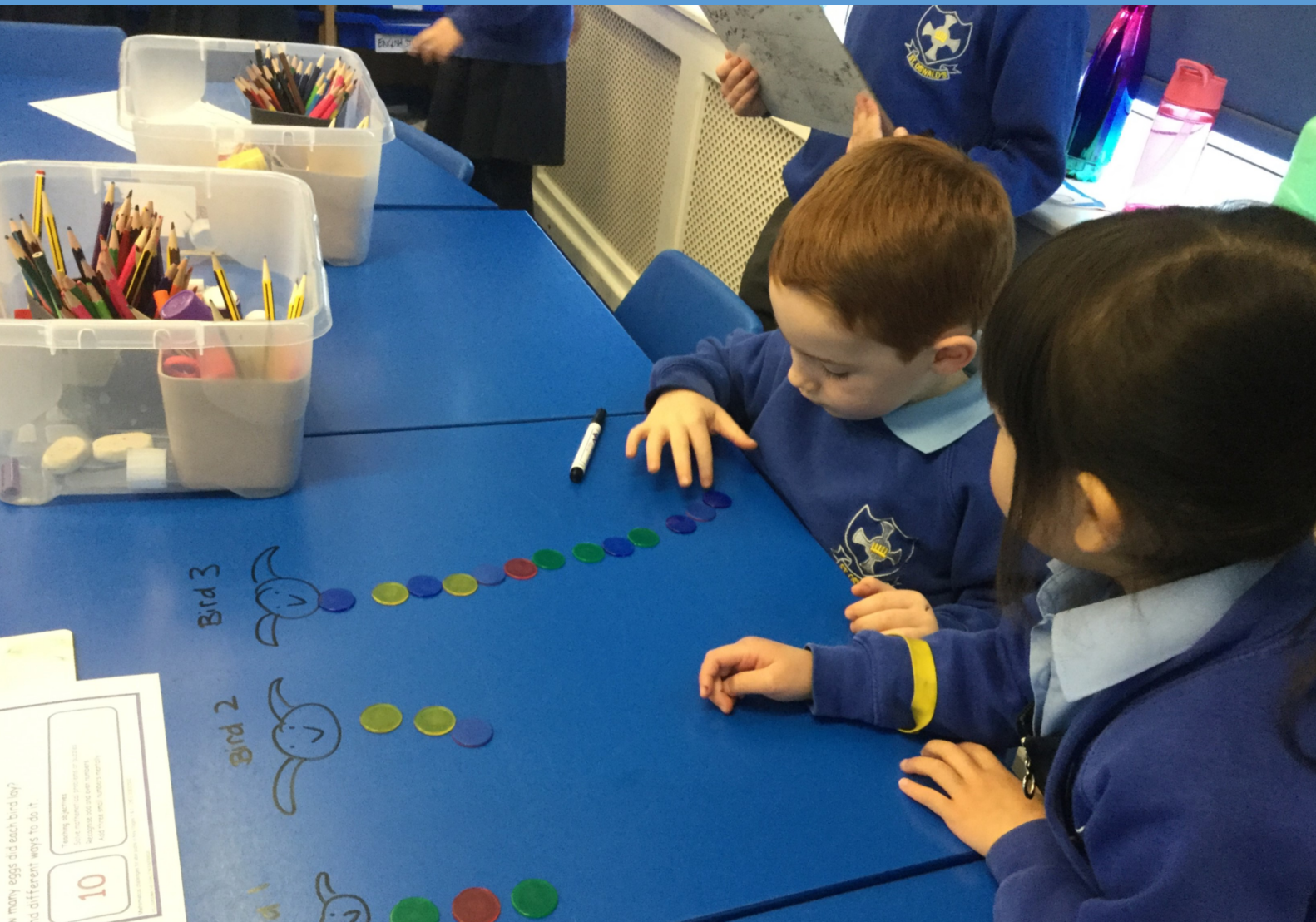


St Oswald's Catholic Primary School

CURRICULUM OVERVIEW



Maths



'Living, Learning and Loving Together with Christ'

Subject Lead: Clare Simms

Deputy Lead: Katie Morris



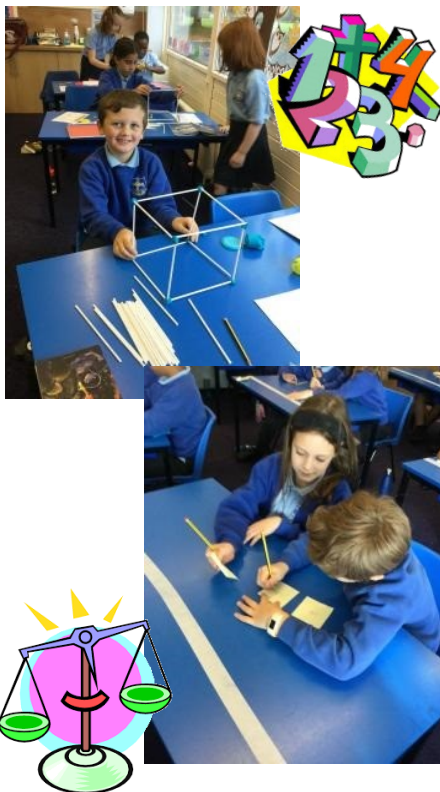
Overview

Mathematics equips pupils with a uniquely powerful set of tools to understand and change the world. These tools include developing fluency, logical reasoning, problem solving skills and the ability to think in abstract ways.



Pupils who grasp concepts rapidly should be challenged through being offered rich and 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 .

Intent



The National Curriculum 2014 for mathematics aims 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 have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

'Doing mathematics should always mean finding patterns and crafting beautiful and meaningful explanations.'

-Paul Lockhart

The programmes of study are organised in a distinct sequence and structured into separate domains: Number, Measurement, Geometry and Statistics.



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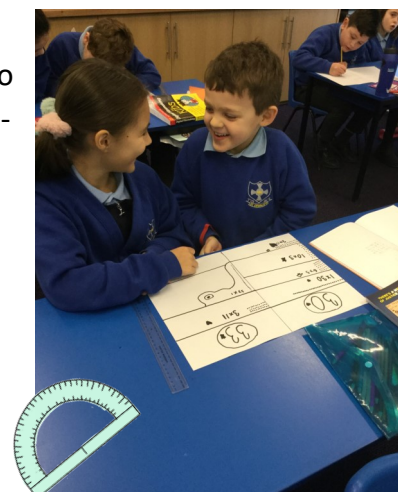


Intent

At St Oswald's, pupils should make connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

Pupils are introduced to concepts in a concrete fashion, before establishing ways of pictorially and formally representing their understanding.

We encourage resilience and acceptance that struggle is often a necessary step in learning.



Implementation



In Reception Class, the curriculum is guided by Development Matters and the objectives set out in the Early Learning Goals.

The teacher has weekly focused teaching objectives for group maths teaching. The children participate in adult directed, differentiated, topic related maths activities, in small groups during the day. Reception has a designated maths area where children are encouraged to explore, enjoy, and develop their understanding of the different aspects of maths such as number, shape and measure. Maths activities take place within the classroom and in the outdoor area.

Links are made to mathematics within other learning areas so that pupils can develop and apply their mathematical skills.

In Key Stages 1 and 2, we use planning and resources provided by the White Rose Hubs. Weekly planning ensures that sequences of lessons are progressive, allowing children to consolidate and extend skills.

To support us we have a range of mathematical resources available in classrooms, including Numicon, Base 10 and counters. We use Times Table Rockstar and Mathletics to encourage learning outside of the classroom.

Through our teaching we continuously monitor pupils' progress against expected attainment for their age. Formative assessments are undertaken at the end of each term and used to update our summative school tracker



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Impact

Our focus on fluency, reasoning and problem solving provides challenging learning as well as opportunities to contextualise mathematics and encourage children to not see mathematics skills in isolation, but to integrate them into other aspects of their learning and lives.



'Without mathematics there is nothing you can do.

Everything around you is mathematics.

Everything around you is numbers.'

-Shakuntala Devi



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