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Interim Head: Mrs Pip Utting Acting Head: Miss Sarah Parsons

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Dear Parents,

At Orleans, 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 access other areas of the Mathematics curriculum more readily.

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:

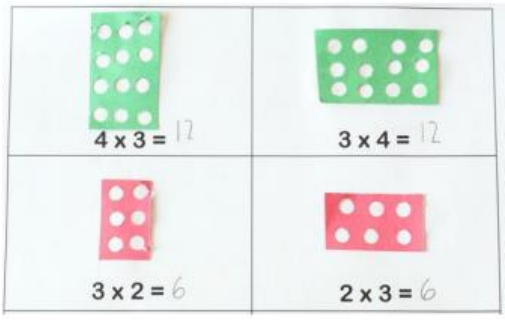
Reception	Count in multiples of 10 to 100 and in multiples of 2 to 20.
Year 1	Count in multiples of 2, 5 and 10. Recall and use doubles of all numbers to 10 and corresponding halves.
Year 2	To recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
Year 3	To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
Year 4	To recall multiplication and division facts for all multiplication tables up to 12x12.
Year 5	Revision of all times tables and division facts up to 12x12. Squared and cubed tables.
Year 6	Revision of all times tables and division facts up to 12x12. Squared and cubed tables.

Our Times Tables system in Years 2-6 and our Counting in Steps system in Reception & Year 1, 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 in 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. Children learn about the commutative law (that 3 x 4 is equal to 4 x 3) and also key relationships 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 also provide many other opportunities within Maths lessons and other times during the school day to learn, embed and consolidate 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 'stages':

- Stage 1: x10, x2 and x5
- Stage 2: x3, x6
- Stage 3: x4, x8
- Stage 4: x7, x9
- Stage 5: x11, x12
- Ultimate Challenge: All mixed up to 12x12

As you will notice, numbers with links have been paired together. The 6x tables is double that of the 3x table and the 8x tables is double that of the 4x table. By learning times tables in this order, children will make connections and spot patterns more easily, helping them to speed up the process of learning and recalling facts. Halving and doubling play a key part, for example, 4 x 3 = 12 so 4 x 6 = 24; 8 x 10 = 80 so 8 x 5 = 40. Other patterns will also be spotted as the children learn their tables such as in the 6x table, every other number is a multiple of 3.

The requirement for *Bronze*, *Silver* and *Gold* include a progressive level of challenge. These are as follows:

Bronze: Recite a complete multiplication table without error or long pauses (pupil may self-correct)
Silver: Answer random order multiplication equations without error or long pauses (pupil may self-correct)
E.g. 2 x 4? 2 x 8?
Gold: Give the multiplication fact for any given answer/product e.g. 36 – 6x6

The *Gold* challenge and its link with division is key. Children find division much more challenging and so making that link with multiplication all the way through, rather than just in the *Ultimate Challenge*, will be hugely beneficial. The more adept children are at knowing their times tables and related division facts, the easier subsequent learning in multiplication and division will be.

As the children continue with their learning in KS2, a lot of the rich, interesting maths is all about the multiplicative relationships and these are hard to fully grasp without fluent recall of the tables.

Our Counting in Steps System

As with our Times Table system, Counting in Steps works in the same way. However, instead of recalling times table facts, children must count in steps of a given times table.

Bronze: Count in steps of a given number, e.g. 0, 2, 4, 6, 8… up to 11x2 (pupil may self-correct)
Silver: Count in steps from a given number (not 0) e.g. count in steps of five from 15
Gold: Say what number come before/after a given multiples, e.g. if testing the twos, what multiple of 2 comes after 10? Before 6?

How are Times Tables tested?

Usually every 2 weeks, 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.

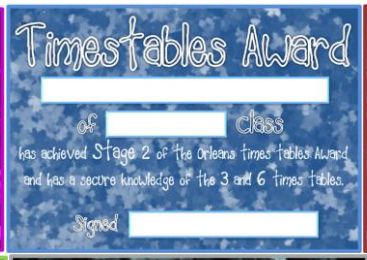
Times Table Challenge

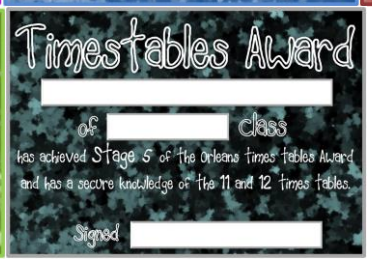
Class:	Stage 1									Stage 2						Stage 3						Stage 4					
	X10			X5			X2			X3			X6			X4			X8			X7			X9		
	B	S	G	B	S	G	B	S	G	B	S	G	B	S	G	B	S	G	B	S	G	B	S	G	B	S	G
Child A	✓	✓	✓				✓	✓	✓																		
Child B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓														
Child C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																

Class	Stage 5						ULTIMATE CHALLENGE	
	X11			X12			All X Tables	
	B	S	G	B	S	G	Silver	Gold
Child A	✓	✓	✓					
Child B	✓	✓	✓	✓	✓	✓		
Child C	✓	✓	✓	✓				

Times Tables Certificates and Rewards

We want our learners to feel proud and be praised for their efforts in learning their times tables. A child will receive a coloured badge and certificate when they have completed each stage of their times tables. Receiving the 'Ultimate Guru' certificate and prize is a very special accomplishment, so this is celebrated in our Friday celebration assembly.





Stage 1 x 2, x 5, x 10	Blue Badge
Stage 2 x 3, x 6	Green Badge
Stage 3 x 4, x 8	Yellow Badge
Stage 4 x 7, x 9	Red badge
Stage 5 x11, x 12	Orange Badge
Ultimate Challenge (KS2 only)	Times Table Guru!

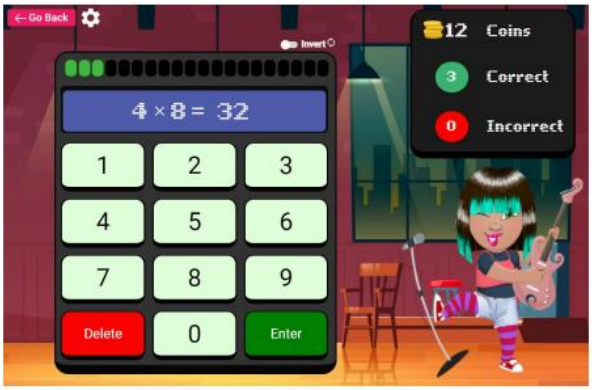
DfE Year 4 Multiplication Check

Two years ago, The Department for Education introduced a statutory multiplication check for all Year 4 pupils in June 2022. 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 and will report upon this in the Summer term.

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. This is a platform we are subscribed to as a school as it bings a lot of enjoyment to learning the times tables.

There are many different games and modes within this platform for children to practice 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 practice can be verbal, using home resources, or of course using platforms like TTRockStars or Hit the Button.

We appreciate your continued support with helping your child on their learning journey to meet these expectations. We want all children at Orleans to enjoy Mathematics and to experience success in the subject. We strive to develop children's resiliency and curiosity about the subject, as well as an appreciation of the beauty and power of Mathematics. Working in partnership with you at home, allows us to achieve just this.

Yours sincerely

Miss Hedges
Maths Leader