

MENTAL MATHS POLICY

WHAT IS MENTAL MATHS (MM)?

It is a process by means of which a learner learns to do a calculation in his or her mind by making use of different strategies. Drilling and communication with friends help to refine these strategies and to develop a good understanding of figures.

WHAT DO WE WANT TO ACHIEVE WITH MENTAL MATHS

- We want the child to think about how he or she does a sum.
- The learner should develop the skill to see a picture of what figures look like and how they function.
- Through verbal explanations and drilling the child should gradually develop good strategies to do calculations in his mind, as well as to understand figures better and better.
- We want to help the child to develop a mathematical language. This can only happen if he or she gets the opportunity to explain his or her calculations.
- We want a feeling of “we all did well” to develop in the learners. It should be nice to do sums.

PLANNING WHEN

- Each morning
- Foundation phase: first ten minutes of the Mathematics lesson.
- Intermediary phase: first fifteen minutes of Mathematics lesson.

LEVEL LEARNERS

- Start by first determining the level of MM most of the learners are on.
- Make use of outcomes in “The National Numeracy Strategy”

WHICH CONTENTS?

- Submit planning for a year for each grade.
- Plan for two weeks in which at least one of the strategies is covered.

MENTAL MATHS PRESENTATION

- Write down everything you want to ask and do.
- Technique – whole group / down the line / individual.
- Ensure that learners understand and know the ground rules.

- Pattern of lesson: **Foundation phase**
 - 4 minutes rapid / fast
 - 3 minutes reflecting / thinking with your head
 - 2 minutes application from real life
 - 1 minute reflection
- **Intermediary phase**
 - 5 minutes rapid / fast
 - 5 minutes reflecting / thinking with your head
 - 4 minutes application from real life
 - 1 minute reflection
- All strategies should be discussed in the annual planning.

METHOD OF PRESENTATION: TIPS

- Maintain eye contact with your learners.
- Stay calm at all times – be friendly – body language should be right.
- DO NOT EXPLAIN – the child should explore by himself or herself.
- Give very clear instructions, e.g. I am going to say this once. Everyone should start with yellow.
- Always start with your BEADS.
- Learners place strings of beads around their necks.
- Use techniques – whole group / along the line / individual. **Everyone** should get a turn.
- Let them stand in a half circle, sit in a row or learners in front sit and those in the back stand.
- Support learners who need more time to think.
- **Good strategies:**
 - Nobody puts up a hand – the teacher gives the sign when hands may be put up.
 - Give each learner a set of number cards, so that everyone can show the answer at the same time.
 - Show with your thumb if your answer is right or if you know the answer.
 - Place your hand on your head if you know the answer.
- After each activity enough time should be spent on discussions
 - to determine which strategies learners used to reach the answer,
 - also to point out all the possible strategies to the learners
 - and to highlight the best strategies.
- Each of the 12 strategies should first be explained and discussed in a full class presentation. It should be explained on the classroom wall.
- There should sometimes be an opportunity to work out a sum in writing.
- Reflection – summarise the main theme for the day at the end of the lesson. Again place emphasis on the most important strategies for the day.



ASSESSMENT

- **Baseline:** The teacher uses the outcomes for each grade to determine the level the learners are on. The YEAR PLANNING is done accordingly.
- **Continuous:** Learners correct errors themselves by means of explanations. The teacher guides them by asking open ended questions. Learners make use of the beads to show friends how they think. Before class tests are done, the learners get the opportunity to go through the sums. He or she marks those that can be answered immediately and then those that present problems may be discussed with friends. After that the test is handed out again and answered.
- **Recording:** The teacher makes use of class tests. The teacher records the learners' progress regarding the outcomes on the class list.
- **Reporting:** The teacher informs the learners regarding the outcomes, what is going to be done, how it is going to be done and how it is going to be determined whether there is progress. At the end of the term the parents get a report on the learners' progress.

CLASSROOM OBSERVATION

- Teachers in the school visit one another's classrooms.
- The purpose is to give advice and to see whether colleagues are on the right track.
- This is done once every two weeks or more often if there are problems.
- If necessary colleagues from neighbouring schools can be invited to attend the presentation of the lesson.

This policy was adopted by the School Management on

This policy has been made available to school personnel and is readily accessible to parents and learners on request.

This policy will be reviewed and updated every year.

Signed _____
School Management

Date: _____

Signed _____
Principal

Date: _____

Signed _____
Educator Representative

Date: _____

