Woodrush High School – Separate Physics

An Academy for Students Aged 11-18

REVISION Plans 8 WEEKS TO SUCCESS!

Exam Board – OCR	Link to Exam Specification – **Combined:** OCR GCSE (9-1) Physics A Specification J249 (Gateway Science) Link to Past Papers –GCSE - Gateway Science Suite - Physics A (9-1) - J249 click the **Question papers, mark schemes and reports** tab

Week	Topics	Subject Content to Revise	Directed Revision – Resources / Online Platforms / Links / QR etc
Week 1 – wb 16th March	**Mocks Round 2**	**P1:** Atomic Structure, History of the Atom, States of Matter, Density, Heating and Cooling Curves, Specific Latent heat, Specific Heat Capacity, Pressure in Gases **P2:** Scalars and Vectors, Speed, Distance/Time Graphs, Acceleration, Velocity/Time Graphs, Forces and Free Body Diagrams, Resultant Forces, Newton's Laws, Gravity, Drag, Terminal Velocity, Momentum, Weight = Mass x Gravity and Circular Motion, Work and Power, Kinetic Energy Calculations, Gravitational Potential Energy Calculations, Hooke's Law, Elastic Potential Energy **P3:** Circuit Symbols, Current, Charge, Potential Difference, Series and Parallel Circuits, Resistance, Ohm's Law, IV Characteristics, Electrical Power, LDRs, Thermistors, Potential Dividers **P4:** Static Charge, Magnetism, Electromagnetism, Motor Effect, Flemming's Left Hand Rule, Motors, Generators – Alternators and Dynamos, Applications of Electromagnetism	P1 Study Pack P2 Study Pack P3 Study Pack P4 Study Pack
Week 2 – wb 23rd March	**P1**	**P1:** Atomic Structure, History of the Atom, States of Matter, Density, Heating and Cooling Curves, Specific Latent heat, Specific Heat Capacity, Pressure in Gases	P1 Study Pack

Week 3 – wb 30th March (Easter)	**P2**	**P2:** Scalars and Vectors, Speed, Distance/Time Graphs, Acceleration, Velocity/Time Graphs, Forces and Free Body Diagrams, Resultant Forces, Newton's Laws, Gravity, Drag, Terminal Velocity, Momentum, Weight = Mass x Gravity and Circular Motion, Work and Power, Kinetic Energy Calculations, Gravitational Potential Energy Calculations, Hooke's Law, Elastic Potential Energy	**P2 Study Pack**
Week 4 – wb 6th April (Easter)	**P3**	**P3:** Circuit Symbols, Current, Charge, Potential Difference, Series and Parallel Circuits, Resistance, Ohm's Law, IV Characteristics, Electrical Power, LDRs, Thermistors, Potential Dividers	**P3 Study Pack**
Week 5 – wb 13th April	**P4**	**P4:** Static Charge, Magnetism, Electromagnetism, Motor Effect, Flemming's Left Hand Rule, Motors, Generators – Alternators and Dynamos, Applications of Electromagnetism	**P4 Study Pack**
Week 6 – wb 20th April	**P5**	**P5:** Waves and wave speed, Electromagnetic spectrum, Reflection, Refraction, Dispersion, Lenses and the eye, Sound and sonar	**P5 Study Pack**
Week 7 – wb 27th April	**P6**	**P6:** Nuclear structure and properties of nuclear radiation, Decay equations and half-life, Uses and dangers of radiation, Irradiation and contamination, Energy levels, Fission and fusion.	**P6 Study Pack**
Week 8 – wb 4th May	**P7**	**P7:** Energy Stores and transfers, Energy efficiency, Heat transfers and reducing heat loss, Specific Heat Capacity, Specific Latent Heat, Energy costs, calculating kinetic energy, calculating gravitational potential energy, calculating elastic potential energy	**P7 Study Pack**

Exam Week 1 – wb 11th May	**P8**	**P8:** Speed, Stopping distances, Reaction times, Renewable and Non-renewable energy sources. Solar System and orbits, Big Bang and Evidence for Big Bang.	**P8 Study Pack**
Exam Week 2 – wb 18th May	**P1-4**	**P1:** Atomic Structure, History of the Atom, States of Matter, Density, Heating and Cooling Curves, Specific Latent heat, Specific Heat Capacity, Pressure in Gases **P2:** Scalars and Vectors, Speed, Distance/Time Graphs, Acceleration, Velocity/Time Graphs, Forces and Free Body Diagrams, Resultant Forces, Newton's Laws, Gravity, Drag, Terminal Velocity, Momentum, Weight = Mass x Gravity and Circular Motion, Work and Power, Kinetic Energy Calculations, Gravitational Potential Energy Calculations, Hooke's Law, Elastic Potential Energy **P3:** Circuit Symbols, Current, Charge, Potential Difference, Series and Parallel Circuits, Resistance, Ohm's Law, IV Characteristics, Electrical Power, LDRs, Thermistors, Potential Dividers **P4:** Static Charge, Magnetism, Electromagnetism, Motor Effect, Flemming's Left Hand Rule, Motors, Generators – Alternators and Dynamos, Applications of Electromagnetism	**P1 Study Pack** **P2 Study Pack** **P3 Study Pack** **P4 Study Pack**
Half Term – wb 25th May	**P1-4**	**P1:** Atomic Structure, History of the Atom, States of Matter, Density, Heating and Cooling Curves, Specific Latent heat, Specific Heat Capacity, Pressure in Gases **P2:** Scalars and Vectors, Speed, Distance/Time Graphs, Acceleration, Velocity/Time Graphs, Forces and Free Body Diagrams, Resultant Forces, Newton's Laws, Gravity, Drag, Terminal Velocity, Momentum, Weight = Mass x Gravity and Circular Motion, Work and Power, Kinetic Energy Calculations, Gravitational Potential Energy Calculations, Hooke's Law, Elastic Potential Energy	**P1 Study Pack** **P2 Study Pack**

		P3: Circuit Symbols, Current, Charge, Potential Difference, Series and Parallel Circuits, Resistance, Ohm's Law, IV Characteristics, Electrical Power, LDRs, Thermistors, Potential Dividers **P4:** Static Charge, Magnetism, Electromagnetism, Motor Effect, Flemming's Left Hand Rule, Motors, Generators – Alternators and Dynamos, Applications of Electromagnetism	P3 Study Pack  P4 Study Pack 
Exam Week 4 – wb 1st June	**Physics paper 1 (P1-4): Tuesday 2nd June AM** **P5-8 after exam**	**P5:** Waves and wave speed, Electromagnetic spectrum, Reflection, Refraction, Dispersion, Lenses and the eye, Sound and sonar **P6:** Nuclear structure and properties of nuclear radiation, Decay equations and half-life, Uses and dangers of radiation, Irradiation and contamination, Energy levels, Fission and fusion. **P7:** Energy Stores and transfers, Energy efficiency, Heat transfers and reducing heat loss, Specific Heat Capacity, Specific Latent Heat, Energy costs, calculating kinetic energy, calculating gravitational potential energy, calculating elastic potential energy **P8:** Speed, Stopping distances, Reaction times, Renewable and Non-renewable energy sources. Solar System and orbits, Big Bang and Evidence for Big Bang.	P5 Study Pack  P6 Study Pack  P7 Study Pack  P8 Study Pack 

Exam Week 4 – wb 8th June	**P5-8**	**P5:** Waves and wave speed, Electromagnetic spectrum, Reflection, Refraction, Dispersion, Lenses and the eye, Sound and sonar **P6:** Nuclear structure and properties of nuclear radiation, Decay equations and half-life, Uses and dangers of radiation, Irradiation and contamination, Energy levels, Fission and fusion. **P7:** Energy Stores and transfers, Energy efficiency, Heat transfers and reducing heat loss, Specific Heat Capacity, Specific Latent Heat, Energy costs, calculating kinetic energy, calculating gravitational potential energy, calculating elastic potential energy **P8:** Speed, Stopping distances, Reaction times, Renewable and Non-renewable energy sources. Solar System and orbits, Big Bang and Evidence for Big Bang.	**P5 Study Pack**  **P6 Study Pack**  **P7 Study Pack**  **P8 Study Pack** 
Exam Week 5 – wb 15th June	**Physics paper 2 (P5-8) Monday 15th June**	YOU MADE IT!!!	