


A guide to Mental Fluency

Daily Structure

Number of the Day

Number of the Day!	
	+100
	x 10
	÷ 10
	x 100
	÷ 100
	Double it
	Halve it
	Square it
	Prime or Composite (Explain)
	List all the factors
List 5 multiples	
Write a story with the number as the answer	

Daily Mental Fluency

We firmly believe that improving the fluency of our pupils will allow them to become more efficient mathematicians; equipping them to confidently use their skills for reasoning and problem solving. We want our approach to help all children leave primary school confident and fluent when recalling and applying their knowledge of number.

Our daily fluency sessions will focus on three main strands (efficiency, accuracy and flexibility) to allow all pupils to become more effective mathematicians. In all year groups, progression in fluency will focus on these areas:

- Working out
- Efficiency generating an answer
- Rapid recall
- Instant recall

Through providing fun and meaningful sessions, our pupils will be supported in developing number sense and fluency in an increasing range of calculations.

Recall of Known Facts



Number of the Day

During this phase, children will work through a variety of number facts that relate to a specific number. This will allow children recap their learning and better able to access known facts. The specific activities will be year groups specific and a template is provided to support teachers.

Arithmetic

A. $60 \times 3 =$	B. $17,456 - 4,737 =$
C. $9 + 7 + 8 =$	D. $7 \times ? = 0$
E. $76,328 + 484,313 =$	


Recall

This phase aims to develop a rapid recall of number facts, relevant to their year group. Retrieval practice is how we help pupils gain this automaticity. Children to answer number facts that are shouted out by their teacher. These can be written on a white board or shouted out.

Arithmetic

A selection of arithmetic questions based on what the children have previously learnt. This will allow children to recap prior learning and ensure they are using efficient methods. Opportunities provided to mark together, explain workings and address misconceptions.

Application

	$12.4 + 6.35$ $\begin{array}{r} 12.4 \\ + 6.35 \\ \hline 7.59 \end{array}$
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Application

This phase encourages children to develop their reasoning skills. Children are presented with a problem solving activity to solve either independently or with a partner to share their ideas. This is supported through both teacher modelling and use of manipulatives (where appropriate). Discussions with other pupils and the teacher will also expose efficient ways of calculations and facilitate a deeper understanding.