

Purpose of Policy

Mathematics is a core subject in the National Curriculum. This policy informs the basis in which we outline the purpose, nature and management of how Mathematics is taught and learned in our school, and informs all teachers of expectations. It is not a sequence/scheme of work, but a document to insure the consistent teaching of maths across the school.

Our policy recognises Mathematics as a functional tool and a valuable key life skill. We want all students leaving St Hugh's to not only be numerate, but to be able to transfer their mathematical skills to other curricular areas and into everyday life. By being 'numerate' we are referring to individual's abilities to thinking and reacting mathematically; to applying number sense to everyday situations encountered and to reasoning, using number knowledge acquired.

We want to impart to our students that Mathematics is not confined to just acquiring mathematical skills, but most importantly it is about fostering inquiring minds, inciting enthusiasm and valuing curiosity.

Aims and Outcomes

- To ensure a broad, balanced, creative and stimulating Mathematical curriculum in line with the National Curriculum
- To present Mathematics in meaningful contexts and to embed a range of practical activities designed to enhance student's mathematical experiences.
- To ensure continuity and progression in the student's learning as they progress.
- To instil in students a positive and confident attitude towards Mathematics through the stimulation of thinking and reasoning skills as well as the fostering of logic and mental agility.
- To enhance pupil's use and understanding of the language and vocabulary of Mathematics.
- To develop pupils' use of information and communication technology (ICT) in their Mathematics studies.
- To highlight cross-curricular links where appropriate.
- To involve our parents in their student's mathematical learning both in school and at home.

Mathematics and the Curriculum

Teachers are guided by long and medium term planning that has been written to systematically map out a structured approach to mathematics teaching, in order to cover all elements of the National Maths Curriculum. In conjunction with using B-Squared to determine the appropriate pitch and challenge, lessons are planned and delivered with the necessary differentiation to allow every student the opportunity to achieve their potential. Our teachers review, adapt and/or adjust lessons with planned activities, use of resources and assessment for learning to meet student's individual learning needs. These changes are annotated onto plans/acted upon and are used to inform future planning and the next steps in teaching.

Students are not set for maths, but are ordinarily taught in their teams but not necessarily by their team teachers. Teachers plan individually for their Maths classes.

Equal Opportunities and Inclusion

All students are given an equal opportunity to maximise their individual potential; this is regardless of ability, gender, race, religion, disability or talent. Activities both within and outside the classroom are planned in a way that encourages full and active participation by all students, matched to their knowledge, understanding, physical and emotional capabilities and previous experience.

Equal emphasis is given to the roles of both men and women using Mathematics in society. Every effort is made to ensure that activities are equally interesting to both male and female students.

Teaching and Learning

At the start of each lesson, the learning objective (WALT) is displayed, shared with the students and used as a title in exercise books when written work is undertaken. The success criteria (WILF) are clearly specified to the students. Relevant vocabulary is regularly displayed and its use and understanding is developed through pair talk. Visual aids, models and images, and concrete resources are used to support teaching and learning.

St Hugh's embraces ICT as an effective enhancing teaching tool in aiding student's learning process and in raising attainment. Abacus Active Learning interactive teaching and learning programmes, relevant software and internet links are incorporated into daily lessons.

Varieties of teaching strategies are used to engage and interest students and further their learning. Consideration is given to different learning styles - visual, auditory and kinaesthetic. These often include:

- Peer teaching/evaluation and use of talk partners
- Individual work
- Paired work
- Group work
- Investigative work including exploring, pattern seeking, sorting and classifying, making a survey and problem solving

- Presentation of knowledge directly imparted by the teacher or another adult, incorporating student's experiences and making it relevant to their lives
- Demonstration and modelling of skills and techniques, and provision of time for practice
- Opportunities to communicate ideas to each other and to teachers
- Use of practical and concrete resources to help scaffold understanding of mathematical concepts

Each Maths teacher has access to a comprehensive calculation policy – a set of structured progressive calculation methods, taking the learner from informal jottings to formal written methods. The implementation of these methods is the responsibility of all Maths teachers.

Student's Work

Students are encouraged, where appropriate, to complete their calculations in their Maths books and show their methods (workings out). The Learning Objective (WALT) and short date should be written for each piece of work. Students are to be encouraged to write one digit for every square in their Maths books. For students with complex needs folders may be used to document their work. Student's books are regularly monitored.

Assessment

The use of formative and summative assessment is an integral part of learning and teaching.

Regular formative assessment checks students' learning throughout the lesson against the learning objective and success criteria. This informal assessment notifies the teachers of the next step in their planning to address learning needs.

Evaluative written feedback is given in student's books to help consolidate learning. In addition, evaluative oral feedback is also used. The next written steps are indicated using the 'two stars and a wish' stampers, which have been supplied to all teachers, and should be carried out at least once a week.

Students are encouraged to self and pair evaluate work to engage them in making judgements about the stages of their/their partner's learning, consequently empowering them to become skilled reflective learners and critical thinkers.

Teachers' plans are annotated to identify the level of achievement of the whole class and specific groups of students, and identify their next steps. Adjustments to planning may be indicated based on this information.

Summative assessment is carried out once a term through the use of B-Squared. Levels for each pupil are recorded centrally. Data analysis of pupils' test results and teachers' assessments are intrinsic to identifying target student for intervention. These include the under-achievers and those making less progress than expected. Students that show high attainment, and are making significantly higher progress than expected, will also be identified and considered for extended provisions.

