

# St Anne's & St Joseph's RC Primary Mathematics Policy



## **Our Vision**

*Our curriculum is designed to have faith and love at its heart, with children developing a sense of belonging to both our Parish and local community as they journey through school. It is designed to value each child, allowing them to develop their God given gifts. Our curriculum will encourage the highest aspirations for all members of our school family, helping pupils become independent learners who have the resilience to persevere, confidence to rise to all challenges and have empathy for all around them.*

## **Introduction to Maths**

At St Anne's and St Joseph's, Mathematics is an important part of everyday life. With this in mind, we endeavour to ensure that children develop a healthy and enthusiastic attitude towards mathematics in order to foster self-confidence and a sense of achievement.

## **INTENT**

At St Anne's & St Joseph's RC Primary School, we aim to help pupils to:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately;
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language;
- solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication.

(Mathematics programmes of study: key stages 1 and 2 National Curriculum in England)

## **IMPLEMENTATION**

### **Planning**

The school uses the National Curriculum and Lancashire LAPs (Learning and Progression Steps) as the basis for planning. At present, Red Rose Mastery Maths is used for Years 1 to 4 to support staff in planning. Teachers' planning ensures that the yearly teaching programme is taught through using and adapting the Red Rose Mastery Maths Program. Teaching objectives are drawn from the year below and/or above where appropriate for mixed aged classes. In Years 5 and 6, teachers plan using the Lancashire maths planning resources to ensure that all pupils are taught the skills they need before they move onto Year 7.

### **Medium Term Plans**

Medium Term plans are part of the Lancashire planning support materials and enable teachers to deliver a clear sequence of learning over the school year which covers all the skills needed for specific year groups. LAPs (Learning and Progression Steps) build up over the school year so that children work towards end of year expectations.

### **Weekly Planning**

Using the Red Rose Mastery Maths Program and information from assessment of pupil progress, teachers create their own plans using the weekly planning grid. Staff use the examples from the Red Rose Mastery Maths Program when planning their lessons. Teachers make amendments to plans according to their assessments of pupil progress. Following the lesson, teachers will identify pupils who have exceeded or not achieved expectations. Same day interventions will be used to ensure that those who have not achieved will be ready to progress by their next mathematics lesson.

### **Variation**

Teachers plan an activity for pupils and adjust the provision to make the learning accessible for all through the use of; teaching assistants, resources, extension activities, targeted questioning, open questions, collaborative learning, peer support.

### **Interventions**

Where targeted intervention is required, these take place in the afternoons and are in addition to same day interventions. The class teacher identifies the focus of these interventions which are taken from a LAP and can be delivered by a teacher or a TA.

### **Teaching & Learning**

In EYFS, pupils are taught mathematics on a daily basis. This early introduction to mathematics may be undertaken orally and often in the context of a class theme. Opportunities for mathematics are exploited wherever possible, such as when taking the register.

Throughout school, mathematics lessons take place each morning and each lesson lasts up to 60 minutes. Teachers spend time in direct teaching and questioning of the whole class, a group of pupils, or individuals. TAs are used to ensure progression in maths and support individuals and groups as specified in plans. Teachers and TAs place strong emphasis on the development of mental and written calculation skills (see our calculations policies). Children are asked to explain their methods and to check for reasonableness. There is also strong emphasis on the development of mathematical vocabulary and the language of explanation.

Learning objectives and success criteria are used and staff ensure that they model the correct use of mathematical language along with appropriate representations and models. Staff encourage and value pupils' oral contributions and create an environment

*in which all children feel they can contribute and where mistakes are seen as a part of the learning process.*

*Activities are planned to encourage the full and active participation of all pupils, and teachers ensure that tasks challenge pupils working at all levels, through reasoning, problem solving and mathematical challenges to deepen their understanding.*

*Children often sit in mixed ability pairs to promote peer support through discussion and a classroom culture where a can-do attitude to mathematics prevails and pupils can succeed at mathematics.*

### **SEN Children**

*All pupils take part in the daily maths lesson. Children may be pre taught vocabulary relevant to the learning that is due to take place. Teachers plan lessons so that all pupils can be included and can make progress in the lesson. In oral work, teachers plan varied questions, with some targeted at specific pupils. Teachers also ask open questions that allow all children to take part. Teachers use a wide range of visual resources and representations to illuminate meaning. During whole class teaching, targeted help is given to children/groups by teaching or teaching assistants where needed.*

*For further information, refer to the SEN Policy.*

### **Gifted & Talented Children**

*Teachers ensure that tasks provide sufficient challenge for all in their teaching and planning of tasks, they use strategies such as 'peeling off' to make sure that all children have the level of support they require and are not held back when they are ready to be challenged. Where used, low threshold high ceiling tasks provide challenge for children at all levels of ability.*

*For further information, refer to G&T policy.*

### **Resources**

*The school aims to provide a mathematically stimulating environment and use resources to enrich the children's learning through:*

- displays that promote mathematical thinking and discussion.*
- providing a good range of resources for teacher and pupil use.*
- providing resources such as number lines, hundred square, place value charts, base ten and multiplication squares, bar models, part-whole models and tens frames.*
- displaying resources as appropriate and use them for whole class or individual work, for children to become confident in their use and understanding of the number system.*

- using a working wall which supports the delivery of the maths curriculum including work and guidance from current numeracy topics and general support material e.g. number bonds, number lines, unit vocabulary, good examples from the children, photographs, problem solving challenges and sentence stems to develop the language of explanation.

### **Health & Safety**

Following our guidance on Health and Safety in the classroom, children will be guided on the safe use of potentially dangerous equipment, such as compasses. For further information, refer to the Health and Safety Policy.

### **IMPACT**

#### **Assessment**

Assessment is an integral part of teaching and learning and is a continuous process. Assessment is carried out; orally through questioning; by observing children at work; marking children's work; through planned assessment activities linked to the key objectives.

Informal assessment takes place continuously and teachers identify names of children who have exceeded/not achieved expectations, to inform same day interventions and planning.

There is time set aside each term (every 12 weeks) for summative assessment to show what the children have learned throughout the term. The tests that school use for this are NFER. From these tests and from teacher assessment of independent work, the children are assessed at being at age-related expectations, above age-related or below age-related. This is recorded on the Lancashire tracker.

#### **Reporting Procedures**

Annual written reports to parents include comments on; pupil progress; effort and attitude; pupil strengths and areas for improvement.

#### **Monitoring**

The subject leader will follow the school's monitoring timetable to ensure that the subject of maths is visible, effective and evidenced. This will be completed through:

- Monitoring of data
- Observations of lessons
- Teacher questionnaires and skills audits

- Pupil conferencing
- Evidence collection through video and photos

*The use of a maths action plan will provide termly evidence of the continuing monitoring and teaching and learning taking place through school. As each term is evaluated, new targets are created ensuring a constantly effective process for maintaining standards in maths.*

*Next Review Date - November 2022*