

Secondary Maths: Maths and Further Maths

- **AQA and WJEC teachers and examiners**
- **GCSE and A'Level Specialists**

Due to the very nature of maths it is clear that many students and parents can find it a daunting subject. Judging by the volume of websites that offer online maths help, Maths is a common area that many children seek help with outside of school. Learn North West are a team of qualified specialists from Primary to A' Level meaning that the maths support we can offer starts in Primary School and finishes at University and is delivered by teachers who have a working knowledge and understanding of the National Curriculum.

First and foremost, it is essential that we ensure children can access the curriculum content by teaching them how to unlock each topical area within maths. This is by far the crucial aspect to success at any level of maths. To do this we need to ensure that our students focus on the three distinct areas within the mathematical framework that ensure that we build strong mathematical foundations at each stage that enable children to grow in competence and confidence with their mathematical studies.

1. Develop fluency

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content in preparation for Key Stage 4 (GCSE).

Teaching will consolidate their numerical and mathematical capability from Key Stage 2 and extend their understanding of the number system and place value to include decimals, fractions, powers and roots.

Students will be encouraged to use language and properties precisely to analyse numbers, algebraic expressions, 2-D and 3-D shapes, probability and statistics.

2. Reason mathematically

Teaching will extend children's understanding of the number system enabling them to make connections between number relationships, and their algebraic and graphical representations.

Children will be encouraged to make and test conjectures about patterns and relationships; look for proofs or counterexamples.

3. Solve problems

Teaching will develop children's mathematical knowledge, in part through solving problems and evaluating the outcomes, including multi-step problems.

Teaching will develop children's use of formal mathematical knowledge to interpret and solve problems, including in financial mathematics.

Our teaching:

Working within the three key strands that underpin the National Curriculum, we ensure that students are 'numerate' and have a real understanding of 'number sense'. Each mathematical topic is broken down to enable ALL learners to access and move on in learning at a pace that is bespoke yet challenging to the individual child, providing the very best preparation that enables children to apply their learning back in the classroom at school and in external assessments.

Alongside supporting mathematical competence, we are building children's self-confidence, resilience and independence which in turn follows through with successful outcomes for children in examinations and beyond. Enabling a fundamental understanding of maths and logic not only permits children to pass exams, but enabled them to use 'mathematical thinking' and logic in all aspects of their life.

Citations taken from National Curriculum in England: Mathematics Programmes of Study