Times Tables Policy and System

March 2023

At Anton Juniors, our aim is for our learners to become fluent in their multiplication and division facts. Being 'fluent' means that children are able to rapidly recall their times tables. If children can recall their tables at speed, it eases cognitive load for pupils and allows them to assess other areas of the Mathematics curriculum more readily.

National Curriculum Expectations

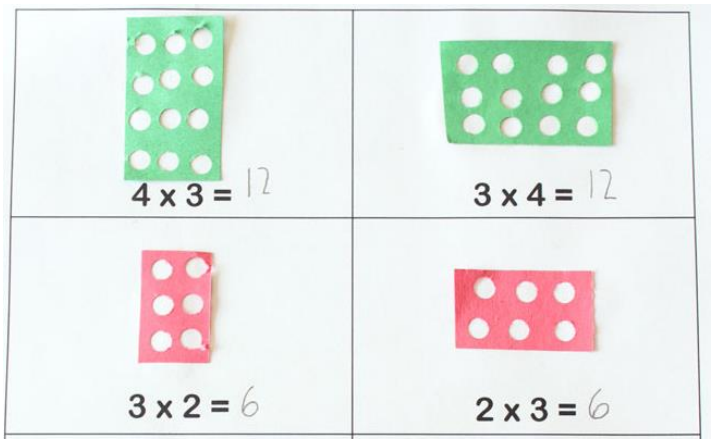
The National Curriculum provides statutory guidance for schools which has guided us in developing our times tables system and policy. The aim of the National Curriculum is for pupils to recall all their times tables by the end of year 4. This is broken down as follows:

Year 2 Expectations	Recall multiplication and division facts for the 2, 5 and 10 tables.
Year 3 Expectations	Recall multiplication and division facts for the 3, 4, 8 and 11 tables.
Year 4 Expectations	Recall multiplication and division facts for tables up to 12 × 12.

Our Times Tables system is rigorous and helps to support children in moving through their times tables at the pace set out by the National Curriculum.

How are Times Tables learned?

Learning times tables begins in the classroom, where children learn about the fundamentals of multiplication and division within Maths lessons. It is vital that children have a secure conceptual understanding of the meaning of a multiplicative calculation, as opposed to just learning by rote. In these lessons, children will explore the times tables relevant to their year group. Through rich exploration of number and the connections within and between times tables, we aim for our children to be able to recall their times tables sometimes as known facts, but others as derived facts (quick mental calculations). Children learn about the communitive law - that 3 x 4 is equal to 4 x 3. Other key relationships are also explored such as 8 x 5 being double that of 4 x 8, or that 7 x 9 is seven less than 7 x 10. We have a strong emphasis on visual representations to support the children's conceptual understanding.



We provide many opportunities within Maths lessons and other times during the school day to learn, explore, embed and consolidate times tables knowledge.

Here are some examples of regular written practice opportunities we give in school:

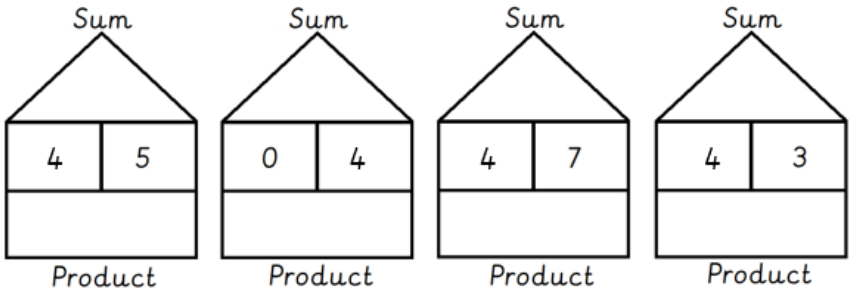
Multiplication Higher or Lower Game

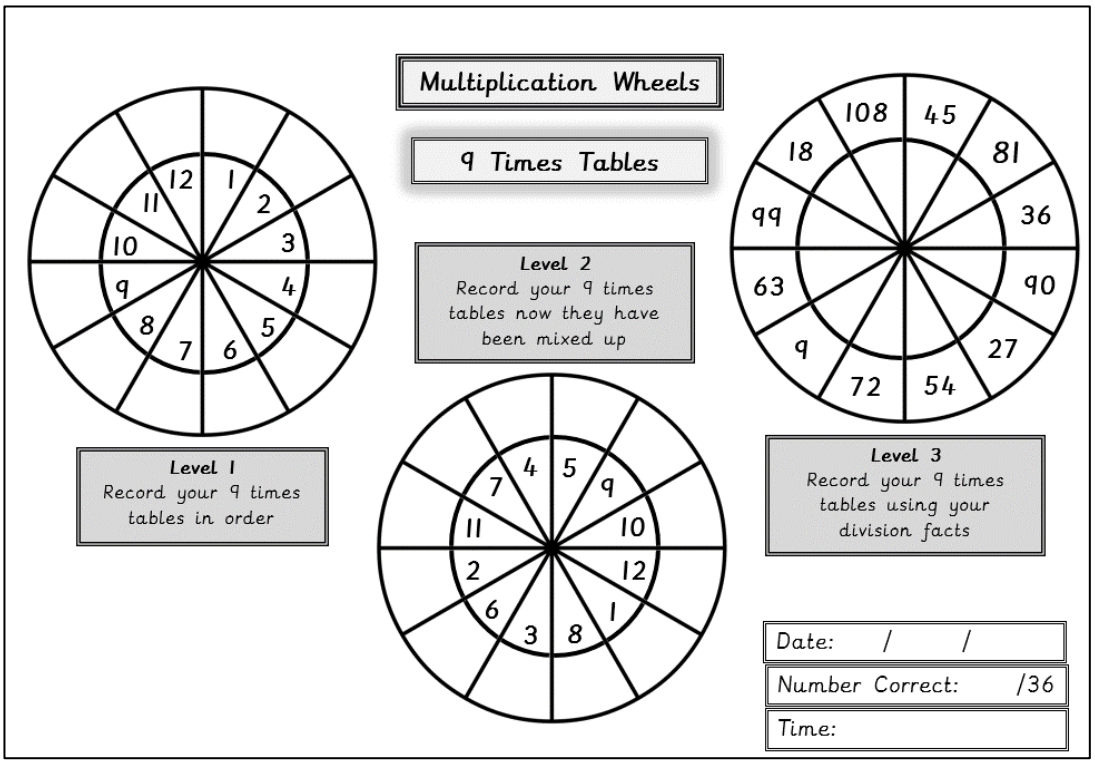
Ruby: 2, 5 and 10

Game 1 Circle the highest value in each row		**Game 2** Tick the lowest value in each row		**Game 3** Insert a < = or > to show how the values of each side compare		
2 x 3	2 x 5	2 lots of 5	2 lots of 6	5 lots of 5		5 x 4
4 x 2	2 x 6	5 lots of 2	5 times 3	5 times 2		1 lot of 10
2 x 5	5 x 1	10 lots of 5	5 times 6	5 x 8		2 groups of 8

Sum and Product Number Houses

4 Times Tables





Our Times Tables System

Guided by the National Curriculum, times tables are learned in a logical order to support children's access to the rest of their curriculum, as well as to make connections explicit such as learning the 8 times tables following the 4 times tables to relate to doubling. In school, we have split these tables into three child-friendly core segments: Ruby, Emerald and Diamond.

RUBY			EMERALD				DIAMOND			
2	10	5	3	4	8	11	6	9	7	12

When we test the children on their times tables, they are firstly tested on their multiplication, then division, then a mixture of the both.

Multiplication

↓

Division

↓

Mixed Multiplication and Division

How are Times Tables tested?

At least once a week, children will be tested on their times tables. Each class will keep a log to track progress so that testing is personalised for each pupil.

✓ =multiplication ✓ ✓ =division ✓ ✓ ✓ =mixed	RUBY			EMERALD				DIAMOND			
	2	10	5	3	4	8	11	6	9	7	12
Child A	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓							
Child B	✓ ✓ ✓	✓ ✓									
Child C	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓							

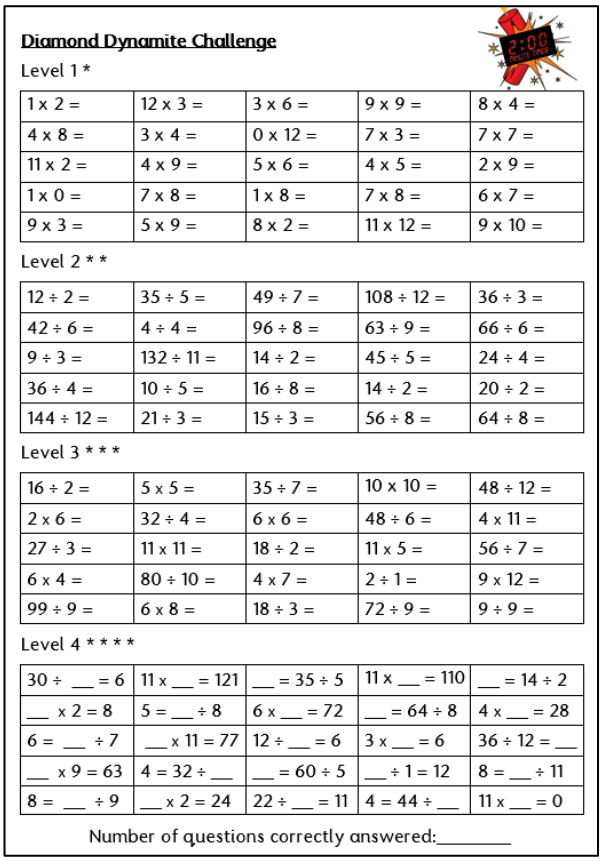
During a test, children will be given a test sheet which consists of 28 mixed practice questions. We allow 2 minutes for each test, which is then marked by the teacher and if it is completed correctly, the child moves onto the next times table.

EMERALD **3 x**			Name: Date:
3 x 3 =	3 x 12 =	5 x 3 =	3 x 2 =
0 x 3 =	2 x 3 =	3 x 8 =	4 x 3 =
3 x 5 =	3 x 1 =	3 x 0 =	3 x 10 =
6 x 3 =	10 x 3 =	11 x 3 =	12 x 3 =
3 x 7 =	3 x 4 =	3 x 6 =	8 x 3 =
11 x 3 =	3 x 8 =	3 x 3 =	12 x 3 =
3 x 3 =	7 x 3 =	9 x 3 =	3 x 0 =

Consolidating Times Tables

Once children learn all their times tables, it is vital that they continue to have the opportunity to practise, embed and consolidate their learning so this knowledge can be easily retrieved and is not forgotten. At the beginning of each academic year, the children will consolidate the times tables they have learned before moving on.

For children who have achieved their Diamond certificate, there are several different practise activities we have within our school to continue to support their fluency. Children can compete against the clock time or questions correct in our 'Diamond Dash' and 'Diamond Dynamite Challenge' These are the main focus of practise within upper Key Stage 2.



Diamond Dynamite Challenge

Level 1 *

1 x 2 =	12 x 3 =	3 x 6 =	9 x 9 =	8 x 4 =
4 x 8 =	3 x 4 =	0 x 12 =	7 x 3 =	7 x 7 =
11 x 2 =	4 x 9 =	5 x 6 =	4 x 5 =	2 x 9 =
1 x 0 =	7 x 8 =	1 x 8 =	7 x 8 =	6 x 7 =
9 x 3 =	5 x 9 =	8 x 2 =	11 x 12 =	9 x 10 =

Level 2 * *

12 ÷ 2 =	35 ÷ 5 =	49 ÷ 7 =	108 ÷ 12 =	36 ÷ 3 =
42 ÷ 6 =	4 ÷ 4 =	96 ÷ 8 =	63 ÷ 9 =	66 ÷ 6 =
9 ÷ 3 =	132 ÷ 11 =	14 ÷ 2 =	45 ÷ 5 =	24 ÷ 4 =
36 ÷ 4 =	10 ÷ 5 =	16 ÷ 8 =	14 ÷ 2 =	20 ÷ 2 =
144 ÷ 12 =	21 ÷ 3 =	15 ÷ 3 =	56 ÷ 8 =	64 ÷ 8 =

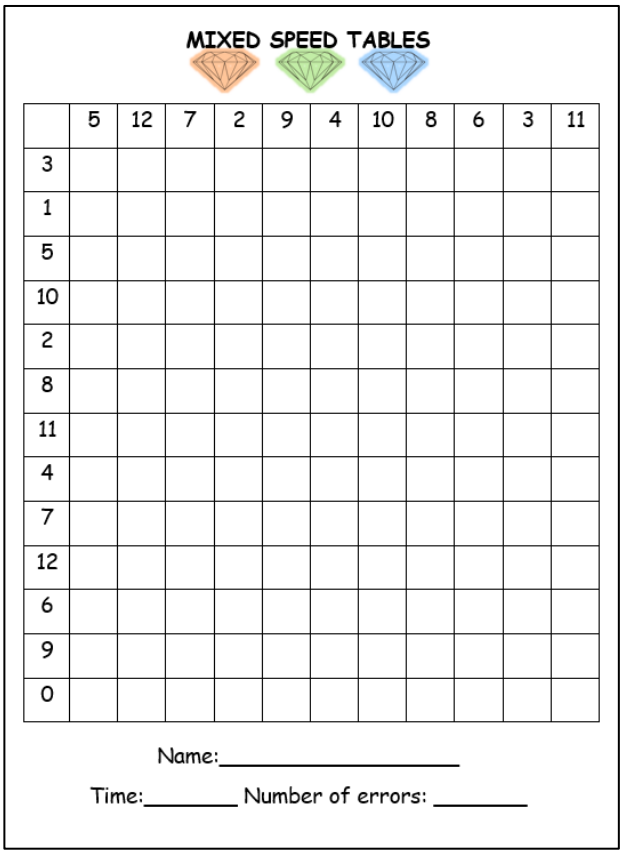
Level 3 * * *

16 ÷ 2 =	5 x 5 =	35 ÷ 7 =	10 x 10 =	48 ÷ 12 =
2 x 6 =	32 ÷ 4 =	6 x 6 =	48 ÷ 6 =	4 x 11 =
27 ÷ 3 =	11 x 11 =	18 ÷ 2 =	11 x 5 =	56 ÷ 7 =
6 x 4 =	80 ÷ 10 =	4 x 7 =	2 ÷ 1 =	9 x 12 =
99 ÷ 9 =	6 x 8 =	18 ÷ 3 =	72 ÷ 9 =	9 ÷ 9 =

Level 4 * * * *

30 ÷ ___ = 6	11 x ___ = 121	___ = 35 ÷ 5	11 x ___ = 110	___ = 14 ÷ 2
___ x 2 = 8	5 = ___ ÷ 8	6 x ___ = 72	___ = 64 ÷ 8	4 x ___ = 28
6 = ___ ÷ 7	___ x 11 = 77	12 ÷ ___ = 6	3 x ___ = 6	36 ÷ 12 = ___
___ x 9 = 63	4 = 32 ÷ ___	___ = 60 ÷ 5	___ ÷ 1 = 12	8 = ___ ÷ 11
8 = ___ ÷ 9	___ x 2 = 24	22 ÷ ___ = 11	4 = 44 ÷ ___	11 x ___ = 0

Number of questions correctly answered:_____



MIXED SPEED TABLES

	5	12	7	2	9	4	10	8	6	3	11
3											
1											
5											
10											
2											
8											
11											
4											
7											
12											
6											
9											
0											

Name:_____

Time:_____ Number of errors: _____

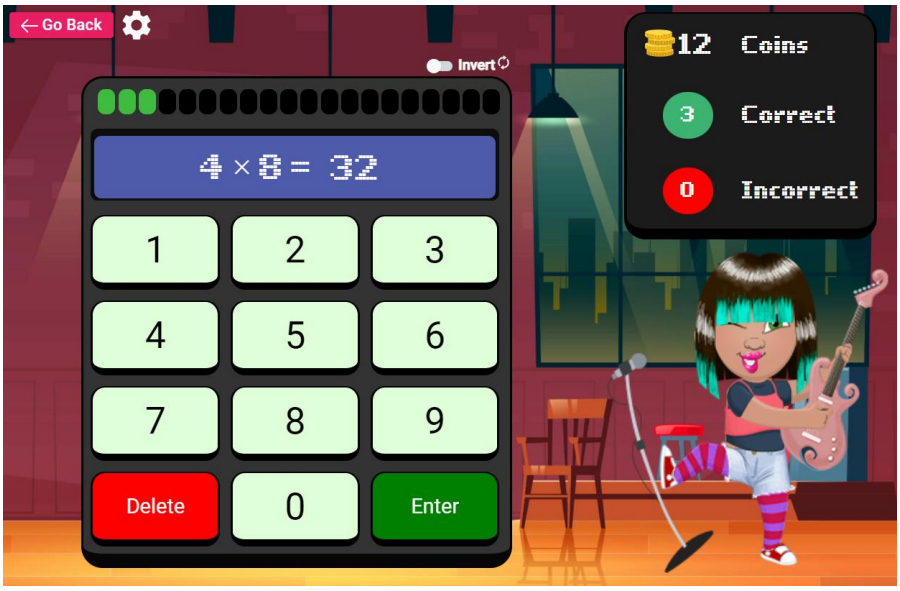
DfE Year 4 Multiplication Check

In 2022, the Department for Education have introduced a statutory multiplication check for all Year 4 pupils which takes place in June of the Summer Term. The purpose of the check is to determine whether children can fluently recall their times tables up to 12, which is essential for future success in mathematics. It will also help our school to identify who may need additional support. This test will be in school time, and will consist of 25 mixed questions. Pupils will have 6 seconds to answer each question. We will receive a copy of the children's results by the end of the academic year.

Times Tables RockStars

TT RockStars is an educational learning platform which is specifically designed to support children in learning and becoming more fluent in their times tables.

There are many different games and modes within this platform for children to practise in different ways. There are also competitive elements where children can play against fellow pupils, the computer or other players from all around the World (within a safe avatar name).



This is a useful tool for teachers as we are able to review children's effort and performance, whilst also analysing data to identify any times tables which children are finding difficult.

Supporting Times Tables at Home

Whilst we do have a heavy emphasis on learning times tables at school, this is best supported when children also have opportunities to practise at home too. Times tables is part of our weekly homework regime and we would encourage pupils to dedicate around 20 minutes a week practising as a rough guide. This practise can be verbal, using home resources, or of course using platforms like TTRockStars or Hit the Button.

https://www.topmarks.co.uk/maths-games/hit-the-button

https://play.ttrockstars.com/

https://ictgames.com/mobilePage/multiplication.html