Numeracy Homework

Due date:_____

At St. Peter's we are committed to developing children's core mathematical skills and concepts. This includes their multiplication and division facts as they move through school. This pack is designed to help children develop their multiplication knowledge for the 2,3,4 5, 8 and 10 times table.

Children should complete at least two grids per week and have their time noted above the grid. When children have completed the grids in one step, they may be ready to move on to the next step.

As well as completing the grids, it would help children to master their times tables if you discuss their learning with them. This can be achieved by using the following examples of Chatterbox style questions:

'What are 3 lots of 2?'
'Count up to 20 in jumps of 2'
'Share equally 16 sweets between 2 children.'
'Here is a fact ..... '5 lots of 2 = 10'. Tell me two division facts for this fact.'

It is important to encourage children to use the correct vocabulary when discussing maths concepts as this will help them master each times table. Please remember to cover a completed grid before children start on the next one!

In addition to learning these times tables, children can start counting in steps of the other numbers to introduce other facts. In school we are introducing these using a rolling numbers programme, where children learn to count in steps using their fingers. Furthermore, children should learn the effect of multiplying and dividing by 10 and 100. There are examples of this at the start of the booklet.

If you have any questions regarding this homework, or would like extra grids for different steps, please speak to your child's class teacher.

When numbers are multiplied by 10, the digits within a number move up the place value columns one column. It is important that children understand that the digits move in the columns, not that a zero is added to the number or that the decimal point moves when ready to calculate with decimals. An example of how this works is shown below.

E.G.   3x10= 30   43x10= 430

Hundreds H 100's	Tens T 10's	Units/Ones U/O I's
		3
	3	0
	4	3
4	3	0

For 3x10 the 3 starts in the ones column. When we multiply by 10, the digit moves up one column to the tens column and a zero is used as a place value holder. It is important children know the digits move ready for decimal calculating.

For 43x10, the same process if followed. The 4 is in the tens column to begin with and moves up one column to the hundreds. The three follows the same pattern moving from ones to tens. Again, a zero is used as a place value holder.

This rule of moving column works for when we multiply by 100 and 100 too. We move two columns for 100 and three columns for 1000. In school we discuss how the 0s is a clue for how many columns to move.

Multiply the following numbers by 10, 100 and 1000 remembering they move up the place value columns one space to the left.

Time taken_____   Date:_____

Starting number	X10	X100	X1000
7			
41			
82			
124			
721			
210			
1354			
24			
124			
875			
325			
135			
784			

Time taken_____   Date:_____

Starting number	X10	X100	X1000
3.2			
41			
2.35			
23.264			
24.3			
12.01			
2.001			
6.24			
6.48			
2.012			
3.1			
3.024			
2.36			

Starting number	X10	X100	X1000
3.24			
87.265			
21.14			
0.154			
0.012			
1.021			
94.587			
3.24			
3.024			
0.204			
6.48			
1.298			
3.021			

Starting number	X10	X100	X1000
7.42			
10.321			
12.4			
852			
14.14			
17.124			
2.32			
19.31			
11.4			
3.17			
15			
13.2			
18.341			

Time taken_____   Date:_____

Starting number	X10	X100	X1000
767.2			
100.1			
1.236			
8.15			
1.0463			
173.4			
0.2			
1.019			
11.3			
3.4			
15.94			
13.2			
1812.4			

Time taken_____   Date:_____

Starting number	X10	X100	X1000
7.9			
103			
1.12			
58.8			
145.4			
2.17			
952.3			
19.47			
11.3			
236.3			
945.21			
0.24			
1.002			

Stage 3.6

When numbers are divided by 10, the digits within a number move down the place value columns one column. It is important that children understand that the digits move in the columns, not that a zero is taken off the number or that the decimal point moves when ready to calculate with decimals. An example of how this works is shown below.

Hundreds	Tens	Units/Ones
H	T	U/O
100's	10's	I's
	5	0
		5
1	4	0
	1	4

For 50÷10, the 5 starts in the tens column. When we divide by 10, the digit moves down one column to the ones column. It is important children know the digits move ready for decimal calculating.

For 140÷10, the same process if followed. The 1 is in the hundreds column to begin with and moves down one column to the ones. The four follows the same pattern moving from tens to ones.

This rule of moving column works for when we divide by 100 and 100 too. We move two columns for 100 and three columns for 1000. In school we discuss how the 0s is a clue for how many columns to move.

Divide the following numbers by 10, remembering they move down the place value columns one space to the right.

Time taken_____   Date:_____

Starting number	÷10	÷100	÷1000
3000			
4000			
14,000			
30,000			
16,000			
82,000			
91,000			
120,000			
340,000			
621,000			
972,000			
218,000			
637,000			

Time taken_____   Date:_____

Starting number	÷10	÷100	÷1000
7000			
2000			
28,000			
34,000			
72,000			
41,000			
34,000			
154,000			
942,000			
348,000			
652,000			
942,000			
612,000			

Starting number	÷10	÷100	÷1000
9820			
3610			
3640			
3642			
7512			
12,840			
81,210			
36,420			
94,120			
3451			
3642			
9753			
3942			

Starting number	÷10	÷100	÷1000
9421			
9873			
2158			
3642			
3942			
4812			
6123			
12,845			
39,451			
94,124			
72,465			
91,248			
91,345			

Starting number	÷10	÷100	÷1000
3469			
9431			
7512			
985			
369			
214			
623			
642			
361			
201.3			
900.1			
673.3			
904.3			

Starting number	÷10	÷100	÷1000
9030			
7003			
9030			
404			
630			
8601			
9430			
850			
8630			
9080			
9040			
360			
3002.1			

Starting number	Calculation	Answer
320	÷10	
45	x100	
530	÷1000	
920	÷100	
60	x100	
710	÷10	
170	÷1000	
62	x100	
81	x10	
730	÷10	
82	x1000	
940	÷100	
82	x100	

Starting number	Calculation	Answer
320	÷100	
970	÷100	
32	x1000	
920	÷100	
34	x100	
81	x10	
74	x100	
830	÷10	
700	÷10	
320	÷100	
35	x10	
820	÷1000	
45	x10	