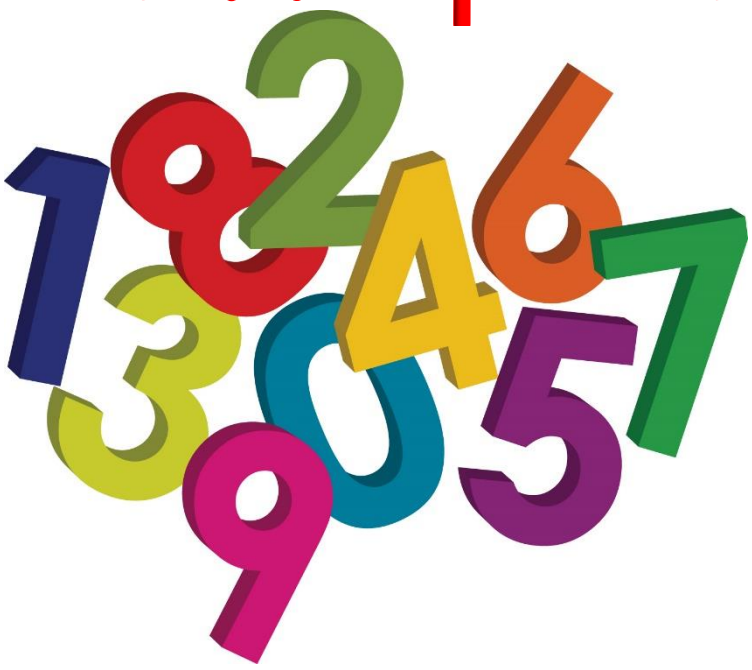
Maths Booklet

Multiplication

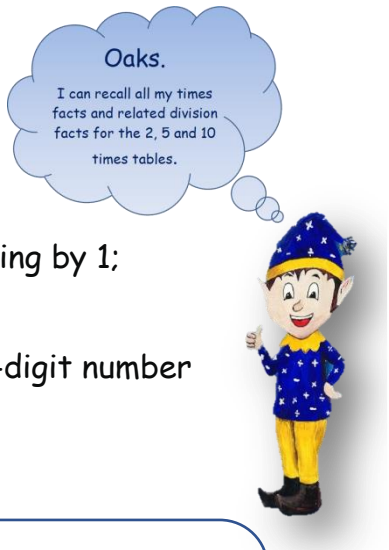


Oaks

The aim of this booklet is to outline what is expected by the end of the year. We have included some of the strategies that will be used in class so that support is given in the same way.

We have included some games and activities that can be done at home to help them develop fluency and understanding.

Multiplication Expected Targets



- I can recall all my times facts and related division facts for the 2, 5 and 10 times tables.
- I can use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.
- I can multiply two-digit and three-digit numbers by a one-digit number using a formal written layout.
- I can solve problems involving multiplication.

5 x 7 = 35
7 x 5 = 35
35 ÷ 7 = 5
35 ÷ 5 = 7

60 x 6 = 360
6 x 6 x 10
6 x 6 = 36
36 x 10 = 360

4 x 6 x 2 = 48

6 x 2 = 12 4 x 6 = 24
12 x 4 = 48 24 x 2 = 48

327 x 4 = 1308

X	300	20	7
4	1200	80	28

1200 + 80 + 28 =1308

Multiplication Collection

You will need:

2 players

4 dice (2 for each player)

10 counters

This is a very simple game, relying solely on the luck of the dice roll to determine a winner. However, there is a great deal of maths being undertaken during the play, and in our experience, children love the simplicity of it. No board, just dice, counters, quick calculations... and, ultimately, a winner!

How to play:

All 10 counters are placed in a single pile between the players.

Now, both players take it in turn to roll their two dice. Each player must multiply the two dice numbers together and announce the result. The player with the larger product takes a counter. If both players have the same product then neither can take a counter.

When all of the counters have been used each player counts the counters they have collected.

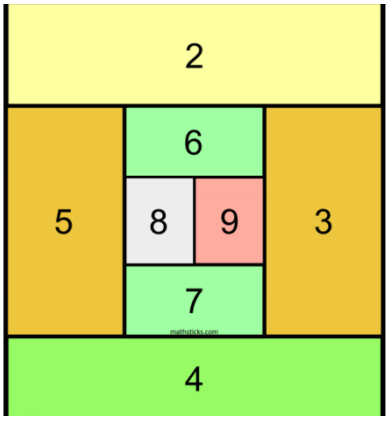
The winner is the one with the most counters.

Notes:

This game can easily be made more challenging by using different numbered dice: 1-6 and 4-10 dice, for example: if you label your own dice then putting a zero on one of the faces can add a further degree of interest; anyone who rolls a zero must replace one of their counters in the middle of the table!

Drop Zone

Make your own 'Drop Zone' mat



You will need:

2 players
1 small dice
A 'Drop Zone' dice mat
Paper to record calculations

How to play:

The players take it in turns to roll a small dice onto the 'Drop Zone' dice mat.

If the dice does not land on the mat they must miss their turn. When the dice stops on the mat they must multiply the dice number by the number in the Drop Zone. The player now makes a note of this number.

Play continues with each player taking it in turns to roll the dice and multiply it by the number where it lands.

All calculations must be recorded and each product added to the previous one, the first player to reach, or exceed, 100 is the winner.

In the example play here, Alex wins by passing 100 first.

Alex

Dice x Zone	Product	Running Total
5 x 4 =	20	20
3 x 9 =	27	47
6 x 4 =	24	71
5 x 2 =	10	81
4 x 7 =	28	109

Jennifer

Dice x Zone	Product	Running Total
6 x 7 =	42	42
2 x 5 =	10	52
1 x 2 =	2	54
5 x 4 =	20	74
3 x 2 =	6	80

(From Dice Games Plus)

Multiplication Grid

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

Useful Websites:

https://www.topmarks.co.uk/times-tables/coconut-multiples

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

https://www.arcademics.com/games/meteor

https://mathsframe.co.uk/en/resources/category/7/multiplication-and-division

www.ictgames.com/resources.