

At Queensway School we follow a Maths mastery approach.



### **What is Maths Mastery?**

- A high level of performance for all
- Keeping the class working together whilst addressing the needs for all pupils to master the curriculum and for some to gain greater depth and proficiency
- A mind-set - All children can achieve with good teaching, appropriate resources, effort and a 'can-do' attitude.
- The manner in which the curriculum is designed, focusing on fewer topics in depth, repetition and application. All pupils have access to the ideas and concepts
- Deep and sustainable learning – for all Depth is the key to avoiding the need to repeat teaching. It doesn't feel like we're starting again each term.

### **How this looks in practice:**

- Teachers use the progression of skills document to plan their Maths medium and short term plans.
- All teacher's should be updating integris regularly particularly at the end of a unit.
- Parallel teachers take it in turn to plan Maths but then are expected to adapt this for their own classes.
- The weekly Maths should be planned with an emphasis on really grasping their understanding of the objective through a range of models and images.
- When planning teachers need to look at what they know previously and what they need to do to achieve the objectives.
- The calculation policy should be used when planning and visual images are hugely linked to the work in all year groups that the children are covering.
- To ensure that essential number skills are given priority all teachers will include an extra daily counting session in their time tables where they can cover the "on the boil" objectives from the school long term progression of skills document.

### **Using Resources and books**

All classrooms have a range of practical resources to help with the teaching of Maths. It is important that all children have the opportunity to use a range of resources and understand the limitations of these. The resources all classes have varies throughout the year groups but every class should have access to Numicon, Cuisenaire, multilink and dienes. Tens frames are used in key stage one.

We don't follow a scheme but teachers should be using a range of resources which includes Math's No Problem, Inspire Maths and white Rose.

### **Marking**

In maths, we recognise that to set targets and next steps, is challenging because there are many areas within the maths curriculum. Therefore, we have adopted a robust system of addressing misconceptions and extending children's learning within each unit of work through our pink for think marking. Children's next steps in learning in maths are identified from the progression of skills document and evidence is seen in teacher's annotated weekly planning.

Every piece of work is marked against the Learning Objective in maths for Years 1-4 with teachers highlighting the Learning Objective in green if achieved and pink if not achieved. In Key Stage two this becomes more of a child-led assessment, whereby children are asked to traffic light their work and by year 5 they comment 'why' if they are red or amber. If a child has self-assessed themselves as red, this is followed up by the teacher. This will be acknowledged by 'D' for discussion, green pen in books or evidence on annotated planning.

## **Homework**

All children from year one onwards bring home weekly homework.

## **Role of the Maths Leader**

- Ensure the school has a clear vision for Maths and what you want all children to achieve.
- Set up and keep a subject file including an action plan, progression of skills document, Maths policy and calculation policy, and ensure these are kept up to date. Ensure your audit of what you are good at is honest, reflective and shows what needs to be worked on and by when.
- Support new teachers to understand Queensway's mastery approach and monitor both short and medium term plans throughout the year as well as monitoring through lesson observations the teaching of all staff.
- Provide staff with training on new initiatives and changes which would support the teaching of Maths. Be supportive to all staff and allow opportunities for staff to watch your Maths teaching and discuss approaches being taught.
- Attend partnership meetings and moderation meetings and feedback information to relevant staff.
- Moderate Maths work as part of team meetings ensuring you have good examples and next steps are targeted and achievable. Also monitor Maths assessment at the end of each assessment period to ensure consistency throughout the school.
- Look at data throughout the year and ensure action plans are being written and implemented where needed. Support staff and work with individual children to moderate. Use this data to write reports to governors on the progress and attainment of Maths throughout the year and at the end of the year.
- Reflect on your own subject knowledge and look at ways to improve through professional development opportunities. To create an environment where people feel confident to share their teaching ideas. Keep up to date with new initiatives and also monitor resources available and when these need to be replenished.

## **What does Maths look like in Foundation Stage**

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers.

## **What are the expectations for Maths in the New EYFS Framework?**

### **Number**

*Children at the expected level of development will:*

- have a deep understanding of numbers to 10, including the composition of each number;
- subitise (recognise quantities without counting) up to 5;
- automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including doubling facts.

### **Numerical Patterns**

*Children at the expected level of development will:*

- verbally count beyond 20, recognising the pattern of the counting system;
- compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;
- explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

## **How do we achieve this?**

At Queensway school we have a progression of skills document that starts when the children join us in nursery and progresses all the way to year 6. Class teachers use this document to plan their medium- and short-term planning.

In Nursery and reception every classroom has a Maths area and teachers plan time everyday for the children to have a focused Maths whole class session. They also always ensure there are activities to support the objectives the children are working on.

There are lots of practical equipment in every class which the children have the opportunity to use including multilink, Cuisenaire, threading equipment, dice, sorting objects, compare bear, tens frame etc. The early years environment is engaging all children to gain an interest in number.