# JAMES PEACOCK INFANT AND NURSERY SCHOOL



Our Maths Curriculum

Subject Lead - S.Litherland

### Intent

At James Peacock Infant and Nursery School Maths is taught following the White Rose Scheme of learning alongside the new initiative – NCETM Mastering Number program. In addition, we refer to the NCTEM prioritisation guidance for KSI to ensure all core concepts are consolidated.

It is our intent that our Maths curriculum will support the prominent place of Mathematics in everyday life whilst ensuring we have curriculum coverage to meet the national requirements. A high-quality education in Maths will teach our pupils to be fluent mathematicians and to solve real world problems.

We will ensure children:

- develop a deep sense of number; building on knowledge and understanding from EYFS and throughout KSI.
- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop their understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically using stem sentences from both White Rose and NCETM's Mastering Number schemes to make connections, generalisations and the ability to justify using mathematical language.
- solve problems by applying their mathematics to a variety of problems with increasing difficulty, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

## Implementation

At James Peacock School we have chosen to follow the White Rose Maths scheme, which follows a mastery curriculum. White Rose Maths has a clear rationale for the sequence of learning. Furthermore, this supports the transition to our feeder school St Peter's as they follow White Rose learning scheme too. This allows for children to be supported through clear progression and mastery of skills over their whole primary school life. White Rose breaks down the skills needed into small achievable steps. Where required, we break down the steps further and supplement our White Rose learning with materials from NCETM and NRICH.

To achieve this, we will:

- Teach daily maths lessons which include fluency (flashback 4), reasoning and problem solving (gold star challenges) and varying levels of challenge to stretch all abilities.
- In Reception children follow a combination of White Rose and NCETM mastering number program. In KSI these are taught as separate sessions to develop fluency. In Nursery we have worked backwards to build in the skills needed to thrive in reception and beyond.
- The Maths leader ensures they provide CPD (especially with the new Mastering Number program), shares updates for the subject, leads professional development and provides support and guidance to colleagues.
- In KSI children are provided with maths toolkits to support the Concrete Pictorial Abstract approach to learning.
- Use working walls to scaffold and extend children's learning and build independence.
- Provide homework to help children practice skills at home such as the Numbots App/Website to support early number skills.
- Regularly assess the children: termly, at the end of each block and daily formative judgements to ensure no child is left behind.
- Teach children to persevere and take lots of opportunities to further their own learning.
- Embedded this by using a consistent approach where new content is taught and modelled clearly and the children then independently challenge themselves with a series of fluency problems that are linked to the sessions learning objectives.
- Maths intervention groups to help the lowest 20% attainers meet expectations.
- Focus on arithmetic at the beginning of the year.
- Differentiation through support and questioning unless a specific SEND need. This support may include help from an adult or resources or increased work/pre-teaching a set of fluency problems.
- On the spot marking to address misconceptions immediately
- Problem solving accessed by all pupils not just the most able.

## Impact

The impact of this will be:

- Most children reach end of year expectations.
- Children's progress is tracked on Otrack.
- Well planned sequences of learning support children to develop and refine their maths skills.
- Children are able to independently apply their knowledge to a range of increasingly complex problems.
- Children are reasoning with increased confidence and accuracy.

## Pupils are assessed each term throughout school through:

- Looking at evidence in their Maths workbooks/seesaw.
- Talking I to I with children about Maths and asking them differentiated questions (see ready to progress document for KSI examples).
- White Rose end of block assessments adapted as required (Year I as a class) (Year 2 – independently)
- End of Term standardised assessments PUMA (KSI)
- Weekly assessment sheets and Feb/Jun Data entry practical assessment (Reception)

#### How we support our pupils

Teachers set high expectations for all pupils. They use appropriate assessment to set

ambitious targets and plan challenging work for all groups, including: • More able pupils

- Pupils with low prior attainment
- Pupils from disadvantaged backgrounds
- Pupils with SEN
- Pupils with English as an additional language (EAL