

Intent

Mathematics is an important part of each student's development throughout school.

We intend to deliver a curriculum, differentiated to meet individual needs, which allows pupils to be a part of creative and engaging lessons and provides a range of opportunities to EXPLORE and ENJOY mathematics. We encourage pupils to BELIEVE in themselves as learners and develop resilience and perseverance when faced with challenges.

Mathematics is part of daily life and is important as pupils ASPIRE to gain the skills necessary for independent living. The curriculum engages all pupils and delivers the same quality of teaching and learning opportunities to all pupils so they can ACHIEVE their full potential.

The curriculum provides opportunities to make rich connections across mathematical ideas and equal opportunities for pupils to apply their mathematical knowledge to other subjects (cross-curricular links).

The curriculum is in line with the expectations in the National Curriculum 2014, differentiated to meet the needs of individual pupils

Implementation

Teaching and Learning, Content and Sequence

As a school we follow the national curriculum 2014 (adapted to support the individual needs of our pupils) and use the White Rose schemes of work and Sandwell or PUMA assessments when planning, depending on pupil ability. Student progress is tracked using the B Squared assessment package. Pupils in Years 10 and 11 follow either the AQA Entry Level in Mathematics and/or AQA Functional Skills in Mathematics and/or the AQA GCSE Mathematics Course.

Pupils are taught through clear modelling and have the opportunity to develop their knowledge and understanding of mathematical concepts. Concrete manipulatives, pictures, words and numbers are used to help pupils explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding at all levels.

In lessons, pupils work on a skill at their own level. Pupils can ACQUIRE the skill, APPLY the skill or DEEPEN the skill within the lesson. Pupils move through the different stages of their learning at their own pace.

Key vocabulary is revisited regularly to develop language acquisition.

Resources are readily available to help secure a conceptual understanding of the different skills.

Pupils are given opportunities to explore, apply and evaluate their mathematical approach during investigations, developing a deeper understanding when solving different problems / puzzles.

A love of maths is encouraged throughout school; success is celebrated in assemblies and newsletters. Pupils enjoy awards such as Times Tables Rockstars certificates and badges, Sumdog certificates and occasional competitions.

LEARNING through games is encouraged. DVD and Film clips add variety and help our VISUAL learners, practical activities help our KINESTHETIC learners and discussions and question and answer sessions help our AUDITORY learners. Repetition and over teaching are used to aid retention into long term memory.

Leadership, Assessment and Feedback

Assessment informs the teaching and learning sequence.

Feedback is given on pupils' learning throughout the lesson. Formative assessment within the lesson helps teachers to identify the pupils' individual needs and provide additional support or extension.

Summative assessments are completed at the end of each term (in Lower and Upper school) and these feed into the B Squared data which is shared with parents in the annual review.

The maths leader has a clear role and overall responsibility for the progress of all pupils in maths throughout school. Working with SLT, key data is analysed and regular feedback is provided, to inform on progress and future actions.

Impact

Pupils demonstrate a quick RECALL of facts and procedures (for learners with processing needs adequate thinking time will always be allowed). This includes the recollection of the times tables.

Pupils show CONFIDENCE in believing that they will achieve.

Each pupil makes PROGRESS relative to their starting point.

Each pupil demonstrates the ability to RECOGNISE RELATIONSHIPS and MAKE CONNECTIONS at their own level.

Mathematical concepts or skills are mastered when a pupil can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.

Pupils show a high level of PRIDE in their individual progress.