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.

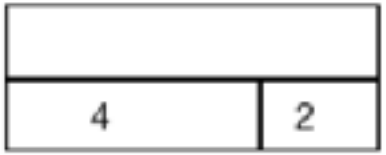
Teaching for Mastery

- **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 progression 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.

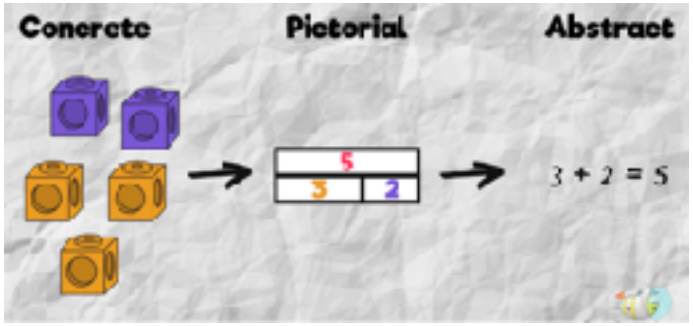


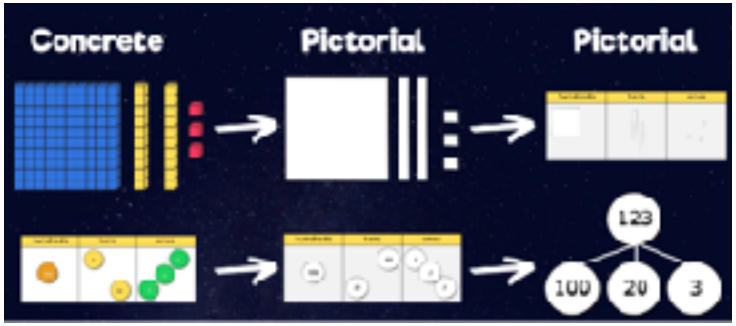
Reasoning: Explaining my answer and why I think it's correct. I know 4 + 2 = 6 because there are 4 counters there and 2 there and when I count them altogether there are 6 counters. 6 is two more than 4.

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 1.

- Read, write and recognise numbers up to 100.
- Sort and recognise most coins- 1p, 2p, 5p, 10p 20p, 50p, £1, £2.
- Count in steps of 2, 5, and 10.
- Begin to know number bonds, addition and subtraction facts for numbers up 20.
- Tell the time to the hour and half past on digital and analogue clocks.
- Recognise days of the week in order.

How you can help at home:

- Make a number track to 20, or longer. Make it relevant to your child's interests – space, sea world, transport etc. Then play games on it.
- Match different representations of a number using a dice, objects, tallies etc.
- Sort and count using buttons, counters, shells, lego, leaves.
- Make patterns with colours, lego bricks etc. Make a pattern and see if your child can continue it.
- Play simple counting games such as Snakes and Ladders, counting spots on dominoes, rolling dice and adding totals, counting points on lego bricks, count on and back on number lines.