



The Structure of our lessons at Rode Heath Primary School using the Maths No Problem Scheme (MNP)

1. **Exploration** - (Explore - problem of the day)
2. **Structured Learning** - whiteboards, blue books and interactive whiteboards (includes discussion of methods and strategies in the Master section of the textbook)
3. **Practice and Apply** - Guided Practice in blue books, identifying children who need additional support. MNP workbooks and blue books (BB) for apply stage.
4. **Expand, Extend and Stretch** - expand, extend and stretch learning for children who are ready (supplement learning with agreed material). This is to take place in the blue books

Remember:

CPA (Concrete, Pictorial and Abstract) approach; plenty of opportunities for talking maths; reinforce positive attitudes and develop metacognition (learning to learn); model specific language and maths sentences and let the children work in mixed groups (don't cap learning).

1. **Explore (Exploration) - Problem of the Day** - No more than *20 minutes* for section one and two

This is the first part of the lesson and the most thought provoking. Pupils are shown the Explore maths story (see MNP textbooks) but not any methods at this stage. This part encourages children to explore their own thoughts and methods in pairs to solve the problem.

Lots of talking to be expected at this stage with support and prompts from the teacher - Q: *what do we need to know before we tackle this problem?*
It's also an opportunity for children to use concrete materials.

The Explore question can be completed with a preferred method in the 'journal' blue maths books. This can be done informally with the use of jottings, drawings, sentences and equations. The role of the teacher is to listen and observe, supporting when necessary.

2. Structured Learning - discussion of methods (Master section in the book)

This section of the lesson focuses on the class re-grouping and discussing their own methods, at least 2 are to be expected in each session. This is a good opportunity to ask lots of questions to the children and to assess whether the children have grasped a firm understanding of the particular methods used (convince me). At this stage you may want to model a method or show other methods given in the textbook (Master) and discuss them (this is not necessary if they have already grasped and explored the most efficient and effective methods). This is to be completed in the blue books.

NOTE: You may need to model how to read equations in the textbook as a 'story' using informal maths language or by putting the idea into context.

3. Practice and Apply

Attempt a selection of the guided practice questions (practically / on whiteboards/ in blue maths books) and then move on to the workbook tasks if the children are secure. Teacher identifies any children in the guided practice stage who are not secure enough to go onto the apply stage in order to support them.

Expectation:

Children to work independently; guided help when appropriate. Remember to keep apparatus available. Based on your observational assessments during the first 3 parts of the lesson, it'll become clear who can access the workbook independently and who can't. Support should be implemented where needed.

4. Extension tasks for those who are ready for problem solving questions

Extension tasks to be used at least three times a week for your GDS children or for children who are EXS but are higher achieving.

Extend/ stretch learning with carefully thought-out questioning, maths mastery or maths mastery with greater depth tasks, I See Reasoning, I See Problem-Solving and White Rose tasks (these can be found on the staff shared drive under maths: year group folders). These are to be completed in blue books. The tasks are based on the lesson and help/support is offered by the teacher.

Ethos:

Concrete material. Plenty of Time. Mathematical language used in each lesson. Working in pairs/groups

We need to get the children visualising - hold off showing them what it looks like and give them a chance to imagine what it looks like.

Things to consider:

- Coverage - please ensure that you plan next term very precisely to ensure you cover all of your year group expectations.
- Ensure the majority of your children are secure with their year group multiplications (Y2-Y6) - multiplication test to be used during assessment week.
- If children are self-marking, it is vital that you check their work and apply the correct marking codes (stamps and indicate corrections). Please ensure that children haven't marked things incorrectly. Children should be given time the same day or next day to correct their mistakes.
- Are you giving children the opportunity to use practical equipment? Remember: concrete, abstract, pictorial.
- If you are unsure of any methods in the MNP textbook, please refer to the calculations policy (you were all given a hard copy and an electronic copy can be found on the staff share: maths, policies).