

ST AGNES

Catholic Primary School

With Jesus beside us, we do our best



Mathematics Policy

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Our Vision and Values

At St. Agnes we believe that although we are all very different we have a way of living, behaving and doing things that allow us to serve as a witness to the Catholic Faith in our Lord Jesus Christ.

Our school motto is: **With Jesus Beside Us We Do Our Best to:**



Believe

We are all valued in God's family and the school family. We **believe** in ourselves and in our abilities.

Persevere

When things get difficult we will **persevere** so that we will grow stronger, realising we can turn to each other and God.

Contribute

We will **contribute** to the life of the school, the parish, the local community and the wider world to which we all belong.

By doing these we will:

Achieve

By being the best we can be, we will **achieve** in making a difference to others and living as God would want us to.

Statement of Intent

The aims of the National Curriculum for Mathematics introduced in 2014 are to ensure that all pupils:

- ❖ Become **FLUENT**
- ❖ **REASON** and **EXPLAIN** mathematically
- ❖ Can **SOLVE PROBLEMS**

Here at St Agnes we want to develop children's lifelong mathematical skills.

This policy is underpinned by all four of the school's core values:

Believe, persevere, contribute = achieve

It should be read in conjunction with the following school policies:

- Calculation policy
- Marking policy
- Special needs policy

Aims and Objectives of this Policy

At St Agnes RC Primary School, we aim to:

- develop positive attitudes towards Mathematics and an awareness of the relevance of mathematics in the real world
- equip pupils with the mathematics they need to become numerate.
- develop pupils' ability to apply mathematical skills with confidence and understanding when solving problems.



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- enable pupils to express themselves and their ideas with assurance, using the language of mathematics
- be able to use and apply the skills in other curricular areas and everyday life.
- develop pupils' initiative and motivation to work both independently and in cooperation with others

EYFS

Mathematics within the EYFS is developed through purposeful play-based experiences and will be represented throughout the indoor and outdoor provision. The learning will be focussed on the expectations from Development Matters / Early Years Outcomes and will take into account pupils' interests and current themes.

Mathematical understanding can be developed through stories, songs, games, imaginative play, child-initiated learning and structured teaching. As pupils progress, they will be encouraged to record their mathematical thinking in a more formal way.

KS1/KS2

It is important that children continue to explore Maths throughout KS1 and KS2. The school adopts the CPA approach. This allows the children to experience the physical aspects of Maths, finding a way to present their findings and understandings in a visual form before relying on abstract numbers. They are encouraged to reason and solve problems, presenting their findings not only in a written form but also visually and verbally as needed.

Approach

A calculation policy has been developed and revised in line with the National Curriculum requirements in 2014. The programmes of study set out within each domain in the Curriculum will be used to ensure children get the learning experience that is required.

Teaching strategies

In order to provide pupils with active and stimulating learning experiences, a variety of teaching and learning opportunities are adopted:

- Children may work individually on a task, in pairs or in a small group, depending on the nature of the activity.
- Activities are planned to encourage the full and active participation of all pupils.
- Teachers provide differentiated support throughout the lesson in order to meet the needs of all pupils.
- Teachers place a strong emphasis on correct use of mathematical language; this is supported by key vocabulary being displayed.
- Teachers value pupils' oral contributions and create an ethos in which all children feel they can contribute.
- Use of questioning helps to tease out children's understanding of key mathematical concepts.
- Teachers are supported by joint planning, modelled lessons, team teaching and scaffolding lessons if and when it is needed.

Organisation

- All children receive a daily maths lesson, although mathematical skills run through many other areas of the curriculum.
- Each lesson focusses on one clear learning objective which all children are expected to master; extension activities enable those children who grasp the objective rapidly to extend their learning by exploring it at greater depth, concrete materials are available to support children who are taking longer to master a concept.
- Each block of lessons includes elements of: fluency, to practise skills; reasoning, to deepen understanding; and problem solving, to apply skills.



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- Teachers use the White Rose Maths planning as medium term plans for each term, and a weekly plan is produced to incorporate the above elements
- All classrooms have maths working walls with key vocabulary clearly displayed.
- Every classroom has a range of practical apparatus to support children's learning, with additional resources stored centrally.

Teachers planning and organisation

Long term planning

The National Curriculum for Mathematics 2014, Development Matters and the Early Learning Goals (Number, Shape Space & Measure) provide the long-term planning for Mathematics taught in the school.

Medium term planning

Years Rec-Y6 use the White Rose Maths Hub schemes of learning as their medium-term planning documents. These schemes provide teachers with exemplification for Maths objectives and are broken down into fluency, reasoning and problem solving - the key aims of the National Curriculum. They support a mastery approach to teaching and learning and have number at their heart. They ensure teachers stay in the required key stage and support the ideal of depth before breadth. They provide plenty of time to build reasoning and problem solving into the curriculum.

Short term planning

The above schemes of learning support weekly lesson planning. Lessons are planned on a common planning format and are monitored at intervals by the Mathematics subject leader. EYFS planning is based on medium term plans and delivered as appropriate to individual children with thought to where the children are now and what steps they need to take next.

Teachers of the EYFS ensure the children learn through a mixture of adult led activities and child-initiated activities both inside and outside of the classroom. Mathematics is taught through an integrated approach.

Assessment

Teachers assess formatively through marking and the use of marking codes (see attached appendix 1.1). Teachers use assessment for learning through their questioning of pupils understanding.

Termly summative assessments will be used to check pupils' progress and to plan for gaps and next steps. Children will be assessed against the national curriculum objectives using the following judgements:

- Significantly below expected year group
- Working Towards expected year group
- Working at the expected year group
- Working at a greater depth within the year group.

SATs take place in Years 2 and 6 and should be analysed to inform future planning.

Parental Involvement

We encourage parents to be involved by:

- Inviting them into school twice yearly to discuss the progress of their child.
- Providing parents with an interim report and an end of year report outlining their child's achievements.
- Sending fluency activities weekly in the Maths Fluency Record to be completed by or with their child. Parents should sign the Fluency record each night.
- Nursery to Y3 also have the opportunity to share Maths activities with their children through the Maths Monkey home learning project.



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Concluding Statement

It is our ambition that, through this policy, all children will have the opportunity to make progress and meet their age related expectations.