Fluency in Multiplication and Division at RAB: A summary

The scheme prioritises 36 essential facts – these are the building blocks children need to complete any written or mental multiplication calculation.

$$2 \times 2 = 4$$

$$3 \times 2 = 6$$

$$3 \times 3 = 9$$

$$4 \times 2 = 8$$

$$4 \times 3 = 12$$

$$5 \times 4 = 16$$

$$5 \times 2 = 10$$

$$5 \times 3 = 15$$

$$5 \times 4 = 20$$

$$5 \times 5 = 25$$

$$6 \times 2 = 12$$

$$6 \times 3 = 18$$

$$6 \times 4 = 24$$

$$6 \times 5 = 30$$

$$6 \times 6 = 36$$

$$7 \times 2 = 14$$

$$7 \times 3 = 21$$

$$7 \times 4 = 28$$

$$7 \times 5 = 35$$

$$7 \times 6 = 42$$

$$7 \times 7 = 49$$

$$8 \times 2 = 16$$

$$8 \times 3 = 24$$

$$8 \times 4 = 32$$

$$8 \times 5 = 40$$

$$8 \times 6 = 48$$

$$8 \times 7 = 56$$

$$8 \times 8 = 64$$

$$9 \times 2 = 18$$

$$9 \times 3 = 27$$

$$9 \times 4 = 36$$

$$9 \times 5 = 45$$

$$9 \times 6 = 54$$

$$9 \times 7 = 63$$

$$9 \times 8 = 72$$

$$9 \times 9 = 81$$

A ten-minute fluency session is to be taught **every day**. This can be part of your maths lesson, or elsewhere in the day e.g. after lunch.

Fluency booklets are used in each session. Each booklet works progressively through a times table. The booklets have been designed to learn in the following order:

1 in 5 questions involve division – it is important for children to understand the inverse relationship between multiplication and division.

There are standalone booklets for the 11x and 12x tables, which need to be completed before the Year 4 Multiplication Table Check (MTC). The careful design of our scheme means that only 21 new facts need to be learnt at this stage.

There is a mixed practice booklet, containing all facts up to 12×12 , which should be completed before the Year 4 MTC.

For Year 5 and 6: Individual booklets can be used to consolidate a specific multiplication table. Mixed practice booklets can be used to rehearse facts up to 12×12 .

Session structure:

1. Fluency practice booklets

Repeated retrieval of facts

2. Chanting and marking

Oral rehearsal of facts the 'same way around'

3. Recording scores and identifying facts to learn

Celebrate success and identify facts to learn

1. Fluency practice booklets

Children are given two minutes to complete 40 questions (approximately 3 seconds per question). They are to complete the questions in order. Please have the relevant multiplication table displayed during this time. If children are unsure, encourage them to 'Flip it' (swap the factors using knowledge of commutativity) or 'Find it' (look at the facts displayed and find the answer).

2. Chanting and marking

Using a 'my turn, your turn' approach, chant each fact whilst the children mark. There is an expectation for all children to chant and complete 40 facts, even if they did not finish. Chant each question the same 'way around' e.g. for the 6x table, always use '_____ sixes are '.

3. Recording scores & identifying facts to learn

When children have marked their questions, ensure they put the number they got correct at the top of the page. This is so you can quickly track progress and identify those who might need further intervention. Identify which fact children need to work on — 'ask me about' stickers can be used here.

Key points to remember:

- 1. Learn each fact 'one way round' only. For example, if children are on their 3x table, always use the phrase '____ threes are ____' even for division questions! This repeated rehearsal and retrieval is vital for engineering success and developing fluency.
- 2. Be explicit about where children 'are' in their fluency journey. Display the 36 essential facts and highlight which facts have been learnt, which facts are being learned, and which facts are 'to come'. Examples below:



