## Summer Term – Remotely Learning Plan

## <u>Year 9 – Physics (Combined Science)</u>

Week:	Instructions to Parents/Students
28B – 20 <sup>th</sup> April	Particle Theory – Go to BBC bitesize https://www.bbc.co.uk/bitesize/guides/zgr2pv4/revision/1 Describe particle arrangement and movement in solid, liquid and gas. Include diagrams. Then describe and explain 2 properties of solids, liquids and gases. Attempt the quiz.
29A – 27 <sup>th</sup> May	Thermal Conductivity – Go to BBC Bitesize <u>https://www.bbc.co.uk/bitesize/guides/zy8g3k7/revision/2</u> Define thermal conductivity and describe an experiment, with a diagram, showing how you can compare the thermal conductivity of different metal rods. Attempt the quiz.
30B – 4 <sup>th</sup> May	Density – <u>https://www.bbc.co.uk/bitesize/guides/zqjy6yc/revision/1</u> and get a definition for density. Learn the density equation and explain the difference in density between solid, liquid and gas. Attempt the density calculation and try the quiz.
31A – 11 <sup>th</sup> May	Required Practical – Calculating Density. Watch <u>https://www.youtube.com/watch?</u> <u>v=ScXOp8Zph28&amp;list=PL9IouNCPbCxWdHszkb6n6503ommOpg_t7&amp;index=2</u> and write a comprehensive method on how you would calculate the density of a regular and irregular shaped object.
32B – 18 <sup>th</sup> May	Insulating our homes – watch <u>https://www.youtube.com/watch?v=GTdgI-0KckA</u> Define thermal conductivity and explain how heat is transferred from our homes and ways in which this can be prevented (home insulation). This can be done in the form of a poster.
33A – 1 <sup>st</sup> June	Energy stores – Go to BBC Bitesize <u>https://www.bbc.co.uk/bitesize/guides/z8n47p3/revision/1</u> and watch the video. List the 8 energy stores with a description and example for each. Then go to page 2 and explain how energy transfers occur, with the examples of the swinging ship, speedboat and boiling kettle.
34B – 8 <sup>th</sup> June	Specific Heat Capacity – Watch <a href="https://www.youtube.com/watch?v=Hs5x0-IU2F4">https://www.youtube.com/watch?v=Hs5x0-IU2F4</a> Define specific heat capacity, learn the equation and practice some questions using <a href="https://www.bbc.co.uk/bitesize/guides/z2gitv4/revision/1">https://www.bbc.co.uk/bitesize/guides/z2gitv4/revision/1</a> Attempt the test.
35A – 15 <sup>th</sup> June	Required Practical: Specific Heat Capacity – Watch https://www.youtube.com/watch?v=HAPmwu7byGM and write a comprehensive method on how you can find the specific heat capacity of different metals.
36B – 22 <sup>nd</sup> June	Efficiency – define efficiency, learn the equation and research ways of increasing efficiency. Watch <u>https://www.youtube.com/watch?</u> <u>v=NI5jaeBrlgQ</u> to help. Use BBC bitesize for practice questions.
37A – 29 <sup>th</sup> June	Power – define power, learn the equations for power and the units of power. Watch https://www.youtube.com/watch?v=EDT0DPhaaMY to help. Look at https://exampapersplus.co.uk/gcse-physics-energy-questions-and-answers/ for example questions.
38B – 6 <sup>th</sup> July	Energy resources – 2 weeks of work. Use <u>http://www.darvill.clara.net/altenerg/index.htm</u> and research renewable and non-renewable energy resources. Watch <u>https://www.youtube.com/watch?v=pqzvUur7QRw</u> and <u>https://www.youtube.com/watch?v=1dJKvxhGEgA</u> to help. Define renewable and non-renewable. (continued below)
39A – 13 <sup>th</sup> July	List all renewable and non-renewable energy resources (solar, wind, geothermal, coal, etc) – explain BASICALLY how they work, giving advantages and disadvantages of each.

Useful resources:

exampapersplus.co.uk

**BBC** Bitesize

Physicsandmathstutor.com

Darvillclara.net

AQA GCSE Physics (for past papers and markschemes)