

Glebe Junior School

Learning and Mastering Times Tables

As with reading, we rely upon parents and family to reinforce and help children practise times tables at home. At Glebe, we use a variety of strategies within class to learn tables such as weekly tables squares, grids, tests, real life examples, word problems and looking at multiplication and division families.

We also encourage children to learn them independently at home or with parents. Learning and mastering times tables is crucial to your child's mathematical development. Any child will find two-digit multiplication very challenging unless they can understand and know how to perform single digit multiplication, i.e. their times tables. Multiplication is also the basis for understanding division, fractions, percentages, area, time and much, much more.

Mastering the times tables transforms a child's confidence!

Unfortunately, **learning** the times tables and **mastering** them are not the same thing! Children need to be able to recall any times tables answer within two or three seconds, preferably in one second. That leaves no time for counting the way up to the answer from $2x$, $3x$, $4x$ etc - the answer has to be there in their memory almost instantly.

This diagram shows the 144 times tables multiplication facts that every child needs to commit to memory. This can look scary at first but once a child starts learning a few, it gets much easier.

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Language and Times Tables

There are many different ways to say the tables and children need to know them all. For example;

- three times eight is . . .
- three multiplied by eight is...
- three eights are ...
- three lots of eight are . . .
- multiply three by eight ...

Best Order to Learn Times Tables

Start with the easy tables first - the Easy Times Tables are the 10x, 2x and 5x times tables. The 10x tables are a natural part of counting, the two times tables are familiar because of doubling, even numbers. The 5x tables are helped by knowing the 10x tables and the fact that we have 5 fingers. Then the 4x, 9x are usually next. The 4x table is the better they will be with all their maths. this could be the 3x tables followed by the 6x tables, then the 8x tables and the 7x tables - which are generally regarded as difficult. Moving onto the 11s and 12s which should be learned last and separately - even though the 11s are a doddle!

Learning Tables

- Stick to one times table at a time to minimise confusion
- Start with chanting and writing them out slowly in order
- Then move on to completing the answers quickly in order - on paper or verbally
- Finally, move on to completing the answers in any order
- Keep reminding your child that 3×4 is the same as 4×3 - this effectively halves the number of tables facts
- Each times table has a square number 3×3 , 7×7 etc. These act as special memory hooks - emphasize them!
- Talk about the numbers are you encounter them "5 x 8 = 40 that's mummy's age" , "3 x 6 = 18 that's our house number" . . . this makes more memory hooks
- When you're trying to speed up recalling tables introduce some games.

Tips and Tricks for Learning Each Times Tables

- The 2s, 4s and 8 times tables are doubles of each other - with many common answers - $2 \times 8 = 16$, $4 \times 4 = 16$, $8 \times 2 = 16$
- The nine times tables can use the ten times tables and work back or compensate - so for 5×9 , think $(5 \times 10) - 5 = 50 - 5 = 45$, also note that the digits in the answer always add to 9.
- The 3 and 6 times table are tricky. Do the 3s first then the 6s - expect these to be more difficult and make an allowance in time
- The 7 times tables are hard but if you've done the other tables first you'll find you've encountered most of the 7s already elsewhere - such as $7 \times 4 = 28$, $7 \times 3 = 21$
- $7 \times 8 = 56$ is the hardest times table! But write it down as $56 = 7 \times 8$, and the numbers say 5,6,7,8. Easy!

Mastering the Times Tables

A child can know all the times tables without going on to master them. So once your child has learned the times tables individually the next stage involves practising recalling them quickly in any random order. The practice can be verbal or written with answers within 3 seconds.

Please support your child as the **more help** a child gets **at home**, the better they will be with all their maths.

