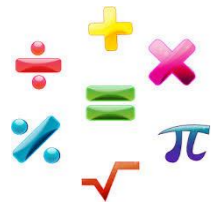




# Maths One Page Overview

## Intent:

**Discover:** Children learn how maths is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy in most forms of employment.



**Challenge:** Children will develop a passion for learning maths that will continue to be applied beyond our school



**Flourish:** Children will become mathematicians who have developed fluency, who are genuine problem solvers and have the ability to reason mathematically.



**At the Green Leek Federation our intent for mathematics is to teach in an enjoyable and applicable way, focused on problem solving, reasoning and fluency. Teachers are supported in their own personal delivery of our updated maths curriculum, ensuring lessons are kept child focused and enjoyable, whilst covering the broad curriculum. We have high expectations that all children will succeed and become numerate through our excellent provision of mathematics.**

- All children will have access to a minimum of 1 hour of maths teaching per day.
- Our curriculum, allows children to explore different mathematical problems and relate them to everyday life.
- Our policies, resources and schemes support our vision, ensuring all children tackle maths in a concrete, pictorial and abstract way.
- The mapping of mathematics across school shows clear progression between year groups, in line with the age related expectations and National Curriculum.
- We use the Abacus scheme as a spiral structure for teachers, always revisiting and consolidating, which ensures both consistency and clear development. This is supplemented by White Rose, Mathletics and Times Table Rockstars.
- Pupils are able to implement their problem solving abilities effectively in all areas of their mathematical learning
- Teachers utilise assessment outcomes to support pupils in their next steps of learning.

## Implement:

### **Coverage through History curriculum & extra-curricular:**

#### Number:

- Number heavy at the start of every term to ensure the foundations of number sense are solid
- Development of essential skills such as fluency, varied fluency, problem solving and reasoning
- Bar modelling method to enhance and embed conceptual understanding
- Manipulatives and resources to aid and embed concepts
- Use of concrete, pictorial and abstract approach which are interlinked and used simultaneously to develop understanding
- TTRockstars regular practice
- Maths Mastery embedded KS1

#### Problem Solving and Reasoning:

- Instant interventions on a daily basis
- Maths Mastery embedded across Key Stage 1 and disseminating through Key Stage 2
- A proportion of discrete problem solving sessions are taught to allow for precise teaching in this area
- Abacus and problem solving resources

#### Assessment:

- Formative day-to-day
- Summative through termly internal assessments.
- National DFE SATs test (Year 6) which consist of 1 arithmetic test and 2 reasoning tests
- TTRockstars and termly maths tests tracking progress.

#### Monitoring:

- To monitor the Abacus scheme ensuring staff understanding and expertise.
- Monitoring lessons, learning walks and work srutinies. Giving staff general feedback during staff meetings.
- Implement Pupil voice to examine lesson coverage, enjoyment, maths outcomes and pupil responses.
- Use staff feedback to gain greater understanding of how staff feel about lesson coverage, resources and assessment.

## Impact:

- School expectations are high and books are monitored both internally and externally at cluster moderations.
- Our maths books are full of a range of activities, showing evidence of problem solving, reasoning and fluency. Maths feedback, occurs regularly and is easy to see as children complete in purple pen, this feedback tackles misconceptions or gives children to reinforce their understanding.
- The impact of our mathematics curriculum is that children have been introduced and exposed to challenge within most lessons. This enables them to apply the taught mathematics skills in a range of new concepts. It is evident that children are accessing a wider range of challenge and are expected to reason more using correct vocabulary.
- Using Puma tests to help focus on areas to be addressed.
- Scores at end of Keystage tests indicate positive value added for the vast majority of children.
- Pupil voice indicates high levels of engagement and enjoyment in mathematics.

#### **Teacher CPD/monitoring:**

- Review Abacus mathematics and use of White Rose resources for developing thinking
- In depth Maths CPD for staff on: bar modelling, concrete and abstract, subitizing and unitizing and how to address misconceptions
- Review of Lockdown learning
- Team leader to provide CPD to increase staff confidence in teaching maths where needed.
- Team leaders to attend training opportunities.

#### **Family/community:**

- Weekly maths homework (mathleitics and TTRS)
- Work created by the children can be shared on websites and other online portals.

#### **Current priorities/Next steps:**

- To ensure pupils can implement their problem solving skills in all areas of mathematical learning.
- Ensure teachers are utilising assessment outcomes to support pupils in their next steps.
- To improve staff pedagogy through in depth training leading to improved subject knowledge.