

Mathematics

Curriculum Overview



Mathematics is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. It provides a foundation for understanding the world.

Aims

- For students to leave Learning Opportunities with qualifications in mathematics that are appropriate to their ability thereby enabling them to progress to further studies and/or employment.
- For students to learn the numeracy skills needed to manage finances and other areas of adult life as independently as possible.
- Provide opportunity to progress within key areas of mathematics

Key Stage 3

| Key Stage 3 | Key Stage 4 |
|--|---|
| <p>Mathematical processes and applications Record work using text, figures and diagrams Recall and apply their knowledge to solve contextual maths problems Understand and use mathematical language and vocabulary Discuss and explain the mathematical processes that they use</p> <p>Number and algebra Read and write numbers using words and figures Recall number bonds and multiplication/division facts Understand place value in whole numbers and decimal numbers Use mental calculation strategies Use efficient written calculation methods Fractions, decimals and percentages Rounding and estimation Use a calculator Algebra Coordinates Number patterns</p> <p>Geometry and measures Units of length, mass, capacity and time 2D shapes Area and perimeter Angles Transformations</p> <p>Handling data Data collection methods Display and interpret data Tables and charts Probability</p> | <p>Mathematical processes and applications Find information to solve contextual maths problems Understand and use mathematical language and vocabulary Explain how conclusions have been reached</p> <p>Number and algebra Place value and calculation strategies Fractions, decimals and percentages Rounding and estimation Ratio and proportion Use a calculator (scientific) Algebra Coordinates and linear graphs</p> <p>Geometry and measures 2D and 3D shapes Volume and surface area Angle facts Transformations (2D) Pythagoras Theorem</p> <p>Handling data Collecting and displaying data Interpret tables and charts State conclusions Probability Averages and range Types of data</p> |