Godalming Junior School

Subject: Maths	Report prepared by: Nick MacIver

*Our curriculum **intent** for Maths* at GJS

- At Godalming Junior School, we make every effort to ensure that all pupils:
  - become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
  - **reason mathematically** by following a line of enquiry and developing proof using mathematical language
  - can **solve problems** by applying their mathematics to a variety problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.
- Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study at GJS are organised into different areas, but pupils should make rich connections across mathematical ideas. They should also apply their mathematical knowledge to science and other subjects.
- We intend that the vast majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly will be challenged through being offered sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.
- We have created bespoke Maths Learning Journeys for each unit of work which set out the steps to be taken in that unit. In parallel to this, we aim to make our curriculum cohesive through regular references to the children's prior knowledge and future learning through our BOLTS (**B**uilding **O**n and **L**eading **T**o). We believe that these documents ensure that knowledge and skills are built on at a gradual and appropriate pace whilst making sure that children are well prepared for 'Secondary Maths' when they leave GJS.
- At GJS we make every effort to maintain a high and popular profile for Maths as a subject in school. Naturally, we aim to do this as it is one of the 3 Core subjects (as defined in the National Curriculum) but also because we want children to enjoy and take an active interest in the mathematical world that they live in.
- At GJS our intent is for maths to be an important part of our **language rich** learning environment. We aim to teach an **ambitious** curriculum that supports children in the development of their mathematical language in each area. The quality and variety of language that pupils hear and speak are key factors in developing their mathematical vocabulary and presenting mathematical reasoning.
- We strive to provide children with the opportunity to participate in engaging and stimulating maths investigations that will help to develop and deepen their understanding of the different mathematical concepts. We also aim to provide pertinent, real-world examples and scenarios to explicitly show the relevance of maths to everyday life outside the school gates.

*How we **implement** the curriculum at GJS*

- Maths is taught each morning across the school. These sessions are planned across the year group to ensure consistency between classes. The lessons are taught by the class teacher.
- Teachers follow the National Curriculum and ensure complete coverage of the maths curriculum through teaching via a variety of resources. White Rose materials, Classroom Secrets problem-solving challenges, Nrich investigations and GJS teacher-made bespoke resources are consistently used and adapted for teaching our children the knowledge and skills they need.
- We implement our **language rich** curriculum in the following ways. All teachers model the correct vocabulary and encourage children to do the same. Key vocabulary is consistently referred to in our Must / Should / Could success criteria. The use of Stem Sentences in maths lessons is aimed at scaffolding children's ability to articulate their mathematical knowledge and understanding. We use the classroom learning environment (e.g. displays and the slides used daily on the interactive whiteboards) as another way of highlighting mathematical language. Teaching staff ask open-ended questions that allow children to express their thoughts and views. We involve all children in paired and / or group discussion at regular points in lessons to give opportunities to discuss the relevant question or learning point, suggest mathematical answers in a low-stakes environment and to hear other children talk about Maths.
- We constantly assess the children using formative ongoing assessment techniques in order to allow us to adapt our teaching, correct errors and misconceptions and to celebrate success.
- We use White Rose summative assessments at the end of each unit of learning. Teachers use these to plan interventions and / or further sessions that may be needed to address areas for development in the children's learning. We also use the White Rose End of Term assessments twice a year to contribute to our overall understanding of where the children are "at" with their learning.
- The use of high quality mathematical investigations happens at least once a half-term in each class.
- Maths Homework is set each week and is predominantly reasoning / problem solving focussed which ensures that all children regularly have the chance to develop their skills around the second and third strands of the National Curriculum.
- The model set out above is followed in each year group until our Year 6 children leave us as secondary school- ready, keen mathematicians.
- We implement our aim for Maths to have a high profile in the school in a number of ways:

- Maths has a focussed week where children and adults in school take part in multiplication challenges.
- In that week we also provide enrichment in the form of buying the services of a highly regarded external company that provides our children with a day of engaging and challenging set of maths assemblies, workshops and problems centred around a real-world scenario.
- There is a prominent and engaging maths display.
- We facilitate Year 3/4 children to attend another school in order to engage in a full-day of high quality, aspirational and deepening maths experiences (run by an internationally renowned maths author and consultant) so that the children have the opportunity to delve deeper and master greater challenges. This is aimed at children who demonstrate a particular talent or flair at Maths.

- The Subject Lead regularly monitors planning and makes adaptations that may need to be made based on recent research.
- The Subject Lead also:
  - conducts regular learning walks and book looks,
  - leads CPD to staff in school,
  - models best practice to other teachers through them observing the Subject Lead teaching Maths.

*The **impact** of our Maths curriculum at GJS*

- Pupil voice and engagement shows clearly that children enjoy Maths at Godalming Junior School. Following pupil surveys, we have adapted our enrichment activities to reflect their areas of interest and adapted our planning to ensure that lessons are as **practical**, **demanding** and **engaging** as possible whilst still ensuring that children are able to develop their knowledge and understanding of key concepts.
- Typically, at least 90% of children at GJS are working either at or above their personal target level.
- Parents have spoken very highly to the Maths lead about their children's attitude and interests in Maths improving since joining Godalming Junior School.
- Children have commented favourably on the new style of home work questions that we have implemented.
- There was excellent feedback from the children and adults about the Maths Day workshops / assemblies and also about the Maths focussed week as a whole.
- The feedback from children about other external events (e.g. the courses run on Saturdays at a local secondary school) has also been very positive.
- Teachers report back high engagement, children asking a number of questions and even on occasions requesting purposeful Maths homework so that they can continue to develop their skills at home.

Action Plan Review for 2023-24

Intent	Implementation	Costs	Impact
Curriculum and teaching: **Ensure consistency of high quality in teaching across the school**	Purchase of White Rose resources for all year groups. Monitoring programme Bi-annual written feedback to teachers on strengths and areas for development. Maths Lead modelling highly effective practice to various teachers observing him teach. Further evidence based research informed staff meetings	Time Classroom secrets (£350) TT Rockstars (£180)	***Lesson observations and learning walks (on occasion with governors) have provided evidence of effective and highly effective teaching (including feedback) enabling children to attain well in Maths.*** ***There is a greater confidence within teaching staff that they are teaching in a highly effective way and in the "GJS way".***
Assessment	Embedding of White Rose End of Term assessments and use of Smartgrade	£500 Smartgrade	***Assessment is more closely linked to what children have learnt. Standardising of scores leading to more accurate view of national comparisons.***

Action Plan for 2024-25

Intent	Implementation	Costs	Projected Impact
Embed development of mastery approach as part of consistently high quality teaching (including feedback) across the school	To induct, mentor and monitor new staff (and recent ECTs) in the way in which we teach Maths mastery in a bespoke way at GJS. Next year, nearly half of our teachers will either be ECTs who are new to school or an ECT+1. Whole staff CPD meeting(s) to be held to embed how we teach Maths at GJS. Individual and small group sessions to mentor and monitor this group of teachers. Opportunities for them to observe and reflect upon more experienced teachers teaching maths. Then for the ECT teachers to be observed implementing (and given feedback on) good practise in their classrooms.	Time	For all Maths lessons observed to be effective or highly effective. For Teachers to provide and children to benefit from, in particular, the use of: the **CPA approach**, **effective written feedback** and a **language rich learning environment** to best support the children's learning. Curriculum content across the school is appropriate and WR scheme used consistently alongside our bespoke improvements. For the outcome of this intent to be that 93% of chn are working at or above their personal target level by the end of the academic year.
To develop the opportunities for lower attaining pupils to engage in reasoning and problem-solving elements of the curriculum.	Whole staff meeting to embed the numerous opportunities that are available to support lower attaining children with participation in reasoning and problem-solving. Learning walks to ensure that this is happening in lessons (either through investigations or other means). Book looks to ensure that it is happening in written feedback. Home learning checks to ensure that it is occurring regularly in that environment.	Time	Improvement in confidence and ability of at least 20 – 30% of lower-attaining children to successfully engage in problem-solving and to explain their reasoning accurately.