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**Lesson Structure**

Each lesson should follow this structure:

* **Explore**: presenting the whole class with a problem to explore – an anchor task. Children can work in groups or pairs exploring the task which can include concrete resources, using previous knowledge, drawing, modelling, using different strategies
* Sharing of ideas and approaches used to solve or attempt to solve the problem - activating prior knowledge, exploring how children have approached the task, look at each method, then encourage the children to note down other methods used. Teachers can observe and assess.
* **Journal their initial ideas.**
* **Master**: a structured discussion of their exploration. Teacher led, using targeted questions, different methods are drawn out, discussed, along with any misconceptions. What are you doing in this strategy and why are you doing it?
* **Read and reflect :** This can be at any point in the lesson; however the children should be given opportunity to read through the textbook. The Master section is presented as though it was someone’s journal which allows the children to compare, discuss and reflect on methods.
* **Guided Practice**: teacher can be modelling solving a given problem step-by-step or children can be working together in pairs to solve the questions, using the methods discussed.
* **Independent Practice**: children answering workbook questions independently where possible.
* **Greater Depth Task/Journalling**: this involves children taking a question and extending their ideas –Prove it; Investigate Patters or Pose a problem.
* **Feedback**: the plenary may focus on addressing a misconception, self, or peer review.

**Explore –** anchor task - instead of ‘Let me teach you…’ as a starting point, children are encouraged to explore a problem themselves to see what they already know. At the beginning of each lesson, the teacher reads through the problem and then encourages children with questions and prompts which probe children’s thinking and understanding. It is also an opportunity for children to use concrete materials. The questions are completed in their exercise books using jottings, drawings, sentences, and / or equations. Journal their ideas.

**Master-**  involves a structured discussion - the teacher leads a discussion with the children to organise the findings of the exploration; compare/contrast at least two strategies and guide toward the most efficient strategy (or the one being learnt that day).

**Read and reflect –** as go through the Master section

**Guided Practice** – this can be either practical or involve the use of whiteboards in KS1; in KS2 it involves the children practicing the methods and writing solutions in their exercise books. Some children may be able to attempt these questions independently or work in pairs; other children may be following the guided practice led by the teacher.

**Independent Practice** – children answer questions in their workbooks independently.

**Greater Depth Task** - for those who finish their workbook there are different approaches which involve expanding, extending, and stretching their thinking (using agreed material). These are completed in their exercise books.

The 3 P’s approach is particularly useful:

* Prove it – show in diagrams, symbols, pictures, write down examples which work and those which do not. Is there more than one solution?
* Patterns – develop their own investigation – eg. Is this always, sometimes, or never true? Do they notice any patterns? Can they find any? Have they thought of all the possibilities? How can they be sure?
* Pose a problems- can children create a solve a similar problem?

Teachers use questions to challenge thinking throughout every lesson to check understanding. Children are also encouraged to question each other frequently throughout the lesson; this aids the development of independent learners and deepens their understanding. Children are expected to listen to each other’s responses and may be asked to explain someone else’s ideas in their own words, or if they agree/disagree etc.

Discussion and feedback – pupils have opportunities to talk to their partners and explain/clarify their thinking throughout the lesson but are expected to complete written work independently (unless working in a guided group with the teacher). The plenary may focus on a addressing a misconception, self or peer review, or further assessment depending on where the lesson sits in the cycle of teaching and learning.

There will be times when this lesson structure does not suit the learning taking place. When longer investigations, games or kinaesthetic activities are taking place, the structure will be that which best suits the learning process.

Children use concrete, pictorial, and abstract models for each topic as appropriate to the learning context. Research conducted by the EEF underpins our expectation that both manipulatives and representations will be used in all year groups and across all ability groups to support learning before procedural methods are used. This will allow children to select from a range of strategies for both efficiency and to support success.

* Concrete – using concrete objects and manipulatives to help them understand what they are doing.
* Pictorial – use pictorial representations to help reason and solve problems.
* Abstract – both concrete and pictorial representations are pre-requisites to support children’s understanding of the abstract methods, reasoning and problem-solving.