MATHS

At Walsh Infants and Juniors

Subject Intent through our Values

Community

A solid grasp of numeracy will give our children the skills to engage as full citizens in our society.
We value and believe that the alliance between parents and carers lays the moral bedrock for the education of their child. We provide them with tools to do so, such as through maths home learning and parent workshops.

Peace

Our maths lessons provide a peaceful environment where children have purposeful discussions. They show good behaviour where they support and value each other.

Love

Teachers are passionate about maths and endeavour to develop a love of maths within all children.
You will see children and adults helping and supporting one another in their maths lessons.
We applaud all efforts in mathematical learning, celebrating the journey of learning.

Resilience

We challenge every child to be the best mathematician that they can be.
We want children to show resilience and know they can use what they already know to help solve problems.
We promote children finding different ways solve and approach problems.

How we make our curriculum exciting and engaging and increase children's cultural capital:

- Lessons are fun and provide a **challenging** and **enjoyable** curriculum for all children using the **mastery approach**.
- Activities are **carefully planned** and are supported using **manipulatives** and carefully selected **visuals.**
- **Practical** and **real-life activities** are provided to bring maths to life and to make learning as purposeful as possible.
- **Maths workshops** on National Numeracy Day help to deepen children's mathematical understanding.

Our Curriculum Approach

White Rose Scheme of learning used from Reception to Year 6.

We use resources such as **Fluency Bee** in Years 1 – 4, and **Fluent in Five** in Year 5 & 6 to offer extra maths fluency sessions.

In KS2, we use **White Rose Fluency, Times Table Rockstars** and **Numbots** to help promote the learning of key maths facts.

We use the **NCETM Ready to Progress guidance** to identify core areas of the curriculum that need to be prioritised.

MyMaths is used for homework to help consolidate learning.

How we develop children's language, including subject specific and technical vocabulary and oracy:

- Explicit **key mathematical vocabulary** and language is identified across each unit and taught at the beginning of each lesson.
- **Key questions** to develop understanding and verbal reasoning are embedded into lessons.
- **Stem sentences** are provided on resources
- We provide opportunities for **collaborative working**.

Spirituality

Mathematics supports spiritual development through a **sense of achievement** and a **positive learning attitude**.

Children are encouraged to be **reflective learners**.

How we Adapt Teaching to meet the needs of our pupils:

- **Metacognitive** and **Self-regulatory** learning strategies
- **Scaffolded learning** through adult support, questioning, smaller steps, manipulatives and visuals.
- Prioritise understanding over task completion.
- **Same day** interventions.
- Give all children the opportunity to achieve **mastery**.
- **Extend and challenge** children to deepen their understanding

Big Ideas

- **Fluency** of key facts to master and retain the basics
- **Varied practice** to increase conceptual understanding and flexible thinking
- **Mathematical thinking** - reasoning and **problem solving**
- **Representation and structure** – pictures, visuals, connections

Teaching and Learning Approaches used in this subject:

- Daily fluency practice
- Communication of clear learning objectives
- Planned retrieval practice
- Activating prior learning
- **Key vocabulary** is explicitly taught
- Modelling - thinking out loud and worked examples.
- Small step sequence
- **I do, we do, you do** to scaffold learning
- **Concrete, pictorial** and **abstract** cycle
- **Cold calling** and **think pair share**

How we Assess:

- Teachers use **key questioning** to check conceptual and procedural knowledge.
- **Formative assessment** used to identify misconceptions and target key learning, whilst also diagnosing who requires intervention.
- **White Rose end of block assessments** is used to inform planning and consolidate learning that needs further embedding
- Termly **NFER testing** enables us to track children's attainment, identify trends and close gaps in knowledge.
- **TTRS heatmaps** are sent home termly and used in class to support the practice and retention of times tables
- Y4 children participate in the **Multiplication Check**
- **Summative assessments, formative assessments and teacher assessments** are used to make triangulated judgements for End of Year reporting.