Electric fields	Gravitational potential	Acoustic impedance		
Coulomb's Law	Gravitational potential	Doppler imaging		
Temperature	energy	Objects in the universe		
Solids, liquids and gases	Alpha particle scattering experiment	Life cycle of stars		
Internal energy	The nucleus	The Hertzspring Russell diagram		
Specific heat capacity	Antiparticles, hadrons and	Energy levels in atoms		
	leptons			

YEAR 13