Sacred Heart Catholic Voluntary Academy

St Thomas Aquinas Catholic Multi-Academy Trust



MATHEMATICS POLICY

Policy Date:	28/06/21	Kate Hayles Head Teacher	an
Policy Review Date:	28/06/22	Edward Hayes Chair of Governors	Edward Hayes

Mathematics Policy

Sacred heart Catholic Voluntary Academy has a particular distinctiveness in that it seeks to represent the Gospel teachings of Jesus Christ and the teaching of the Catholic Church as we strive to develop the talents of every member of our community.

<u>We believe that:</u>

"The whole point of learning maths is to be able to solve problems. Learning rules and facts is of course important, but they are the tools with which we learn to do maths fluently, they aren't maths itself."

Lynne McClure: Director of Nrich

Aims to ensure that all pupils:

- Become **fluent** in mathematics, through varied and frequent practice with increasingly complex problems to develop understanding and to recall and apply knowledge rapidly and accurately.
- **Reason mathematically** by investigating, making conjectures, relationships and generalisations, developing an argument, justification or proof using mathematical language.
- **Can solve problems** by applying their mathematics to a variety of problems, making rich connections across mathematical ideas and contexts, and across other subjects, and persevering in seeking solutions.
- Develop an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.
- are equipped with the mathematical skills, knowledge and understanding necessary in order that they can play an increasingly useful and positive role in society and make informed choices about their lives both now and in the future

Time Allocation

To provide adequate time for developing mathematics each class will spend the equivalent of approximately 5 hours of mathematics per week. These sessions will usually be daily. In addition, through our Curriculum Planning opportunities are provided where appropriate for pupils to develop, use and apply their mathematical skills within different contexts and a variety of real life situations.

In Foundation Stage, children are taught in mostly small group, short sessions, with other independent activities provided throughout the week in support of this and previous learning.

Teaching and Learning

Planning

- The new National Curriculum (2014) forms the basis of the teaching and learning of mathematics and for implementing the statutory requirements of the programme of study for mathematics.
- At Sacred Heart all planning should be in accordance with the White Rose Hub teaching and assessment materials. White Rose Yearly overview timetables are used in all year groups. However short term plans can be supplemented by other teaching resources/ideas.
- Calculation strategies and appropriate child progression are outlined in the school's Calculation Policy.
- Short term planning is the intellectual property of the class teacher, and follows a format that is purposeful and informative to the class teacher (see Teaching and Learning Policy). This outlines details of objectives for the lesson and how these objectives will be taught (which may include combinations of whole class, groups, pair and individual activities).

We will ensure that:

- The majority of children will work on <u>age-related objectives</u> in line with the National Curriculum.
- Age-related objectives are shared with the whole class with the expectation that all children will achieve this and some will exceed.
- Planning reflects and takes into account children's prior learning and current assessment.
- Hot and cold tasks are used at the beginning and end of units of work (In years 1-6) to provide assessment information. This is used to influence and is reflected in subsequent planning.
- Planning is appropriately differentiated in order that lessons consolidate, build upon and extend learning for all children.
- Opportunities are provided for the children to develop a broad range of skills in using and applying mathematics and in making connections in mathematics.
- Planning identifies a wide range of engaging activities and uses a wide range of teaching strategies and visual/concrete resources/ models / ICT to sustain children's concentration, motivation and application.
- Teachers demonstrate secure mathematical subject and pedagogical knowledge and avail of CPD opportunities where possible.
- Teachers systematically and effectively check pupils' understanding throughout the lessons. Teachers show flexibility in planning both before and during lessons so that they can adapt lesson plans due to child responses and their professional judgment. They anticipate where they may need to intervene, support or challenge as appropriate to impact on learning.
- We provide opportunities for children to show independence, take initiative, think for themselves and show perseverance.

- Children are encouraged to build resilience and to see mistakes as learning opportunities
- Teachers provide appropriate feedback to children allowing pupils to understand in detail how to improve their work. Next steps in learning will be identified and shared.
- Children have opportunity to reflect on what they have learnt and to respond to this.

Inclusion:

Children are taught using the Programme of Study appropriate to their age and year group, from the 2014 National Curriculum and EYFS Curriculum. The expectation is that the pupils will move through the programmes of study at broadly the same pace. This will be made appropriate for all pupils, through quality first wave teaching and differentiation. The majority of children will work on age-related objectives in line with the National Curriculum and EYFS Curriculum. Those children with alternative or additional needs may have an adapted or individualised curriculum relevant to their specific needs.

However, teachers will use both formative and summative assessments to make decisions about when to move on based on the evidence of pupils' understanding and their readiness to progress to the next stage.

Children who are exceeding age related expectations are given the opportunity to deepen their understanding. Children who are not sufficiently fluent with earlier material will be given opportunities to consolidate their understanding, through additional practice, before moving on. Specific Wave 2 intervention programmes may be used when appropriate for identified children who would benefit from this in order to achieve or exceed age-related expectations by the end of the year. (This may include precision 1:1 teaching, Small Additional Booster Groups)

Foundation Stage

In Foundation Stage the class is organised to promote social skills and the development of the seven areas of learning, including mathematical language and understanding. There are 2 strands within the Mathematics Area of Learning: Numbers and Shape, space and measure.

Assessment

Assessments are made in line with the school assessment policy.

Both formative and summative Assessments will be used to inform teaching and learning in a continuous cycle of planning, teaching and assessment.

Hot and cold tasks are used for summative assessment at the beginning and end of units of work (in Years 1-6).

White Rose Hub tests are used as end of term assessments.

Formative assessment is ongoing throughout the lesson. Assessment of and for learning in mathematics may use a variety of accurate, timely and regular assessment for learning strategies in order to assess children's work in relation to the lesson's learning (including observation, questioning, discussion, mini-plenaries and plenaries, marking, self / peer assessment, and continuous feedback through =out the lesson).

Summative assessment are carried out regularly at the end of each term in Year 1-6. All results from these assessments will be recorded, analysed and used to inform future planning and target setting.

Standardised testing is used according to the current assessment schedule and supplements the judgements made by the teachers.

Target Setting;

Targets in maths will be reviews and set by teachers and Head teacher / SLT through halftermly Pupil Progress meetings. Targets will be shared with children and parents on a regular basis.

Complimentary Policies and Documents:

This policy should be read in conjunction with all supporting policy statements, schemes of work, the Primary National Curriculum; EYFS Curriculum; Calculation, Teaching and Learning, SEND, Assessment and Marking Policies.

Monitoring and Review

The Head Teacher, Maths Subject Leaders and Senior Leadership team will monitor the effectiveness of this policy throughout the academic year. They will report to the governing body on the effectiveness of the policy annually, and if necessary, make recommendations for further improvements.