



Arithmetic used to secure learning to the long-term memory and as small steps for future learning.

Introduce learning objective, success criteria (WIN) and complete an element of retrieval (stuck in books)

- * Pre-teaching based on accurate assessment
- * Counting is essential for all year groups but especially until timetables are secure (should be Y4). Counting in decimals/fractions etc can be practised in UKS2.
- * Written warm ups should build on prior learning and act as a small step for the next lesson.

Fluency teaching delivered in small steps. Elements of 'ping-pong' where necessary.

- * I say, you say, we all say.
- * Concrete / Pictorial / Abstract
- * Choral chanting
- * Sentence stems
- * Group/paired/independent work

Children independently complete fluency calculations

- * Fluency delivered using a variety of models and representations.
- * Concrete / Pictorial / Abstract

Self-assessment— support targeted to identify the 'point of struggle'. Misconceptions are addressed and used as learning opportunities

- * Age appropriate self-assessment using green pen.
- * Expectation that children 'fix' anything that is incorrect (prove it!)
- * Support targeted at children that need it.

Explicit teaching of reasoning and problem solving.

- * Model expectations of reasoning and problem solving.
- * 'Numberless word problems' / 'teacher as an expert' / 'silent teacher' (I See Maths approaches and resources used).

Children complete elements of 'challenge' within the lesson. Where possible there is an open-ended challenge to deepen learning.

- * Challenges are clearly numbered and include a range of reasoning and problem solving, which should get progressively more difficult and test a different skill.
- * An expectation that there are elements of 'open-endedness' to allow children to think systematically and deepen their learning.

Self and teacher assessment against WIN. Children targeted for intervention. Teachers mark with blue and pink pen, children respond with green.

- * Children self-assess against WIN.
- * Teacher assesses the learning and support is targeted to enable children to keep-up.
- * Learning is added to arithmetic sheets for the following week to give children the opportunity to embed the new learning.