GCSE PHYSICS

Year 11 Revision Plan (Triple Science)

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| WEEK 1  ***w/b Mon 4th March 2018*** |  | 3 Hours |
| Topic 1 Energy  **Subject Content**   * Energy Stores and Systems – pg 11 * Kinetic and Potential Energy Stores – pg 12 * Specific Heat Capacity – pg 13 * Conservation of Energy and Power – pg 14 * Conduction and Convection – pg 15 * Reducing Unwanted Energy Transfers – pg 16 | | |
| WEEK 2  ***w/b Mon 11th March 2018*** |  | 3 Hours |
| Topic 1 Energy  **Subject Content**   * Efficiency – pg 17 * Energy Resources and their Uses – pg 18 * Wind, Solar and Geothermal – pg 19 * Hydro-electricity, Waves and Tides – pg 20 * Bio-fuels and Non-renewables – pg 21 * Trends in Energy Resource Use – pg 22 | | |
| WEEK 3  ***w/b Mon 18th March 2018*** |  | 3 Hours |
| Topic 1 Energy  **Subject Content**  **Subject Content**   * Past Paper Questions   Topic 2 Electricity  **Subject Content**   * Current and Circuit Symbols – pg 24 * Resistance and V=IR – pg 25 * Resistance and I-V Characteristics – pg 26 * Circuit Devices – pg 27 | | |
| WEEK 4  ***w/b Mon 25th March 2018*** | ***Break up for Easter holidays – Weds 28th March 2018*** | 3 Hours |
| Topic 2 Electricity  **Subject Content**   * Series Circuits – pg 28 * Parallel Circuits – pg 29 * Investigating Resistance – pg 30 * Electricity in the Home – pg 31 * Power of Electrical Appliances – pg 32 * More on Power – pg 33 | | |
| WEEK 5  ***w/b Mon 1nd April 2018*** | ***EASTER HOLIDAYS*** | 5 Hours |
| Topic 2 Electricity   * The National Grid – pg 34 * Static Electricity – pg 35 * Electric Fields – pg 36 * Past Paper Questions   Topic 3 Particle Model of Matter   * Density of Materials – pg 38 * Internal Energy and Changes of State – pg 39 * Specific Latent Heat – pg 40 * Particle Motion in Gases – pg 41 * Past Paper Questions | | |
| WEEK 6  ***w/b Mon 8th April 2018*** | ***EASTER HOLIDAYS*** | 5 Hours |
| Topic 4 Atomic Structure   * Developing the Model of the Atom – pg 43 * Isotopes and Nuclear Radiation – pg 44 * Nuclear Equations – pg 45 * Half-Life – pg 46 * Background Radiation and Contamination – pg 47 * Uses and Risk – pg 48 * Fission and Fusion – pg 49 * Past Paper Questions | | |
| WEEK 7  ***w/b Mon 15th April 2018*** | ***Back to school – Mon 16th April 2018*** | 3 Hours |
| Topic 5 Forces   * Contact and Non-Contact Forces – pg 51 * Weight, Mass and Gravity – pg 52 * Resultant Forces and Work Done – pg 53 * Calculating Forces – pg 54 * Forces and Elasticity – pg 55 * Investigating Springs – pg 56 | | |
| WEEK 8  ***w/b Mon 22rd April 2018*** |  | 3 Hours |
| Topic 5 Forces   * Moments – pg 57 * Fluid Pressure – pg 58 * Upthrust and Atmospheric Pressure – pg 59 * Distance, Displacement, Speed and Velocity – pg 60 * Acceleration – pg 61 * Distance-Time and Velocity-Time Graphs – pg 62 | | |
| WEEK 9  ***w/b Mon 29th April 2018*** |  | 3 Hours |
| Topic 5 Forces   * Terminal Velocity – pg 63 * Newton’s First and Second Laws – pg 64 * Inertia and Newton’s Third Law – pg 65 * Investigating Motion – pg 66 * Stopping Distances – pg 67 * Reaction Times – pg 68 | | |
| WEEK 10  ***w/b Mon 6th May 2018*** | ***Bank holiday – Mon 7th May 2018*** | 4 Hours |
| Topic 1 Energy, Topic 2 Electricity, Topic 3 Particle Model of Matter and Topic 4 Atomic Structure  **Subject Content**  **Subject Content**   * Past Paper Questions   Topic 5 Forces   * More on Stopping Distances – pg 69 * Momentum – pg 70 * Changes in Momentum – pg 71 * Past Paper Questions   Topic 6 Waves   * Transverse and Longitudinal Waves – pg 73 * Experiments with Waves – pg 74 | | |
| WEEK 11  ***w/b Mon 13th May 2018*** |  | 3 Hours |
| Topic 1 Energy, Topic 2 Electricity, Topic 3 Particle Model of Matter and Topic 4 Atomic Structure  **Subject Content**  **Subject Content**   * Past Paper Questions   Topic 6 Waves   * Reflection – pg 75 * Electromagnetic Waves and Refraction – pg 76 * Investigating Light – pg 77 * Radio Waves – pg 78 | | |
| WEEK 12  ***w/b Mon 20th May 2018*** | ***Paper 1 Exam – Weds 23rd May 2018***   * Topic 1 – Energy * Topic 2 – Electricity * Topic 3 – Particles * Topic 4 – Atomic Structure | 3 Hours |
| Topic 1 Energy, Topic 2 Electricity, Topic 3 Particle Model of Matter and Topic 4 Atomic Structure  **Subject Content**  **Subject Content**   * Past Paper Questions   Topic 6 Waves   * EM Waves and their Uses – pg 79 * More Uses of EM Waves – pg 80 * Dangers of Electromagnetic Waves – pg 81 * Lenses – pg 82 | | |
| WEEK 13  ***w/b Mon 27th May 2018*** | ***HALF TERM*** | 5 Hours |
| Topic 6 Waves   * Images and Ray Diagrams – pg 83 * Concave Lenses and Magnification – pg 84 * Visible Light – pg 85 * Infrared Radiation and Temperature – pg 86 * Black Body Radiation – pg 87 * Sound Waves – pg 88 * Ultrasound – pg 89 * Exploring Structures Using Waves – pg 90 * Past Paper Questions | | |
| WEEK 14  ***w/b Mon 3rd June 2018*** |  | 4 Hours |
| Topic 7 Magnetism and Electromagnetism   * Permanent and Induced Magnets - pg 92 * Electromagnetism – pg 93 * The Motor Effect – pg 94 * Electric Motors and Loudspeakers – pg 95 * The Generator Effect – pg 96 * Generators and Microphones – pg 97 * Transformers – pg 98 * Past Paper Questions | | |
| WEEK 15  ***w/b Mon 10th June 2018*** | ***Paper 2 Exam – Fri 15th June 2018***   * Topic 5 – Forces * Topic 6 – Waves * Topic 7 – Magnetism and Electromagnetism * Topic 8 – Space | 4 Hours |
| Topic 8 Space Physics   * The Life Cycle of Stars - pg 100 * The Solar System and Orbits - pg 101 * Red-Shift and the Big Bang – pg 102   Topic 5 Forces, Topic 6 Waves, Topic 7 Magnetism and Electromagnetism and Topic 8 Space  **Subject Content**  **Subject Content**   * Past Paper Questions | | |