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| Week/dates | Topic | Homework |
| Week beginning: 22/4/19 29/4/196/5/19 | Energy Energy Energy  | * Changes involved in the way energy is stored
* Calculations to include work done by forces
* Calculations to include kinetic energy, elastic potential energy and gravitational potential energy.
* Equations for kinetic energy and gravitational potential energy
* Specific heat capacity
* Power
* Conservation and dissipation of energy
* Reducing unwanted energy transfers.
* Calculating efficiency and describe the ways to increase the efficiency
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| Week beginning: 13/5/1920/05/193/06/19 | Electricity Electricity Electricity  | * Draw circuit symbols
* Electric Current and equation for it
* Electric current in series and parallel
* How the resistance of a component affects the current through it.
* Potential difference, current and resistance and how they all are linked.
* Ohms law and conditions needed for it to apply
* How the resistance of electrical components change with external conditions.
* Current-potential difference graphs for electrical components
* Series and parallel circuits/ properties and adding resistor in series
* Resistance in series and parallel circuits
* AC/DC
* Mains electricity supply/ The name, colour and function of each wire in a three core electrical cable
* Electrical power and how it is calculated.
* Energy transfers in everyday appliances/Work done and Equations for energy transfer
* National Grid and static charges/Electrostatic forces between objects
* Electric fields and the forces exerted by objects placed into an electric field.
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| Week beginning: 10/06/1917/06/1924/06/19 | Particle model of Matter Particle model of Matter Particle model of matter  | * Density and equation
* Particle model of matter to explain density of materials
* Changing the state of the substance
* Physical and Chemical Changes
* Internal energy of a system
* Heating and temperature
* Specific heat capacity/Specific latent heat
* Using the particle model of matter explain motion of particles in a gas
* Gas Laws and temperature and gas calculations
* Gas thermal expansion
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| Week beginning: 1/07/198/07/1915/07/19 | Atomic Structure Atomic structure Atomic structure  | * History of atom
* The size and structure of an atom.
* Radioactivity, atomic number and atomic mass
* Isotopes and early atomic models
* Development of atomic theory/Rutherford’s experiment
* Radioactive decay, stable and unstable nuclei
* Different types of nuclear radiations and their nature
* Alpha, beta and gamma radiations and their properties
* Nuclear decay and equations
* Properties of radiation/half life and rate of decay
* Handling radioactive materials
* Radioactivity and food
* Uses of radioactivity and hazards of radioactive materials
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| Week beginning:  |  Forces  | * Scalar and vector quantities
* Contact and non-contact forces.
* Weight and gravitational fields
* Calculating the weight of an object+ Equation for calculating
* Resultant Force and Free body diagrams
* Calculating the work done when a force moves an object.
* Definition of a Joule/Work done and energy transfer
* Elastic and inelastic deformation
* Hookes law/Work done in stretching a spring
* Turning forces/simple lever and gear systems
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| Week beginning:  | Waves Waves Waves  | * Transverse and Longitudinal waves
* Properties of waves/ Equation linking the wave speed, frequency and wavelength
* Refraction
* Human hearing and the speed of sound
* How the ear works
* Uses of waves in imaging, sonar and developing theories on the structure of the Earth
* P waves and S waves/Waves in the spectrum
* Reflection, Refraction and diffraction
* Radiowaves and electrical circuits
* The electromagnetic spectrum/Dangers of ionising radiations
* Harmful effects of ultraviolet radiation and

Uses of electromagnetic waves.* Concave and Convex lenses
* Emission and absorption of infra-red radiation.
* Black body radiation
* 2nd Law of Thermodynamics/ global warming
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| Week beginning:  | Magnetism and Electromagnetism  | * Laws of magnetism
* Permanent and induced magnets
* Magnetic field and earth’s magnetic field
* Motor effect / electromagnets and motor
* Generator
* Force on a current in a magnetic field
* Calculating the force on a conductor in a magnetic field.
* How do Headphones work/generator generates electricity
* Electromagnetic induction
* Dynamos and transformers and Microphones
* Electrical power inputs and outputs of a transformer
* Electricity distribution
* Use of transformers in National Grid
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| Week beginning  13/05/19Yr 11s only  | Revision Revision-Revision -Revision - | * Biology
* Chemistry
* Physics
* Biology
* Chemistry
* Physics
* Biology
* Chemistry
* Physics
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