



Times Table Policy

February 2019

Reviewed : March 2019

Ratified by Governors: 28th March 2019

Next Review: March 2021

Introduction

We believe at George Tomlinson Primary School that Times Tables are at the heart of mental arithmetic, which in itself helps form the basis of a child's understanding and ability when working with number. Once the children have learnt the times tables and related divisions by heart, they are able to work far more confidently – and efficiently – through a wide range of more advanced calculations whilst developing their fluency in the recall of number facts. We believe that through a variety of interactive, visual, engaging and rote learning techniques, most children can achieve the full times tables knowledge by the time they leave George Tomlinson Primary School.

Aims

- To ensure children learn their times tables and to develop children's fluency in times tables.
- To raise the profile of the teaching of times tables and the times tables and related facts across the school.
- To ensure continuity in practices and progression in times tables.
- To ensure there is successful teaching and learning of times tables and related divisions within our school.
- To develop number sense and times table proficiency, children to be able to 'see' the maths in different representations and have the language to describe their own thinking.
- To develop our knowledge of language associated with times tables: 'times', 'lots of', 'product', 'multiplied by'

Progression of times tables throughout the school

Reception	Solve problems including doubling, halving and sharing. Begin to count in steps of 2.
Year 1	Count in multiples of 2, 5, 10. Recall and use doubles of all numbers to 10 and the corresponding halves. Begin to recall the 5 and 10 times table.
Year 2	Recall and use the 2, 5 and 10 times table and the corresponding division facts. Recognise odd and even numbers. To be able to count in steps of 3.
Year 3	Recall and use the multiplication and division facts for the 3, 4 and 8 times table.
Year 4	Recall and use the multiplication and division facts for the 6, 7, 9, 11 and 12 times table.
Year 5 & 6.	Recall all of the times table facts and related division facts through regular consolidation of all. Children are going to be catching up where they have fallen behind in previous times tables in other year groups.
SEND children	Children to work at pace and level appropriate to their needs based on teacher judgement/discretion.

Teaching of times tables throughout the school

It is expected that there is explicit teaching of the times tables appropriate to year groups. Although children do need to understand that multiplication is commutative, when explicitly teaching the times tables, the number of groups should be first and then the size of the group. For example, when teaching the 2 times tables children should be taught 1×2 , 2×2 , 3×2 and so on. In EYFS and KS1 the children will be taught the foundations and key concept of multiplication (lots of) and use concrete and pictorial representations to support their understanding of multiplication taking into account all learners.

Teachers are to use the CPA approach (Concrete-Pictorial-Abstract) approach to underpin knowledge, understanding and skills. Teachers will give children opportunities to regularly practise their times tables and related division facts when appropriate in mathematical learning journeys as this supports mathematical learning and understanding. Therefore the children will feel more confident applying their knowledge when learning new concepts.

Once the children are able to recall all their times tables facts and their associated division facts, they need to be extended through place value, related number facts and real-life problem solving in context.

Application of times tables in calculation

Children should be able to apply use and apply their times table knowledge in a variety of contexts, including real-life contexts. Therefore children should be taught how to use recall of times tables and related division facts when needed in calculations.

This can be shown in a variety of ways including:

- Highlighting when times tables are being used during explicit 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 misconceptions have been made.

Rainbow Maths

The use of Rainbow Maths from years 1-6 will ensure consistency and the children will feel more confident in their times table knowledge. Each colour will represent different year groups and times tables and the aim is for the children to at least achieve the colour appropriate for their year group if not higher. Children will start on Red, and move their way up through Orange, Yellow, Green, and so on. They need to have passed their test at their current colour before moving on to test 2. Once they have passed two tests they will move on to the next colour test. This means children progress at a rate that suits them and continue to practice the times tables they need.

Recording

Teachers are to keep a log of the children’s weekly tests and date of achieving the next colour to ensure progress.

Reward

Children will be rewarded with a certificate once they have completed the times table colour appropriate to their year group or higher. When they achieve a Gold or Platinum they will be given a certificate as well as a prize (e.g. a badge, medal). When a child receives platinum status they will receive a special certificate, a platinum badge that can be worn on a daily basis and will become a times tables ambassador. Other children can approach this child for support with times tables. Class teachers can also give out class dojos for times tables as rewards for effort, resilience and achievement etc.

Outline of progression

Rainbow Maths colour	Pink	Red	Orange	Yellow	Green	Blue	Indigo	Violet	Bronze	Silver	Gold	Platinum
X tables practiced	2	2, 5	2, 5, 10	2, 5, 10, 3, 4	2, 5, 10, 3, 4, 8	All x tables up to 12 x 12	All x tables and Inverse	All x tables and Inverse with missing number questions	All x tables and Inverse and squared numbers	All x tables, Inverse Squared numbers Fractions of amounts	All x tables, Inverse Squared and cubed numbers Fractions of amounts Decimals Brackets	All x tables, Inverse Squared and cubed numbers Fractions of amounts Decimals Brackets Order of Operations
Number of questions	10 questions	20 questions	30 questions	40 questions	50 questions	60 questions	60 questions	80 questions	80 questions	80 questions	80 questions	80 questions
Age expectation	Year 1	Year 1	Year 2	Year 3	Year 3, Year 4	Year 4	Year 5	Year 5	Year 5	Year 6	Year 6	Year 6

Assessment

At the beginning of the year children will complete a timed baseline test. Therefore, the teacher will have a good understanding of individual children’s base knowledge. They will be able to identify the gaps in their learning and support learners. Teachers will explain to children the times table expectation for their year group.

To ensure that children are secure in the recall of the times tables and related division facts the children will be regularly assessed (weekly years 2-6). Children in Reception and Year 1 this assessment can be based on teacher assessment through carpet sessions. Evidence through planning in the moment opportunities –ensuring that the children can recall facts in random order. From year 2-6 the children will be assessed weekly using Rainbow maths and be given a time limit to complete the test. These assessments could take place at the start of a maths lesson and focus on instant, fast recall of facts.

Displays

Times table grids should be accessible and available for children to use in their maths resource boxes. Times tables appropriate for the year group should also be on display in the classroom to use as support and reference. However, these must be covered during the weekly test. Also, there should be a Rainbow Maths display.

Home learning/Homework

Times tables learning can be supported and consolidated at home and should be encouraged. As part of Rainbow Maths, the children will have regular times table tests in class so will need regular times table practice of this in order to prepare for this and to become more fluent in their times tables. This will ensure the importance of learning times tables is enhanced, children feel more confident in their times table knowledge and its profile of times table will be raised within school (see homework policy for more information). Therefore, children are encouraged to practice the times tables at their current colour at home in preparation for their Rainbow Maths test.

Times Tables: Practice for your Rainbow Maths Test										
Red	Orange	Yellow	Green	Blue	Indigo	Violet	Bronze	Silver	Gold	Platinum
2, 5	2, 5, 10	2, 5, 10, 3, 4	2, 5, 10, 3, 4, 8	All	All / Inverse	All / Inverse	All / Inverse	Squares Fractions	Decimals Brackets	Cubes Order of operations.