



# APHS CURRICULUM AND ASSESSMENT PLAN

Physics 2021-22

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## Year 7 – Assessment Plan

Please note that if your child has more than one teacher for Physics, then they may do different parts of the same topic with each teacher. E.g. teacher 1 teaches 1.1 forces speed, teacher 2 teaches 1.2 forces gravity, A small online assessment may be done when a class has completed a section.

Term	Unit	Topics	Dates
Autumn 1	1 Forces - speed	Introduction to forces Balanced and unbalanced Speed Distance time graphs	w/b Mon 6 <sup>th</sup> Sept 2021 – Wed 20 <sup>th</sup> Oct 2021
Assessment 1 Submission			When topic complete
Assessment 1 Feedback			That lesson or subsequent lesson
Autumn 2	1 Forces - gravity	Gravity	w/b Mon 1 <sup>st</sup> Nov 2021 – Thurs 16 <sup>th</sup> Dec 2021
Assessment 2 Submission			When topic complete
Assessment 2 Feedback			That lesson or subsequent lesson
Spring 1	2 Electromagnets – potential difference and resistance	Potential difference Resistance Series and parallel circuits	w/b Tue 4 <sup>th</sup> Jan 2022 – Fri 11 <sup>th</sup> Feb 2022
Assessment 3 Submission			When topic complete
Assessment 3 Feedback			That lesson or subsequent lesson
Spring 2	2 Electromagnets - current	Current Charging up	w/b Mon 21 <sup>st</sup> Feb 2022 – Fri 1 <sup>st</sup> Apr 2022
Assessment 4 Submission			When topic complete
Assessment 4 Feedback			That lesson or subsequent lesson
Summer 1	3 Energy	Food and fuels Energy resources Energy and power Energy adds up Energy dissipation	w/b Tue 19 <sup>th</sup> Apr 2022 – Fri 27 <sup>th</sup> May 2022
Assessment 5 Submission			When topic complete
Assessment 5 Feedback			That lesson or subsequent lesson
Summer 2	4 Waves	Sound waves and speed Loudness and amplitude Frequency and pitch The ear and hearing	w/b Mon 6 <sup>th</sup> Jun 2022 – Fri 22 <sup>nd</sup> July 2022



		Light Reflection Refraction The eye and vision Colour	
Assessment 6 Submission			When topic complete
Assessment 6 Feedback			That lesson or subsequent lesson



## Year 8 – Assessment Plan

Please note that if your child has more than one teacher for Physics, then they may do different parts of the same topic with each teacher. E.g. teacher 1 teaches 1.1 forces speed, teacher 2 teaches 1.2 forces gravity, A small online assessment may be done when a class has completed a section.

Term	Unit	Topics	Dates
Autumn 1	1 Forces – contact forces	Friction and drag Squashing and stretching Turning forces	w/b Mon 6 <sup>th</sup> Sept 2021 – Wed 20 <sup>th</sup> Oct 2021
Assessment 1 Submission			When topic complete
Assessment 1 Feedback			That lesson or subsequent lesson
Autumn 2	1 Forces - Pressure	Pressure in gases Pressure in liquids Stress on solids	w/b Mon 1 <sup>st</sup> Nov 2021 – Thurs 16 <sup>th</sup> Dec 2021
Assessment 2 Submission			When topic complete
Assessment 2 Feedback			That lesson or subsequent lesson
Spring 1	2 Electromagnets	Magnets and magnetic fields Electromagnets Using electromagnets	w/b Tue 4 <sup>th</sup> Jan 2022 – Fri 11 <sup>th</sup> Feb 2022
Assessment 3 Submission			When topic complete
Assessment 3 Feedback			That lesson or subsequent lesson
Spring 2	Energy	Work, energy and machines Energy and temperature Energy transfer: particles Energy transfer: radiation and insulation	w/b Mon 21 <sup>st</sup> Feb 2022 – Fri 1 <sup>st</sup> Apr 2022
Assessment 4 Submission			When topic complete
Assessment 4 Feedback			That lesson or subsequent lesson
Summer 1	4 Waves – waves effects	Sound waves, water waves and energy Radiation and energy	w/b Tue 19 <sup>th</sup> Apr 2022 – Fri 27 <sup>th</sup> May 2022
Assessment 5 Submission			When topic complete
Assessment 5 Feedback			That lesson or subsequent lesson
Summer 2	4 Waves - wave properties	Modelling waves	w/b Mon 6 <sup>th</sup> Jun 2022 – Fri 22 <sup>nd</sup> July 2022
Assessment 6 Submission			When topic complete



Assessment 6 Feedback	That lesson or subsequent lesson
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## Year 9 – Assessment Plan

Please note that we start the GCSE course in year 9, at a much slower pace to enable all pupils to understand and build a good foundation for year 10. The topics covered are the same for separate science and trilogy (double) science. Please note that some classes have 2 physics teachers and may do a different order.

Term	Unit	Topics	Dates
Autumn 1	1 Energy and resources	Changes in energy stores Conservation of energy Energy and work	w/b Mon 6 <sup>th</sup> Sept 2021 – Wed 20 <sup>th</sup> Oct 2021
Assessment 1 Submission			When topic complete
Assessment 1 Feedback			That lesson or subsequent lesson
Autumn 2	1 Energy and resources	GPE Kinetic and elastic potential energy stores Energy dissipation	w/b Mon 1 <sup>st</sup> Nov 2021 – Thurs 16 <sup>th</sup> Dec 2021
Assessment 2 Submission			When topic complete
Assessment 2 Feedback			That lesson or subsequent lesson
Spring 1	1 Energy and resources	Energy and efficiency Electrical appliances Energy and power	w/b Tue 4 <sup>th</sup> Jan 2022 – Fri 11 <sup>th</sup> Feb 2022
Assessment 3 Submission			When topic complete
Assessment 3 Feedback			That lesson or subsequent lesson
Spring 2	2 Energy transfer by heating	Energy transfer by conduction Infrared radiation (S) More about infrared radiation (S)	w/b Mon 21 <sup>st</sup> Feb 2022 – Fri 1 <sup>st</sup> Apr 2022
Assessment 4 Submission			When topic complete
Assessment 4 Feedback			That lesson or subsequent lesson
Summer 1	2 Energy transfer by heating	Specific heat capacity Heating and insulating buildings	w/b Tue 19 <sup>th</sup> Apr 2022 – Fri 27 <sup>th</sup> May 2022
Assessment 5 Submission			When topic complete
Assessment 5 Feedback			That lesson or subsequent lesson
Summer 2			w/b Mon 6 <sup>th</sup> Jun 2022 – Fri 22 <sup>nd</sup> July 2022
Assessment 6 Submission			When topic complete



Assessment 6 Feedback	That lesson or subsequent lesson



## Year 10 – Assessment Plan

Please note that some classes have 2 physics teachers and may do a different order. The separate only content will have a (S). As the separate chemists have more lessons they will go through the chapters at a different rate.

Term	Unit	Topics	Dates
Autumn 1	3 Energy resources	Energy demands Energy from wind and water Power from the Sun and the Earth Energy and the environment Big energy issues	w/b Mon 6 <sup>th</sup> Sept 2021 – Wed 20 <sup>th</sup> Oct 2021
Assessment 1 Submission			When topic complete
Assessment 1 Feedback			That lesson or subsequent lesson
Autumn 2	4 Electric circuits	Electrical charges and fields (S) Current and charge Potential difference and resistance Component characterises Series circuits Parallel circuits	w/b Mon 1 <sup>st</sup> Nov 2021 – Thurs 16 <sup>th</sup> Dec 2021
Assessment 2 Submission			When topic complete
Assessment 2 Feedback			That lesson or subsequent lesson
Spring 1	Electricity in the home	Alternating current Cables and plugs Electrical power and potential difference Electrical currents and energy transfer Appliances and efficiency	w/b Tue 4 <sup>th</sup> Jan 2022 – Fri 11 <sup>th</sup> Feb 2022
Assessment 3 Submission			When topic complete
Assessment 3 Feedback			That lesson or subsequent lesson
Spring 2	Molecules and matter	Density States of matter Changes of state Internal energy Specific latent heat Gas pressure and temperate Gas pressure and volume (S)	w/b Mon 21 <sup>st</sup> Feb 2022 – Fri 1 <sup>st</sup> Apr 2022
Assessment 4 Submission			When topic complete
Assessment 4 Feedback			That lesson or subsequent lesson





Summer 1	P7 Radioactivity	Atoms and radiation The discovery of the nucleus Changes in the nucleus More about alpha, beta and gamma radiation Activity and half life Nuclear radiation in medicine (S) Nuclear fission (S) Nuclear issues (S)	w/b Tue 19 <sup>th</sup> Apr 2022 – Fri 27 <sup>th</sup> May 2022
Assessment 5 Submission			When topic complete
Assessment 5 Feedback			That lesson or subsequent lesson
Summer 2	Forces in balance	Vectors and scalars Forces between objects Resultant forces Moments at work (S) More about levers and gears (S)	w/b Mon 6 <sup>th</sup> Jun 2022 – Fri 22 <sup>nd</sup> July 2022
Assessment 6 Submission			When topic complete
Assessment 6 Feedback			That lesson or subsequent lesson



## Year 11 – Assessment Plan

Please note that some classes have 2 physics teachers and may do a different order. The separate only content will have a (S). As the separate chemists have more lessons they will go through the chapters at a different rate.

Term	Unit	Topics	Dates
Autumn 1	Forces in balance	Centre of mass Moments and equilibrium (S) The parallelogram of forces Resolution of forces	w/b Mon 6 <sup>th</sup> Sept 2021 – Wed 20 <sup>th</sup> Oct 2021
Assessment 1 Submission			When topic complete
Assessment 1 Feedback			That lesson or subsequent lesson
Autumn 2	Motion  Force and Motion	Speed and distance-time graphs Velocity and acceleration More about velocity time-graphs Analysing motion graphs Force and acceleration Weight and terminal velocity Forces and braking Momentum Using conservation of momentum (S) Impact forces (S) Safety first (S) Forces and elasticity	w/b Mon 1 <sup>st</sup> Nov 2021 – Thurs 16 <sup>th</sup> Dec 2021
Assessment 2 Submission			When topic complete
Assessment 2 Feedback			That lesson or subsequent lesson
Spring 1	Force and pressure  Wave properties	Pressure and surfaces (S) Pressure in a liquid at rest (S) Atmospheric pressure (S) Upthrust and flotation (S) The nature of waves The properties of waves Reflection and refraction More about waves Sound waves (S) The uses of ultrasound (S) Seismic waves (S)	w/b Tue 4 <sup>th</sup> Jan 2022 – Fri 11 <sup>th</sup> Feb 2022
Assessment 3 Submission			When topic complete
Assessment 3 Feedback			That lesson or subsequent lesson



Spring 2	Electromagnetic waves  Light	The electromagnetic spectrum Light, infrared, microwaves and radiowaves Communications Ultraviolet waves, X-rays and gamma rays X-rays in medicine Reflection of light (S) Refraction of light (S) Light and colour (S) Lenses (S) Using lenses (S)	w/b Mon 21 <sup>st</sup> Feb 2022 – Fri 1 <sup>st</sup> Apr 2022
Assessment 4 Submission			When topic complete
Assessment 4 Feedback			That lesson or subsequent lesson
Summer 1	Electromagnetism	Magnetic fields Magnetic fields of electric currents Electromagnets in devices (S) The motor effect The generator effect (S) The alternating-current generator (S) Transformers (S) Transformers in action (S)	w/b Tue 19 <sup>th</sup> Apr 2022 – Fri 27 <sup>th</sup> May 2022
Assessment 5 Submission			When topic complete
Assessment 5 Feedback			That lesson or subsequent lesson
Summer 2	Space	Formation of the solar system (S) The life history of a star (S) Planets, satellites and orbits (S) The expanding universe (S) The beginning and future of the universe (S)	w/b Mon 6 <sup>th</sup> Jun 2022 – Fri 22 <sup>nd</sup> July 2022
Assessment 6 Submission			When topic complete
Assessment 6 Feedback			That lesson or subsequent lesson