

Mathematics Pedagogy KS2

Teaching aligned with White Rose Maths Small Steps'

Daily Maths Lesson Structure

Recall

- Fluency warm up using eg counting stick
- SIX in FIVE session
 - 6 fluency questions in 5 minutes
 - Questions to meet the GAPS identified in previous assessment/feedforward
 - Recorded in Maths book – questions on small paper stuck in book under days' header

Lesson Introduction – Teacher input to whole class

- Clear Learning Intention' and link to the target book. Written on Header and shared with pupils
- New learning to be taught. Aligned with WRM PPT teaching slides (edit to meet needs of the lesson)
- Identification of the 'vocabulary' to be used during the lesson
- Explicit expectation of how the learning will be evidenced.

Exposition of learning

- Demonstration/model learning eg how to multiply 3 digit by 2 digits
- Whole tables practise as a group (collaborating to solve 1 or 2)
- Paired work to solve a further calculation on white boards
- Solve example individually on white boards

Learning content explained

- Presentation. Questions left hand side, calculation right hand side, one digit per square
- Target books out in front of the pupils so these can be referenced
- Identify the concrete manipulatives that will support learning

Independent/Group Evidence -

- Activities with 3 levels of challenge – pupils to select their starting point
- Use of NCETM, NRICH, alongside WRM materials to provide problem solving, reasoning learning to deepen understanding
- Teacher to circulate to support
- Pupils to have learning partner to enable support and extend reasoning by explanations

Plenary

- Explain learning to a partner /teacher using
 - The vocabulary learnt
 - Reference to the Learning Intention and Target.
- Identify misconceptions and successful learning
- Plenary to recap key knowledge acquired and introduce next session.

Maths across the Curriculum

Mathematics learning is used in context within the daily maths lessons. In addition opportunities to embed understanding during other lessons are identified and planned. These opportunities might be retrieval of prior learning from previous days, weeks or months.

Examples of opportunities

History – comparing lengths of time by calculating the difference between dates.

Art – fractions and proportion within artwork.

RE – Hindi, Arabic number systems and their place value.

Science – calculating differences in results of enquiries.

PE - Gathering /analysing performance data

Upper Key Stage 2 Interventions

Pinpoint learning identifies individual gaps in learning.

Individual analysis of gaps produces tailored work books

SATs boot camp questions replicate test style examples.

