Maths On a page St George's Junior

Training/CPD

Jo Boaler & Carol Dweck (Growth Mindset/Mathematical Mindset)
Metacognition & Rosenshine Principals (I do, we do, you, think alouds. Me plan, do, review, Give me 5)
White Rose (CPA, Models and Images, Fractions and Decimals)
Lesson Studies (observation, planning and feedback)
Observation of other colleagues
Involving staff in booklooks, observations and feedback
Technology Training through staff meetings
Number Talks

Curriculum/Scheme

White Rose Maths provides us with **suggestions** and sample materials in a structured and coherent way to develop pupils into mathematical thinkers. The long-term aim fits with our intention to provide an ambitious, connected curriculum accessible to all pupils across KS2 and leading onto secondary education. NC Coverage and pedagogical support for teachers.

Fluency, reasoning and problems solving using **CPA approach** allows children to visualize and make connections between different representations. Progression grid to see prior knowledge.

Supplemented with materials from: LbQ, Powermaths- **DISCOVER, SHARE, THINK TOGETHER, PRACTICE (challenge by choice approach), REFLECT**, Diving for Mastery, Sumdog, TTRockstars and additional arithmetic sessions. Linked to other curriculum areas to provide real-life practical application of mathematics wherever possible. Progressive, visual calculation policy with supporting models and videos.

Technologies (EEF Supported)

LbQ (Fantastic question sets, assessment tool, immediate feedback, understanding, fluency, reasoning, problem solving, reduces workload, prerequisites)
Sumdog (engaging, personalised learning tasks, automatically adapts to pupils' strengths and areas for developments, diagnostic tools, tables practise.)
Seesaw (provide feedback and additional modelling & scaffolding which pupils can revisit)
Power maths (planning, problems, manipulatives, misconceptions, vocabulary, unit reviews, manipulatives/models, prerequisites.)
White Rose Maths (paid subscription to access additional teacher tools).

STRENGTHS

- **Curriculum design**
- **Progression**
- **Links to other subjects**
- **CPD and subject leader support**
- **Pupil outcomes**
- **Fluency**

Intent (see website)

For every child to develop a comprehensive understanding of the interconnected nature of mathematics, equipping them with the skills of number fluency, reasoning and problem solving required for everyday life.

(**number fluency, patterns, varied, investigate, question, reason, conjecture, generalise, make links, mathematical language, justify/prove, enquiry, applying, context, real-life, mathematical mindset, persevere, technology)**

Assessment & Monitoring

Summative: Termly NFER, White Rose assessments**,** Power Maths end of unit assessments**,** Frog Club
Formative: Questioning**,** Marking & Feedback of independent tasks**,** Checks**,** Kahoot/Sumdog/LbQ or quizzes
Monitoring:
Insight assessment tracks progress, Pupil progress meetings, Cohort meetings, Interventions (Power of 2, Precision Teach, Catch-up maths, targeted interventions, Fix-it, Stretch-it activities)

Mastery

The journey to mastery is broken down into small steps in the WRM curriculum. Intelligent practice and building up experiences of different contexts gradually we aim to move our children towards mastery where they become fluent in the unfamiliar and can apply their skills in new situations. We aim to make connections between areas of mathematics to aid this journey and consider each step on the journey to mastery carefully. (Varied fluency, embedding CPA, reasoning and problem solving.) We aim to develop skills across the school to deepen children's understanding of concepts.

Actions: Stem sentences, pupil vocabulary, teacher glossary

SEND

CPA approach supports pupils to break steps down. Revisiting of key skills and links to real life applications (cross-curricular), technology (Sumdog, LbQ)