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
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