Maths at Rushen Primary School

At Rushen we follow the key principles of a Maths Mastery approach, focusing on deep understanding through fluency, reasoning, and problem-solving, and utilising a Concrete, Pictorial, Abstract (CPA) progression. It emphasises building a growth mindset with high expectations for all, providing collaborative learning opportunities, reinforcing knowledge through logical sequences, and offering adapted support through enabling and extending questions. Many resources are used, including some planning from White Rose maths.

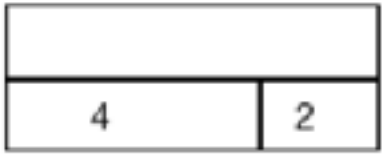
Teaching for Mastery

- **Deep Understanding:** At Rushen we aim to focus on a deep understanding of maths skills rather than just breadth of topics, ensuring knowledge is reinforced and built upon through logical progressions and small, sequenced steps.
- **Growth Mindset:** The philosophy is that everyone can succeed in maths, fostering resilience and a belief that abilities can grow.

Focus on Fluency, Reasoning and Problem-Solving

- **Essential Skills:** The approach aims to develop core competencies in mathematical fluency, reasoning and problem-solving.
- **Number Sense First:** Confidence with numbers is a foundational priority, with strong number sense built through counting, recognising patterns and understanding place value. ‘

Fluency: How many different ways can I show this calculation? With beads, with part whole model, in a bar model.

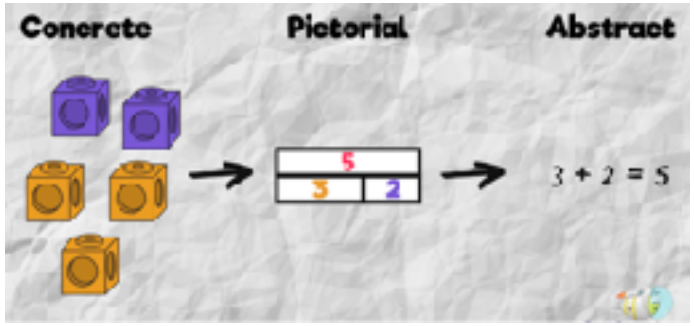


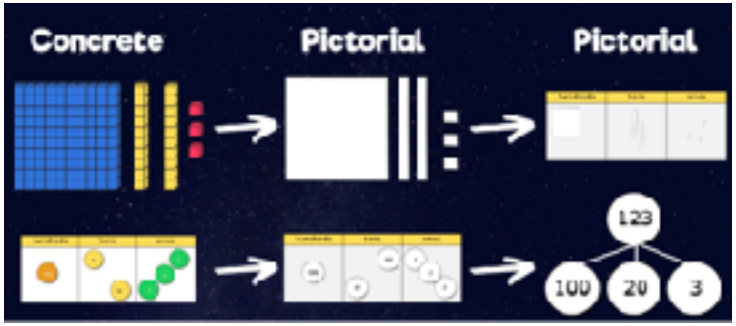
Reasoning: Explaining my answer and why I think it's correct. I know 4 + 2 = 6 because there are 4 counters there and 2 there and when I count them altogether there are 6 counters. 6 is two more than 4.

Problem solving: Applying skills to complex or real-life problems.
Tom has 4 cards, Alice has 2 cards, how many do they have altogether?

Concrete, Pictorial, Abstract (CPA) Approach

- **Three Stages:** Concepts are introduced first with concrete objects (e.g., counters), then represented pictorially (e.g., part-whole models), and finally moved into abstract calculations.





- Knowing key mathematical facts e.g. number bonds to 10 and 100, basic addition and subtraction to 10, 20 and 100
- Multiplication and division facts
- Thinking flexibly
- Making connections

Sample of maths statements that your child will cover throughout Year 6.

- Read, write and recognise numbers up to 10,000,000.
- Read, write and compare numbers with 3 decimal places.
- Add and subtract numbers with four digit numbers, including decimals.
- Multiply and divide four digit numbers by two digit numbers.
- Calculate simple fractions and percentages of amounts.
- Add and subtract fractions with different denominators.
- Calculate area and perimeter of various regular shapes.
- Calculate angles around a point, in a straight line and in shapes.

How you can help at home:

- Talk about whole numbers, decimals, fractions and percentages you see e.g. in shops, newspapers, adverts, containers etc.
- Keep practising multiplication and division facts.
- Choose a number between 0 and 1 with one, two or three decimals. Ask each other questions to work out the number. You can only answer 'Yes' or 'No'. e.g. Is it less than half? Is it more than 7 tenths?
- Talk about time, what time is it now in different countries? Look at digital and analogue clocks. Read timetables and calculate journey times.
- Measure different items around the home and garden, using different units and convert between them. e.g. cm to m and mm.