Teaching Times Tables at Moss Hey

In the Autumn term of 2017, we introduced a new Times Table Challenge aimed at developing quicker and more confident recall of the Times Tables facts.

The current National Curriculum states that children should know their times tables up to 12x12 by the end of Year 4. Knowing the Times Tables inside out is essential for moving on to most other areas in mathematics; including division, fractions, decimals and percentages.

In life we use times table and division facts almost every day in many different ways:

- 6 people are coming for tea. Each person will eat 2 burgers. How many burgers do you need to buy?
- A ticket costs £3. How much would it cost to buy 5?
- You need 50 apples for a party. 8 apples come in a bag, how many bags do you need?

Children who know their times tables facts will be able to answer questions more quickly and be able to focus on using other maths strategies in more complex problems rather than being slowed down by multiplication. Knowing times tables can also increase a child's confidence levels, as this part of the question becomes easy.

The Department for Education has announced that in 2019 a 'Times Tables Check' will be administered for children in Year 4. We aim to enthuse and encourage the children to learn the times tables with the following new system, whilst also preparing them for this Government assessment.

The Times Table Challenge will run in Years 2, 3, 4, 5 and 6. The idea is that children will work their way through the times tables at their own pace. Children will be awarded with a certificate when they successfully move to the next level.

We need all children to succeed at their Times Table Challenge and therefore we will continue to work on learning them within school, but the support that parents can give at home is crucial for success.

Every child will be assessed by their class teacher and placed on a Times Table Challenge which is appropriate to their ability. There are four awards to complete:

BRONZE **SILVER** **GOLD** **PLATINUM**

To progress onto the next award, the children need to complete a timed four minute test of 60 questions. They will be tested once a week and they need to get all questions correct four times, then they will receive a certificate. The reason for the limited time is to ensure children are doing a mental calculation rather than working it out with support.

Children in Year 2 will have a gradual introduction to a times tables test and will not be given 60 questions until they are ready.

The children will bring their test and scores home so that you can see their personal progression through the level and help them accordingly.

There will be a small number of children for whom this is very difficult and they will be set a more personal and achievable challenge.

The following links may be useful in helping pupils learn their Times Tables:

http://www.woodlands-junior.kent.sch.uk/maths/timestable/interactive.htm

http://www.teachingtables.co.uk/

http://www.maths-games.org/times-tables-games.html

http://www.primarygames.co.uk/

http://www.ictgames.com/resources.html

http://www.mymaths.co.uk

http://www.fun4thebrain.com/division.html

http://downloads.bbc.co.uk/skillswise/maths/ma13time/game/ma13tabl-game-tables-grid-find/timestables_2.swf

http://www.learnyourtables.co.uk/en/index2.htm

http://www.jeuxclic.com/jeux/game-1257204950.swf

https://www.nationwideeducation.co.uk/www/flash/bso/bso-flash/index.html

The following are ideas for games and activities to help pupils learn their Times Tables:

- Chant.
- Create a rap.
- Create a song.
- Write them out.
- Beat the clock to recall the fact.
- Beat your opponent.
- Mallet's mallet style taking it in turns to say the multiples.
- Beat your personal best time of recalling the times-table.
- How many times can you write the fact in 30 seconds?
- Create some cards out of paper and play snap – match the calculation to the product or the multiplication to the division etc.
- Match up the number cards according to the number family e.g. 4, 5 and 20.
- Create some cards with the calculation on the front and the product on the back. Can you work out what is on the other side?
- Pass the 'hot potato' backward and forward with your partner saying the next multiple each time.
- Play the times-tables games on MyMaths.
- Create a poster and put it up in your bedroom.

The following charts could help pupils learn their Times Tables:

Times Tables

1 Times Table	2 Times Table	3 Times Table	4 Times Table	5 Times Table	6 Times Table
0 x 1 = 0	0 x 2 = 0	0 x 3 = 0	0 x 4 = 0	0 x 5 = 0	0 x 6 = 0
1 x 1 = 1	1 x 2 = 2	1 x 3 = 3	1 x 4 = 4	1 x 5 = 5	1 x 6 = 6
2 x 1 = 2	2 x 2 = 4	2 x 3 = 6	2 x 4 = 8	2 x 5 = 10	2 x 6 = 12
3 x 1 = 3	3 x 2 = 6	3 x 3 = 9	3 x 4 = 12	3 x 5 = 15	3 x 6 = 18
4 x 1 = 4	4 x 2 = 8	4 x 3 = 12	4 x 4 = 16	4 x 5 = 20	4 x 6 = 24
5 x 1 = 5	5 x 2 = 10	5 x 3 = 15	5 x 4 = 20	5 x 5 = 25	5 x 6 = 30
6 x 1 = 6	6 x 2 = 12	6 x 3 = 18	6 x 4 = 24	6 x 5 = 30	6 x 6 = 36
7 x 1 = 7	7 x 2 = 14	7 x 3 = 21	7 x 4 = 28	7 x 5 = 35	7 x 6 = 42
8 x 1 = 8	8 x 2 = 16	8 x 3 = 24	8 x 4 = 32	8 x 5 = 40	8 x 6 = 48
9 x 1 = 9	9 x 2 = 18	9 x 3 = 27	9 x 4 = 36	9 x 5 = 45	9 x 6 = 54
10 x 1 = 10	10 x 2 = 20	10 x 3 = 30	10 x 4 = 40	10 x 5 = 50	10 x 6 = 60
11 x 1 = 11	11 x 2 = 22	11 x 3 = 33	11 x 4 = 44	11 x 5 = 55	11 x 6 = 66
12 x 1 = 12	12 x 2 = 24	12 x 3 = 36	12 x 4 = 48	12 x 5 = 60	12 x 6 = 72

7 Times Table	8 Times Table	9 Times Table	10 Times Table	11 Times Table	12 Times Table
0 x 7 = 0	0 x 8 = 0	0 x 9 = 0	0 x 10 = 0	0 x 11 = 0	0 x 12 = 0
1 x 7 = 7	1 x 8 = 8	1 x 9 = 9	1 x 10 = 10	1 x 11 = 11	1 x 12 = 12
2 x 7 = 14	2 x 8 = 16	2 x 9 = 18	2 x 10 = 20	2 x 11 = 22	2 x 12 = 24
3 x 7 = 21	3 x 8 = 24	3 x 9 = 27	3 x 10 = 30	3 x 11 = 33	3 x 12 = 36
4 x 7 = 28	4 x 8 = 32	4 x 9 = 36	4 x 10 = 40	4 x 11 = 44	4 x 12 = 48
5 x 7 = 35	5 x 8 = 40	5 x 9 = 45	5 x 10 = 50	5 x 11 = 55	5 x 12 = 60
6 x 7 = 42	6 x 8 = 48	6 x 9 = 54	6 x 10 = 60	6 x 11 = 66	6 x 12 = 72
7 x 7 = 49	7 x 8 = 56	7 x 9 = 63	7 x 10 = 70	7 x 11 = 77	7 x 12 = 84
8 x 7 = 56	8 x 8 = 64	8 x 9 = 72	8 x 10 = 80	8 x 11 = 88	8 x 12 = 96
9 x 7 = 63	9 x 8 = 72	9 x 9 = 81	9 x 10 = 90	9 x 11 = 99	9 x 12 = 108
10 x 7 = 70	10 x 8 = 80	10 x 9 = 90	10 x 10 = 100	10 x 11 = 110	10 x 12 = 120
11 x 7 = 77	11 x 8 = 88	11 x 9 = 99	11 x 10 = 110	11 x 11 = 121	11 x 12 = 132
12 x 7 = 84	12 x 8 = 96	12 x 9 = 108	12 x 10 = 120	12 x 11 = 132	12 x 12 = 144

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

The following are sample tests that we will be using:

Number of Questions: **60**
Testing: **3×**, **4×**, **8×** (with **inverse**)

8 x 8 = _____	72 ÷ 8 = _____	21 ÷ 3 = _____	4 x 4 = _____
24 ÷ 3 = _____	6 x 8 = _____	3 x 7 = _____	9 ÷ 3 = _____
7 x 3 = _____	4 x 10 = _____	32 ÷ 4 = _____	3 x 11 = _____
3 x 4 = _____	9 x 4 = _____	8 x 4 = _____	2 x 8 = _____
12 x 3 = _____	8 x 3 = _____	8 x 12 = _____	2 x 4 = _____
8 ÷ 4 = _____	15 ÷ 3 = _____	4 x 8 = _____	4 x 1 = _____
4 x 2 = _____	16 ÷ 8 = _____	8 x 9 = _____	8 x 4 = _____
64 ÷ 8 = _____	3 x 12 = _____	4 x 6 = _____	6 x 4 = _____
27 ÷ 3 = _____	10 x 4 = _____	4 x 5 = _____	1 x 3 = _____
8 x 6 = _____	12 x 8 = _____	3 x 2 = _____	8 x 2 = _____
8 x 5 = _____	24 ÷ 8 = _____	4 x 9 = _____	1 x 4 = _____
5 x 3 = _____	8 x 3 = _____	8 x 11 = _____	48 ÷ 4 = _____
8 ÷ 8 = _____	5 x 8 = _____	6 x 3 = _____	8 x 1 = _____
40 ÷ 4 = _____	4 ÷ 4 = _____	11 x 4 = _____	40 ÷ 8 = _____
16 ÷ 4 = _____	3 x 9 = _____	12 x 4 = _____	32 ÷ 8 = _____