

## Times Table Policy and Expectations:

### Intent:

At Rainbow Forge Primary School, we believe that all children can achieve in Maths. Times tables are at the heart of mental arithmetic and fluency with multiplication and division facts supports a child's ability and understanding when working with number. Mastering times tables allows children to work confidently and efficiently through a range of advanced calculations. We believe that using a range of techniques (interactive, visual, and rote learning) will ensure that most children can master their times tables by the end of Year 4.

We aim to provide children with a high-quality maths education that allows children become fluent in the fundamentals of mathematics through daily practice to ensure fluency of number facts.

At Rainbow Forge Primary, our aims for Times Tables are:

1. To raise the profile of the teaching of times tables and to raise overall knowledge of multiplication and related division facts across the school.
2. To explain the expected practices and ensure children learn their times tables.
3. To ensure continuity in practices and progression in times tables.
4. To ensure there is successful teaching and learning of multiplication and related division facts.
5. To develop our knowledge of language associated with times tables: **'times'**, **'lots of'**, **'multiplied by'**, **'group of'**, **'multiplier'**, **'multiplicand'**, **'product'**.

### Progression of times tables

Year group	What should be taught?	Additional comments
Reception	<ul style="list-style-type: none"><li>• Introduce concept of X1 (one group of 5 etc)</li><li>• Solve problems with doubling and halving</li><li>• Count in steps of 2, 5 and 10</li></ul>	
Year 1	<ul style="list-style-type: none"><li>• Counting in multiples of 2, 5 and 10</li><li>• X1 table (one group of...)</li><li>• Count in steps of 2 and 5 from 0 and in 10s from any number forwards or backwards.</li></ul>	
Year 2	<ul style="list-style-type: none"><li>• To count in steps of 3</li><li>• Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.</li><li>• Begin to introduce concept of square numbers through arrays</li><li>• X1 table</li><li>• Begin to introduce X0 table</li></ul>	

Year 3	<ul style="list-style-type: none"> <li>Count from 0 in multiples of 4, 8, 50 and 100</li> <li>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</li> <li>Revise X2, X5, X10 multiplication tables</li> <li>X1 and X0 tables</li> <li>Square number times tables</li> </ul>	Link x4 to x2. Link x8 to x4.
Year 4	<ul style="list-style-type: none"> <li>Count in multiples of 6, 7, 9, 25 and 100</li> <li>Recall multiplication and division facts for multiplication tables up to 12 x 12 (x6, x7, x9, x11 and x12 are new tables for this year group)</li> <li>Revise X0, X 1, X 2, X 3, X4, X 5, X 8, X10</li> <li>Continue with square number times tables</li> </ul>	Link x6 to x3. Link x12 to x6
Year 5	<ul style="list-style-type: none"> <li>Revise all times tables (including x0 and x1) to 12x12</li> <li>Revise square number times tables</li> <li>Establish whether a number to 100 is prime. Recall prime numbers to 19</li> </ul>	
Year 6	<ul style="list-style-type: none"> <li>Revise all times tables (including x0 and x1) to 12 x12</li> <li>Revise square numbers times table</li> <li>Revise prime numbers</li> </ul>	

Requirements for satisfying the year group expectations are as follows:

- To be able to count in steps, the children are required to count on in quick succession. – If the child has to count on in 1s to reach the next 5, the child is unable to count on in 5s
- To be able to recall, the child must be able to recall the times tables and related division facts instantly
- If the child needs to count on/count up in 7s to reach 4 x 7, they do not know their 7 times table. They are able to count on in 7s.

### **Teaching a New Times Table**

Teachers will follow six steps when introducing a new times table. It is also important to note what the children already know as known facts (kf).

Step 1	Order of introduction
Step 2	Making conceptual links to the real world - display
Step 3	Use of the concrete, pictorial, abstract approach – use of arrays to model
Step 4	Introduce new times table by building it around facts already known

Step 5	Explore patterns in times tables. Reasoning. Investigation. Deeper learning. Making links
Step 6	Time-tabled opportunities to practise times tables facts

- See Appendix A for further detail on each step.

Times Tables are practised each morning as part of the Flashback Maths sessions. This should include rote chanting to help promote rapid recall of multiplication and division facts. Chanting should include the full calculation ( 4 times 8 is 32) and small sound bites (4 8s are 32).

Children will complete a test in Times Table booklets set at their own level when coming in to school each morning. These are to be self-marked using a times table grid.

### **Assessment:**

To ensure that children are secure in the recall of the times table and related division facts the children need to be regularly assessed.

In Reception and Year 1 this assessment can be broadly teacher assessment through carpet recall sessions – ensuring that the children can recall facts in a random order.

From Year 2 onwards the children should be assessed bi-weekly on their ability to recall multiplication and related division facts. These assessments should take place during Flashback Maths/Number club/ Arithmetic slots and focus on instant, fast recall of facts. These assessments may be given verbally by the teacher/TA or can be a printed out set of questions which can be looked at after the session.

1. Year 2 = 10 questions (5 times tables and 5 divisions)
2. Year 3 & 4 = 20 questions (10 times tables and 10 divisions)
3. Year 5 & 6 = 20 – 100 questions (even amount of multiplications and divisions to recall)
4. Teachers are to keep a log in mark books of the children's assessments to ensure the progress of the children is recorded.
5. We will also be using Times Tables rock star to assess children on their times tables knowledge in Years 3 to 6. It is a quick, easy and accurate way of collating children's times table knowledge which supports teacher assessment in this area. Children will complete a times table test online, using the programme, during the early morning slot each half term.

6. A gap analysis of children's results should be used by the teacher to inform planning so that gaps in knowledge can be addressed and target children identified.

### **Home Learning**

Times Table Rock Stars is a home learning tool to which all pupils from Year 1 to 6 have access. It is a carefully sequenced programme of daily times tables practice. Each week concentrates on a different times table, with a recommended consolidation week for rehearsing the tables that have recently been practised every third week or so. Teachers can access and set learning tasks for pupils and children are expected to be actively encouraged to access this platform from home.

### **Application of times tables in calculation**

A child's growing understanding of times tables is only relevant if they are aware of their application in calculations and real life. In order to do this, children should be using recall of times tables and related divisions when needed in calculations.

This awareness can be created in several ways:

- Highlighting when times tables are being used during modelling
- Discussion of how they are being applied during problem solving
- Inclusion of real-life examples of times table application
- Practicing times tables on a daily basis
- Marking – identifying where errors have been made due to incorrect calculating.