Curriculum Map: Physics Year 7 *(delete as necessary)*

	Autumn	Spring	Summer
Content Declarative knowledge 'I Know'	To know the difference between energy and power To define renewable and non renewable and to list examples. To list examples of energy stores and energy transfers and to define efficiency and conservation of energy.	To state what produces sound. To define key features of a wave (amplitude, wavelength etc) To define transverse and longitudinal. To state the structure of the ear To define key words connected to light (luminous, transparent etc) To state the law of reflection and to define the difference a solar and lunar eclipse. To state the difference between reflection and reflection and to define key words for lenses (real, focal point, converging etc) To recall the structure of the eye.	To list examples of forces. To define resultant force and the newton. To identify balanced and unbalanced forces. To define speed and to state different sections of a distance time graph. To define acceleration, gravity and weight.
Skills Procedural Knowledge 'I know how to'	Calculating power and efficiency Interpreting data on different energy sources Equipment handling Recording and analysing data Planning of experimental methods - naming variables Making prediction	To construct ray diagrams for lenses, reflection and refraction. To compare transverse and longitudinal waves Describe how sound is produced To find the frequency of a wave using a diagram Equipment handling Observations of experiments Recording naming variables Making predictions	Draw force diagrams for different objects Connect the size of the resultant force with the speed To calculate the speed of something and weight. Draw a distance or speed time graph from data. Recording and analysing data Planning of experimental methods - naming variables Making predictions
Strategies Conditional Knowledge 'I know when to'	To evaluate the effectiveness of different renewable energies To know when to rearrange the equations for power and efficiency To draw conclusions and comparisons on the different energy amounts in fuels. To know when to include energy stores in an energy transfer diagram	To interpret data on frequency or amplitude and draw conclusions about hearing To know when to discuss reflection compared to refraction To evaluate the differences between long and short sight To compare colours and explain how filters work	Explain whether a situation has balanced or unbalanced forces. To interpret a force diagram to allow you to draw conclusions. To know when to rearrange the equation for speed or weight To interpret a distance/speed time graph and draw conclusions about the journey
Key Questions	What is the connection between a lump of coal and a sandwich? How will we generate electricity in the future? Why are more efficient devices better	How fast do sound and light travel? How do lenses correct short sight? Why do coloured objects seem to change colour when the colour of the light changes.	Where do forces come from? How do we measure speed? Is the force of gravity the same on the moon?
Assessment topics	End of topic test (after 8 lessons of topic) and this will be re tested at the end of the term.	End of topic test (after 8 lessons of topic) and this will be re tested at the end of the term.	End of topic test (after 8 lessons of topic) and this will be re tested at the end of the term.
Cross curricular links/Character Education	Calculation practise – maths Renewable and non renewable benefits – geography Energy in food – food tech Energy in fuels – chemistry	Drawing diagrams – art Interpreting data – maths The ear and the eye – biology Sound waves and frequency - music	Interpreting graphs and calculations – maths Motion and speed – PE drawing force diagrams - Art
