Ideas for helping your child with multiplication and division

The National Curriculum expectations:

- By the end of Y2 children should know the multiplication and division facts for the 2, 5 and 10 times tables.
- By the end of Y3 children should know the multiplication and division facts for the 3, 4 and 8 times tables.
- By the end of Y4 children should know the multiplication and division facts for all times tables up to 12 x 12.

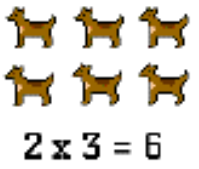
You can see from this that once your child is confident with a times table they need to practise the division facts for that times table as well.

Activities

You can start by counting up in jumps out loud, (e.g. 2, 4, 6, 8..) or down (e.g. 30, 27, 24…).

Say the times tables out loud: 1 x 5 is 5, 2 x 5 is 10, 3 x 5 is 15, …

To help your child to visualise the calculation you or they could draw **arrays** like the pictures below (or make arrays using objects that they have at home):



2 x 3 = 6

4 x 3 = 12

6 x 2 = 12

2 x 4 = 8

These arrays are good for showing times table and division facts.

Another way of helping your child to see the times tables is by colouring in the numbers on a **hundred square** and seeing if they can spot any patterns, e.g. colouring in all of the numbers in the 3 times table green. There is a hundred square on the back of this sheet.

They can also complete blank **multiplication grids**. Initially your child could fill it in with the times tables they know, in order. As they become more confident, you could change the order. See the examples on the last page.

Hundred Square

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Here are some ideas for games to play at home from www.theschoolrun.com

1. **Speed Tables -** Your child can race against a friend or play alone (even racing against the clock can be a challenge that really gets competitive-types going!). As they write down their tables, make it a sport and encourage them to aim for 'personal bests'. They can write them down either as 8 x 6 = 48 or by filling in a tables grid.

2. **Bingo! -** Make this ultra-authentic by buying some proper bingo dabbers, just for fun. This is best played with at least two children, or drag in your other half or a grandparent if there isn't an extra child around. Make simple bingo cards with multiples of, for example, nine on them. Then you, as the caller, call out "nine nines", and whoever has 81 dabs it. The person who gets a full house is the caller on the next round.

3. **Throw the Dice -** Again, this is best played with two or more children. Throw two dice and ask the children to write down the multiplication. If you want to work on tables higher than one to six, use small stickers to change the numbers, or buy twelve-sided dice. The winner is the child with the most correct calculations written down in a given time frame.

4. Memory Game - Buy or make some number cards, and write down the corresponding tables calculations onto cut-out card. Make sure the number cards and the tables calculation cards are different shapes so your child can distinguish a calculation from a potential answer. Lay all cards upside-down on the floor or desk. First your child has to turn over one of the table calculation cards, and then they need to find the number card that is the answer to the calculation. The winner is the player with the most cards once all the overturned cards are gone.

5. Keep Fit Challenge - Getting children active is proven to help learning, so instead of just asking your child to recite their tables, encourage them to jog on the spot and do different aerobic moves in time to chanting them. As exercise helps mood and concentration, it should make the sessions more fun and effective.

Online Games and Resources

http://mathszone.co.uk/ has games and resources for all aspects of the maths curriculum.

http://resources.woodlands-junior.kent.sch.uk/maths/ includes times tables tests that are marked online, as well as games and flashcards.

http://www.arcademics.com/games has games for multiplication and division. (There are parts of this website that require a login but the games are available without signing up.)
Searching online for times tables **songs or videos** can also help to make the times tables more memorable and fun to learn.

If you have any questions, or require further resources then do contact your class teacher.

R.Westcott September 2015

Multiplication Grids

x	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

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

Blank Multiplication Grid in Order

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

Blank Multiplication Grid in Random Order

x	1	2	3	4	5	6	7	8	9	10
5										
2										
3										
4										
6										
1										
7										
9										
8										
10										