Bishop Heber High School

Subject	Year	Term
Physics	12	3

Topic

Electricity and Further Mechanics

Content (Intent)

Prior Learning (Topic) Waves, Electricity, and Materials

AQA A Level Physics

- D.C. Electricity
- Further mechanics – circular motion and simple harmonic motion.

Future Learning (Topic) Further Mechanics, Thermal Physics, and Fields

What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
D.C. Electricity: Applying Kirchhoff's laws, learning about potential dividers and their use in sensor-type circuits, internal resistance and EMF, resistivity, power dissipation, I-V characteristics of components, resistance, current and pd. *Required practical's 5 & 6* Determination of resistivity and Investigation of the emf and internal resistance of electric cells and batteries.	End of topic tests - A level grading and formative feedback given. Summer Mock Exam - A level grading and formative feedback given. Homework – a percentage, A level grade and Formative feedback provided.
Further Mechanics: Circular motion, angular displacement, the radian, centripetal force and acceleration, Simple Harmonic motion, damping, resonance. *Required Practical 7* Investigation into SHM using a mass-spring system and a simple pendulum	End of topic tests - A level grading and formative feedback given. Summer Mock Exam - A level grading and formative feedback given. Homework – a percentage, A level grade and Formative feedback provided.

How can parents help at home

Ensure all class notes and content files are complete and homework submitted on time
Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters.
Encourage pupils to actively research future University courses and careers.

Helpful further reading/discussion (including Reading and Vocabulary Lists)

Reading

Text Book – Collins AQA Approved Physics Year 1 & AS and Year 2 Student books by Dave Kelly
Websites

- www.physicsandmathstutor.com
- www.antonine-education.co.uk
- AQA website

Books – Practice in Physics by Akrill et al.
CGP revision guides

Vocabulary Lists

Radian
SHM
Resonance
Damping
Centripetal Force
Angular Displacement
Circular Motion