# **GJS Maths Protocols**



# Our Maths vision: Every child is a confident, accurate mathematician.

### **Planning Lessons**

- GJS use White Rose (new scheme) to deliver maths lessons.
- White Rose is a mastery approach, underpinned by the 'Concrete Pictorial Abstract' ideology.
- Planning follows the GJS Yearly Overview document.
- White Rose is planned and sequenced. Planning can be found at https://whiterosemaths.com/
   with the log in provided by the maths leader.
- All children follow the age-related sequence of learning unless they have an EHCP, when they may access work at a level suitable for their needs.
- Children access the same lesson content because they are all expected to achieve.
- Children receive teacher-led whole class teaching as our primary teaching model.
- **Children will receive scaffolding as required** and this will be removed as independence grows.
- Children are required to think this requires resilience, and being resilient is hard. Teachers develop children as active learners and active thinkers to maximise retention of knowledge in long-term memory.

### **Implementation of Lessons**

- Maths lessons are taught in sets in order to extend greater depth learners and raise the attainment of those children who require additional adult support ideally in a smaller group setting or a higher ratio of adult to pupils.
- Work is completed in White Rose workbooks. An additional maths book is provided for extension activities and for showing additional working.
- Prior learning is revisited through the Flashback 4 starter.
- Concrete learning resources are available to use in every lesson where appropriate.
- Learning, taught in small chunks, is modelled by the teacher before children are given the
  opportunity to talk through their understanding and then apply this through the activities
  provided.
- Additionally, Yellow Maths books are used by each year group to supplement children's learning with challenges or additional material to revise a particular method. Staff also use these books to document methods for Arithmetic to provide the children with an expert resource they can refer back to.

### **Provision for Children with SEND in Maths**

At Greenleys, we recognise that pupils with Special Educational Needs and Disabilities (SEND) are not necessarily low attainers. Many are able to access the full mathematics curriculum when provided with appropriate scaffolding, adaptations and high-quality, inclusive teaching. Teachers use their knowledge of individual pupils' needs to define and demonstrate ambition for all learners and ensure the curriculum is accessible, meaningful and challenging.

**Ordinarily Available Provision in Maths** includes a range of high-quality teaching approaches that are adapted and differentiated to support all learners, including those with SEND. These include:

- Regular opportunities to revisit prior learning and key mathematical concepts to support retrieval and embed knowledge in long-term memory.
- Use of assessment for learning (AfL) strategies and timely feedback in line with the school's marking and feedback policy.
- Targeted interventions, such as Precision Teaching or small-group tuition for pupils working below age-related expectations.
- Use of manipulatives and pictorial representations to deepen understanding and support concept development.

### **Adaptations and Support Strategies:**

- Pre-teaching of key vocabulary and mathematical language to enhance understanding and access to new content.
- Repetition and reinforcement of key concepts to promote fluency and retention.
- Use of visuals and concrete resources to support conceptual understanding.
- Adapted tasks using structured supports such as worked examples, sentence stems for reasoning or guided steps for problem-solving.
- Varied questioning techniques to promote engagement and assess understanding e.g. scaffolded questions, use of "what do you notice?", "what's the same/different?"
- Anticipation and explicit teaching of common misconceptions to support secure conceptual understanding.
- Use of interactive whiteboard tools and visualisers to model step-by-step methods and enhance clarity.
- Regular fluency practice embedded in daily routines to build speed and accuracy in number facts and calculation.

#### **Scaffolding and Differentiation in Lessons:**

Wherever possible, all pupils engage with the same mathematical content and small-step progression of learning as outlined in the White Rose Maths curriculum. Scaffolding supports access and success without diluting the ambition of the lesson. This may include:

- Use of manipulatives e.g. Numicon, base 10 or counters to support understanding at all levels.
- Strategic adult support to guide thinking and model approaches.
- Modified tasks tailored to individual needs while maintaining core learning objectives.
- Inclusive vocabulary instruction, ensuring that all pupils develop confidence with mathematical language and reasoning.

Teachers plan responsively, using high-quality adaptations and scaffolding to ensure Maths lessons are inclusive, ambitious and supportive of every learner's progress and potential.

## **Times Tables Rock Stars**

- We use the Times Tables Rock Stars online learning platform to support the teaching of times tables. It can be found here: <a href="https://ttrockstars.com/">https://ttrockstars.com/</a> with a log in provided by the maths leader.
- Times Tables Rock Stars is used to support preparation for the Year 4 Multiplication Tables
   Check.
- Year groups also use Times Tables Rock Stars for homework based activities and can be used for the 2 timetabled times tables practice sessions.

# **Fluency Friday**

- Maths lessons on a Friday are used for arithmetic and mental maths-based activities (timetable variations can be agreed via discussion with SLT).
- Additional four number operation practice is also undertaken at the teachers' discretion.

## **Formal Assessments**

- The Test Base termly tests are completed at the end of the Autumn, Spring and Summer term during the timetabled sessions allocated to testing. MeRIT will be used to analyse results for future planning and support.
  - Autumn test end of T2 2 weeks before data is due
  - Spring test end of T4 2 weeks before data is due
  - Summer test T6 2 weeks before data is due
- Sonar is used to make a summative assessment attainment judgement 3 times a year for all children.

# **Displays**

- Linked to what is being taught e.g. place value. This can be displayed through concrete resources, pictorially using written methods/steps.
- Vocabulary for each mathematical subject taught should be included on your Math's display.
- Teachers may wish to promote good, quality work relating to maths (WAGOLL).

### **Additional Maths Expectations**

- Presentation is very important at Greenleys Junior School. Digits are clearly presented
  using the squares in the books where appropriate. Workings are spaced out and clear.
  Rulers are used for all mathematical drawing and working out where appropriate.
- Although we use White Rose as our main teaching approach, other resources can be used to provide challenge activities:
  - Offline resources Target Your Maths, Busy Ant, CGP Key Stage 2 Maths (year group specific), CGP White Rose books (autumn, spring and winter) for extension activities.
  - Online resources
    - o <u>www.whiterosemaths.com</u> Planning and worksheet website.
    - www.thirdspacelearning.com Worksheet, arithmetic and CPD website (Maths resources are aligned with White Rose).
    - www.mathsframe.co.uk Variety of online games, activities and printed worksheets.
    - o https://ttrockstars.com Timed, competitive times table practice.
    - <u>www.twinkl.com</u> Activities, lesson plans and games (Maths resources are aligned with White Rose).
    - o www.tes.com Lesson plans, activity sheets and resources.
    - www.testbase.co.uk Lesson plans, activity sheets and games (individual logons will need to be created).

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