CURRICULUM MAP – Year 8
Each topic will cover the key enquiry processes, relevant maths skills and cultural capital. See corresponding schemes of work for more detail

ST JAMES' CATHOLIC HIGH SCHOOL

KEY
Biology
Chemistry
Physics

HT1:	HT2:	Assessment	HT3:	HT4:	Assessment	HT5:	HT6:	EOY Assessment Point
INTENT Atoms, elements and molecules *Recap Y7 Particles.* Name elements, compounds and understand the properties of elements. Use symbols and formulae of elements and compounds. Food and Nutrition *Recap Y7 Fit and Healthy and Cells.* Balanced diets and the importance of leading a healthy lifestyle. Why the body needs specific nutrients. The process of digestion and evaluating the varied diets which we are exposed to in the media. Enquiry – food tests	**INTENT** Light *Recap Y7 Sound.* How light waves travel and how they are detected. Investigating reflection and refraction and what happens to light when it passes through a prism. Enquiry – law of reflection Earth and Rocks How the Earth was formed and the different structures within the Earth itself. The rock cycle and rock types. *Link to Y7 acids.*	**Assessment 1 – interleaved content from HT1 and HT2 and Year 7 content** **Assess the Enquiry Processes** Collecting, recording and presenting data Describe how to make and record observations and measurements. Calculate a mean from three repeat measurements. Present data appropriately as tables and graphs. Describe a risk assessment. question	**INTENT** Breathing and respiration *Recap fit and healthy.* The structure and function of the respiratory system and the processes involved in the 2 types of respiration Enquiry – fatigue Heating and Cooling Energy transfers of conduction, convection and radiation in different materials, *linking to particles Y7.* Enquiry – insulation investigation	**INTENT** The periodic table *Recap atoms and elements.* How the PT is arranged and how this arrangement holds clues to the properties of the elements in it. Explaining why elements in similar groups react in similar ways. Enquiry – patterns of reactivity Unicellular organisms *Recap Y7 Cells and Fit and Healthy.* Explore the differences between multicellular and unicellular organisms including examples and link to disease	**Assessment 2– interleaved content from HT1 to HT4 AND Year 7** **Assess the Enquiry Processes:** Describe how scientists develop an idea into a question that can be investigated. Identify independent, dependent, and control variables. Suggest ways to investigate different types of enquiry. Describe how to write a plan for an investigation. Describe how to produce accurate and precise data, and reduce experimental error	**INTENT** Earth and Space *Recap Y7 Forces* Explore how stars and planets have formed. Learn about how our ideas of the solar system have changed over time. Use models to explain the movement of planets and moons and why we have years, day and night, seasons. Explain how our solar system and universe can be explored. Apply the force equation for gravity and know the light year as a unit of astronomical distance Enquiry – how orbital distances affect year length	**INTENT** Earth's Atmosphere *Recap Y7 energy resources.* Explore the atmosphere and how humans have impacted on the environment and the Earth's climate. Evaluate causes and effects of global warming. Plants and their reproduction *Recap animal reproduction and respiration.* The reproductive cycle of plants from pollination to seed dispersal. Practically investigate plant structures and functions. Enquiry - dissecting a lily	**End of Year Interleaved assessment covering content from Year 7 and HT 1 - 6** **Assess the Enquiry Processes:** Find a pattern in data using a graph or chart and draw a line of best fit on a line graph. Interpret data to draw conclusions using scientific explanations Describe the stages in evaluating the data. Suggest ways of improving a practical investigation