Maths at Yearsley Grove

Foci

- Revisit calculation policy
- Embed reasoning and problem solving within every maths lesson, accessed early by all children
- To continue to develop arithmetic/fluency through use of daily skills sessions and quick quizzes

Maths in EYFS and Year 1 (until summer term)

(9:20 – 10:00 and 1:20 – 2:00, daily) access to maths activities in provision, linked to current focus, modelled at start of week, then children access throughout week. Set maths OLO from assessment curriculum each week, every child is observed and assessed, recorded on Tapestry each week.

(11:00 maths input, daily) modelling each day, language focus.

Further maths-based activities also accessible in outside area during free flow two times daily.

(nursery activities are also accessible to reception children during provision/free flow)

Maths Lesson Structure (Y2-Y6)

Teaching process involves use of Concrete-Pictorial-Abstract approach

Song Lessons start with a song as children prepare resources for rest of lesson. Times tables songs, Supermovers, E.g. whilst children sticking sheets into books, etc.
Quick quiz 3 minutes of timed questions every day to practise key maths skills. Mostly mental arithmetic to promote and use key facts and keep them at forefront of brain throughout the year. These are then quickly whole-class marked.
Activate prior knowledge Revisit key information from lessons prior to this one. Not necessarily another written exercise. Can be be an I do > We do > You do, with last question(s) a quick whiteboard check.
Vocabulary check Introduce / clarify / revisit key words that will be used in this lesson or group of lessons.
Main Input Follows I do > We do > You do as appropriate. Regular opportunities for AfL using whiteboards, etc ensure children are not passive. Subsequent example questions build on previous question by adding one further step/changing one factor following the 'I do, We do, You do' approach. Some inputs are broken up into smaller 'chunks' throughout the lesson if necessary - not maths themes lend themselves to having one whole input happen at the start.
Independent work Children complete questions, practising the key skills taught in this lesson. These reflect the layout/strategies practised during main input. These are a mix of fluency and reasoning, marked during lesson or whole class as much as possible.
Plenary Time-permitting, one key reasoning question is explored whole class, giving access to instant feedback to those who have completed it and access to step-by-step model for those who have not.

- *TA role: To work with pre-identified children to help provide support based on previous work/activation of prior learning and support children completing reasoning/problem solving aiding reading as well as assessing children who may need more support.*

Maths PM Year 1 (post-provision) – Year 6

Maths 'Do Now' Activity (1:00 – 1:10 daily)

- Around four - six questions that should be able to be answered independently by pupils during afternoon registration.
- Questions should be based on repetition of prior learning or as a pre-assessment of an upcoming topic or to address gaps identified in Weekly Workout assessments. Use of Flashback 4 from White Rose Maths is also encouraged.
- For a **maximum** of two 'Do Now' sessions, either Numbots or Times Tables Rockstars is used.
- One of these sessions is replaced by the **"Weekly Workout"** (see details below)

Weekly Workout – Completed weekly from Y1 Summer onwards

- The expectation is that by the end of the term, most pupils in the class will be able to score 10/10. Misconceptions identified should be planned for in 'Do Now' or 'Skills' afternoon sessions.
- **There is also a bar modelling question. Teachers must make sure that pupils are using bar models to answer these questions.**
- Year 6 will complete arithmetic papers from Autumn term, building up to longer arithmetic papers in readiness for the KS2 SATS.

Numbots and Times Tables Rockstars

- An essential part of our Maths curriculum is to develop basic skills and we use Numbots (EYFS Y6) and Times Tables Rockstars (Y2 Y6).

Planning

- The school uses the White Rose scheme **– updated v3.0 -** as basis of its daily maths planning. *It is important to note that each small step does not necessarily constitute one lesson.* Teachers should break down these small steps as they see appropriate.
- When planning lessons, teachers should consider WHAT they want children to remember and think about, not simply what they want them to do.
- Teachers should also refer to the NCETM planning materials to support their teaching as well as the resources provided via the White Rose Maths Premium Subscription.
- Both long and short-term planning should be amended in light of day-to-day assessments and analysis of termly assessments.
- Planning is also supplemented by activities from NCETM Mastery tasks, I See Reasoning, Reasoning Ambassador training materials, tasks from Nrich website.
- Teachers should utilise all available time to complete the scheme of work. At the end of a term, if all of the units have been completed, the next unit from the next term should be started or time should be used to consolidate previous learning.

Reasoning and Problem Solving

- Both reasoning and problem solving are an integral part of the teaching of Maths and as such, is a key part of every learning sequence.
- It is not 'done on a Friday' or completed exclusively by children who work quickly during lessons.
- Children should go from surface learning to deeper learning during a small step. While the focus is on ensuring fluency and conceptual understanding initially, all children should have the opportunity to at least verbally reason about their learning. Question stems used to create reasoning-based questions.

Formative/Summative Assessment

- Continuous assessment in lessons, both during input and independent work
- Questions answered incorrectly in weekly workouts should be used as a basis for PM skills teaching
- Termly NTS tests tracked and analysed to inform quality first teaching and intervention