The Fisher Way: Curriculum

The Fisher Way aims to educate and inspire with joy, faith and love because we are an inclusive Catholic community.

Successful and resilient learners who aspire to and achieve excellence

Confident individuals who can explore and communicate effectively

Responsible citizens who are active, loving and wise in all their endeavours

Subject	Core Mathematics
Year Group	Year 13
Intent	**Successful and resilient learners** who have developed their fluency and curiosity in mathematics and can adapt their skills to the work around them. **Confident individuals** who can reason mathematically and use their math skills to solve problems in an eloquent way. **Responsible citizens** who are learned and realise the importance of maths in the world around them even when they may not be using it in their day to day lives.

Narrative	Core Maths introduces learners to scenario-based tasks, to build confidence in applying maths to real-life situations. The course builds on KS3/4 maths skills and introduces some A level Statistics/Business skills. Fluency in Maths skills is valuable for learners considering Further Education courses in Science, Business, Economics, Social Sciences etc. which require a level of competence with mathematical calculations. Life skills in finance are valuable for all learners.					
Half term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge (topics studied)	Understand the normal distribution Calculate the probability of catching diseases Half life Calculate amount owed on payday loan Probabilitiy of combination of outcomes Gross value added (GVA) per capita Identify trends in sales, consider linear and non linear models	Stopping distances Calculate speed, acceleration/ deceleration Use formulae to model data Analyse spending on transport overseas & income from tourism	Investigate deforestation Consider the cost of environmentally friendly technology Analyse climate & weather data Model real world situations with mathematical formulae	Mathematical constraints on manufacturing Wave frequencies & wavelengths Linear programming Reciprocal relationships Project management	Application of Core Maths skills to a variety of real world problems	Exams
Key skills	Mean & standard deviation Tree diagrams Iterative formulae Percentage calculations	Speed distance time calculations Plot graphs Calculate gradient of tangent	Calculate area Find the equation of a straight line Calculate with quadratic equations	Identify & plot inequalities Compound histograms Median & IQR	Practice of exam questions using all skillls	

	Gradient of tangent to a curve Set notation Venn diagrams Interpret pie charts Histograms Common ratio Geometric series	Use formulae with fractional indices/quadratic formulae Inequalities Solve simultaneous equations Regression lines Scattergraphs Moving averages Percentage calculations Box plots Time series graphs Product moment correlation coefficient	Calculate equation of a tangent Compound interest nth term of a quadratic sequence Time series graphs Box plots Mean & standard deviation Scattergraphs Moving averages Least squares regression line PMCC Logarithms	Tree diagrams % calculations		
Cultural capital and careers	Vaccination Prevalence of measles worldwide Consider different ways to borrow e.g.credit unions, payday loans, cooperatives.	Road safety Plan international travel	Spending on tourism Travel abroad Understand inflation Identify sources of error in calculations Deforestation Solar panels & green homes Feed-in tariffs	Manufacture of paper Scientific discoveries of electromagnetic spectrum Construction contracts Careers Project management		

	Be aware of loan APR Import/export and global trade Change in sales of music formats over time		Climate change from weather data Earthquakes & the Richter scale Cost of damage caused by hurricanes Causes of fires & injury rates	Site management Business managers		
Assessment	Unit test	Mocks	Past paper test		Exams	Exams