Holy Family
Catholic High School

Year 10

Curriculum and Assessment Progression Map

Subject: Combined Science Physics

Subject Leader D Wilde

Key Learning Constructs to be developed over the academic year. – Core Knowledge	**Scheme of Learning Autumn Term**	**Scheme of Learning Spring Term**	**Scheme of Learning Summer Term**
*** the use of models, as in the particle model of matter or the wave models of light and of sound * the concept of cause and effect in explaining such links as those between force and acceleration, or between changes in atomic nuclei and radioactive emissions * the phenomena of 'action at a distance' and the related concept of the field as the key to analysing electrical, magnetic and gravitational effects * that differences, for example between pressures or temperatures or electrical potentials, are the drivers of change * that proportionality, for example between weight and mass of an object or between force and extension in a spring, is an important aspect of many models in science *that physical laws and models are expressed in mathematical form.**	**Part 1 Atomic Structure 1 Part 2 Atomic Structure 2**	**Part 3 Forces 1 Part 4 Forces 2**	**Part 5** Waves 1 **Part 6 Waves 2**
Hinterland Knowledge	Real examples of the APPLICATION of the content studied (eg the development of models of the atom)	Real examples of the APPLICATION of the content studied (eg crumple zones/crash testing by motor manufacturers)	Real examples of the APPLICATION of the content studied (eg the work of Marconi in radio transmission)
Assessment: -Formative Techniques	Use of whiteboards, hinge questions, recall questions.		
-Summative Pieces	End of Topic Tests	End of Topic Tests	End of Topic Tests and End of Year Assessment
Key Vocabulary	Key scientific terminology appropriate to each topic studied	Key scientific terminology appropriate to each topic studied	Key scientific terminology appropriate to each topic studied
Key Skills	Working Scientifically, relevant mathematical techniques (percentages, mean, mode, median etc) Graph plotting skills. Understanding variables and anomalies and their causes and effects	Working Scientifically, relevant mathematical techniques (percentages, mean, mode, median etc) Graph plotting skills. Understanding variables and anomalies and their causes and effects	Working Scientifically, relevant mathematical techniques (percentages, mean, mode, median etc) Graph plotting skills. Understanding variables and anomalies and their causes and effects
Opportunities Outside the taught			

Curriculum.	Careers, STEAM enrichment activities, educational visits	Careers, STEAM enrichment activities, educational visits	Careers, STEAM enrichment activities, educational visits