



Agreed Mathematics Lesson Structure: Using Maths No Problem as the main teaching and learning support

LESSON SEQUENCE	Purpose	Resources	What evidence is recorded and where
Key skills practice / Fluency <i>(10 questions, should take no longer than 5 minutes)</i>	To practice previously taught skills in calculation (+, -, X and ÷) and place value. To develop quick mental recall of key facts that will be needed in other areas of maths	Teachers will create their own questions based on the calculation and place value facts their class needs, possibly focussing on previous year group objectives to ensure they are embedded.	Questions are given to pupils at the beginning of the lesson, they have a few minutes to complete and then the answers are shared and marked in red pen by the pupil.
Pre-learning	To iron out potential misconceptions To alleviate any potential anxiety that may come in the In Focus task To create a level playing field for all learners to access the In Focus task	Previous information from Working Walls Concrete apparatus that will be used in the In Focus Task	No evidence recorded.
In Focus Task (Children start journalling)	Starts lesson with an exploration task that all pupils can access Task should lead learners to find an answer, but should be open enough to ensure that pupils can use a variety of ways of getting the answer (e.g. method 1, method 2 and method 3) Helps identify what chn already know / any misconceptions Helps to identify which chn need additional support	<u>Maths No Problem In Focus Tasks</u> <u>CONCRETE RESOURCES</u> TO REPRESENT THE PROBLEM FOR ALL PUPILS IN ALL LESSONS	Pupils share a Textbook in pairs. They record their responses to the In Focus Task in their Maths exercise books right from their initial exploration (known as ' journalling ') Use of photos to record concrete exploration, where appropriate
Structure and Representations (bringing the key	Teacher picks out the different ways of solving the problem that will highlight the key concept – using the ideas from the children's books	<u>Maths No Problem:</u> - <u>Lesson Approach</u> guidance (online) - ' <u>Let's Learn</u> ' section	Teacher adds taught representations / models to Working Wall poster

<p>learning out from the IF task)</p>	<p>This will normally involve moving through Concrete – Pictorial – Abstract</p> <p>Teacher models / teaches key representations that they want pupils to have made, based on the problem (focus on one key point each lesson and the methods that show efficient solving of the problem)</p> <p>Teacher may have to ‘plant’ a method or idea in a pupils head to ensure the correct learning point is raised, or use something like ‘<i>My friend says that</i>’</p> <p>Use of <u>Stem Sentences</u> to embed the learning give pupils the correct vocab for the maths</p>		
<p>Add to Journaling</p>	<p>Children add additional jottings to those they made at the start of the IF task. They should add anything that helps them to show their understanding (not simply copy everything discussed in the Structures and Representation section)</p> <p>Children can record the Stem Sentences in the context of the problem</p>		<p>Children record their preferred methods / representations directly into books</p>
<p>Guided Practice</p>	<p>To introduce ‘<u>varied fluency</u>’ based on the key learning point</p> <p>(Use additional similar examples to highlight the learning/key concepts)</p> <p>Use examples that would highlight any misconceptions/possible exceptions to a rule</p>	<p><u>Maths No Problem</u></p> <p>- <u>Guided Practice</u> section</p> <p>Allow children continued access to concrete resources</p>	<p>Pupils share a Textbook in pairs. They record their answers to GP directly into their maths exercise books under the title ‘Guided Practice’ or ‘G.P.’</p>
<p>Intelligent Practice (independent work)</p>	<p>To practice application of the concept independently</p>	<p><u>Maths No Problem</u> workbook activities (all children, with scaffolding for slower graspers)</p>	<p>Children write answers directly into their individual Workbooks</p>

	<p>To give pupils opportunities to apply their learning in a reasoning and problem solving context</p> <p>Gives ALL PUPILS access to RPS examples and opportunities to reason and discuss</p>	<p><u>Dong Nao Jin</u>: 1 or 2 questions / activities carefully chosen to show evidence of pupils ability to apply the learning in a range of contexts and to show a greater depth of understanding (not all children will complete this, but all should be presented with it to explore)</p> <p>Examples can be chosen from:</p> <ul style="list-style-type: none">- <u>White Rose Reasoning and Problem solving tasks</u>- <u>Classroom Secrets Reasoning and Problem Solving activities</u>- <u>NCETM Assessment for Mastery activities</u>- <u>'I see Reasoning'</u> resources- <u>NCETM Progression Documents</u>	<p>Additional activities are stuck into exercise books and completed in them</p>
--	---	--	--