Itchen Abbas Primary School
'Growing Hearts and Minds'

Expectations for the Teaching of Times Tables
September 2021

Aims

- That all children develop automaticity and rapid recall of the times table facts stipulated for each year group in the National Curriculum.
- That all children are able to manipulate the facts to think about other relationships and patterns

Rationale

- Quick recall of times tables facts reduces cognitive load and supports children's ability to successfully access the maths curriculum.
- A whole school, consistent and progressive approach to the teaching of times tables, based on cognitive sciences and metacognition is most likely to ensure learning for every child
- According to the National Curriculum, fluency and conceptual understanding should be developed in tandem.
- Focussing on one times table at a time enables a neural pathway to develop (8-10 weeks) and a schema to develop with conceptual links.
- Mastery should be achieved as an overarching aim through intelligent practice

Structure and Strategy for Teaching

The order we will teach times tables is as follows:

Year	Autumn	Spring	Summer	
1	Experience of counting in 1's, 2's, 5's and 10's.			Revision and retrieval of previously learnt tables will occur throughout the year.
2	2	10	5 (introduce 3s)	
3	4	8	3 (introduce 6s)	
4	11,6, 9	12, 7	Recall	
5	Manipulation/ scaling of the tables taught in Year 4	Manipulation/ scaling of the tables taught in Year 4	Manipulation/ scaling of the tables taught in Year 4	

Vocabulary

The first digit in the calculation will determine the table i.e.

5 x 6 = the 6 times table
6 x 5 = the 5 times table

Components and Steps

1. Three maths lessons per half term dedicated to the explicit teaching of tables

2. When introducing a new table systematically build it with the children starting with the facts they already know and have met before, for example through skip counting, numberlink boards etc

3. Introduce a new table by making conceptual links to the real world clear. Photos of groups of in the real world will be displayed (this could be part of the working wall).

4. Introduce a new table using the CPA approach – consider the most powerful representation for exposing the properties and laws of multiplication and enabling connections to be made.

5. Regular retrieval practice to develop fluency – 5-10 minutes, 3-5 times per week. Include full verbal patterning (say the whole calculation) and step counting. First in order, then out of order, build in low stake quick quizzes where the correct answers are explained.

6. Take time to explore the many patterns within the new table; repeating digits, the commutative law (reversing digits), repeated addition, divisibility and how each table relates to several other times tables

7. Develop mastery through the use of variation and intelligent practice.

8. Intervention and additional support is provided for children who have not learnt previous year's tables.