Maths at St Peter's
Friday 29th November

Introduction and Purpose

Today's sessions purpose:

- Explain our approach in maths at St Peter's
- Talk about maths mastery and what this looks like at our school
- Provide strategies and resources for you

Maths purpose:

- For all children to achieve in and enjoy maths

Curriculum Overview

"The Mastery" approach to maths

- Focuses on depth of understanding, fluency, reasoning and problem solving

White Rose Maths

White Rose uses a mastery approach to maths teaching. This is a research-driven teaching and learning method that meets the goals of the National Curriculum

Curriculum Overview

What does it mean in practice? In summary, a mastery approach...

- **Puts numbers first**: Our curriculum has number at their heart, because we believe confidence with numbers is the first step to competency in the curriculum as a whole.
- **Puts depth before breadth**: we reinforce knowledge again and again.
- **Encourages collaboration**: children can progress through the schemes as a group, supporting each other as they learn.
- **Focuses on fluency, reasoning and problem solving**: it gives children the skills they need to become competent mathematicians.

Curriculum Overview

ddition & subtraction: Calculations

White Rose MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
add and subtract one-digit and two-digit numbers to 20, including zero	• add and subtract numbers using concrete objects, pictorial representations, and mentally, including: ➢ a two-digit number and ones ➢ a two-digit number and tens ➢ two two-digit numbers ➢ adding three one-digit numbers	• add and subtract numbers mentally, including: ➢ a three-digit number and ones ➢ a three-digit number and tens ➢ a three-digit number and hundreds • add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	• add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	• add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) • add and subtract numbers mentally with increasingly large numbers	• perform mental calculations, including with mixed operations and large numbers • use their knowledge of the order of operations to carry out calculations involving the four operations
Autumn 2 Spring 2	Autumn 2	Autumn 2	Autumn 2	Autumn 2	Autumn 2

Curriculum Overview

Fluency targets

One major theme we are working on currently is our children's mathematical fluency.
Fluency in maths means being able to recall and apply facts and methods quickly and accurately. It's about understanding numbers and how they work, solving problems efficiently, and being confident in using different strategies to find answers

At St Peter's, every maths lesson begins with a KIRF stater - Key Instant Recall Facts.
Every year group is given different targets per term and these are built into the beginning of maths lessons 3 times a week. The purpose of these being to develop children's fluency so they are more confident in answering and solving number problems.

Curriculum Overview

KIRF starter example

Dice game

Our approach to maths teaching

At our school, we are passionate about providing every child with the tools and confidence to succeed in maths. Here's what you can expect from our lessons:

1. **Fluency**
   - We focus on helping children build quick recall of key facts and methods, ensuring they can apply them with confidence.
2. **Clear Modelling and Explanations**
   - Teachers model methods step-by-step, using simple language and visual aids to make learning clear and accessible for all.
3. **Different Representations**
   - Maths is shown in multiple ways (e.g., using objects, pictures, and numbers) so children truly understand the concepts, not just the answers.
4. **Developing Oracy and Vocabulary**
   - We encourage children to explain their reasoning, use mathematical vocabulary, and articulate their thinking as part of their learning.
5. **Practice and Problem-Solving**
   - Every child is given opportunities to practise their skills and tackle problems that challenge them to think critically and reason logically.
6. **Success for Every Child**
   - We believe every child can achieve in maths. Lessons are designed to support and challenge all learners, building confidence and resilience.

Supporting Maths at home

1. Build a Positive Mindset

- Speak positively about maths, even if it wasn't your favourite subject at school.
- Avoid saying things like, "I'm not good at maths," as this can influence your child's confidence.
- Celebrate effort and progress, not just the correct answers—mistakes are part of learning!

2. Have Conversations About Maths

- Encourage your child to explain their thinking when solving problems, using "how" and "why" questions.
  - *E.g., "How did you work that out?" or "Why do you think that's the answer?"*
- Discuss everyday maths in real life, such as:
  - Cooking: Measuring ingredients or adjusting recipes.
  - Shopping: Adding prices, calculating discounts, or estimating totals.
  - Time: Reading the clock, planning activities, or counting down days.

3. Practise Key Skills in Fun Ways

- Play games that involve maths, such as card games, board games, or apps.
- Use dice or playing cards to practise addition, subtraction, or multiplication facts.
- Encourage fluency with quick-fire challenges:
  - *E.g., "What's 7 × 6?" or "How many ways can you make 10?"*

4. Use Online Resources

There are excellent websites and tools to support maths at home. Here are some favourites:

- White Rose 1-Minute Maths App: Quick fluency activities for all ages.
- Times Table Rockstars: For fun and engaging times table practice.
- Top Marks - Hit the Button: Great for practising number facts and fluency.
- NRICH: Problem-solving challenges for curious minds.

Questions and answers