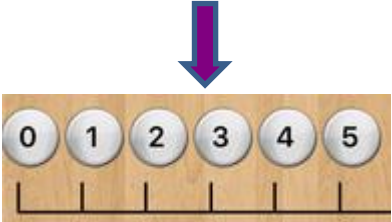
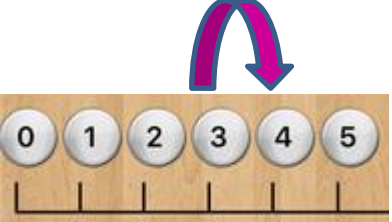
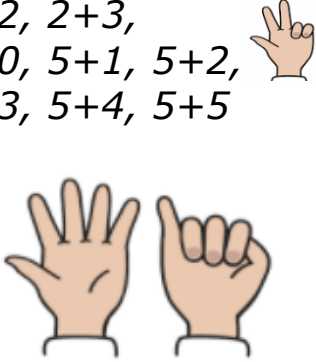


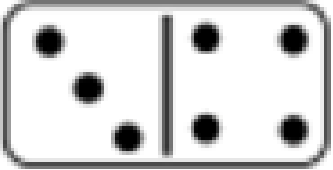
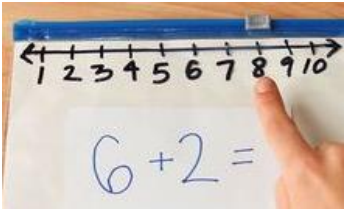
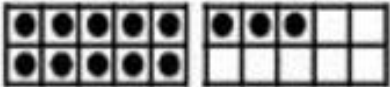
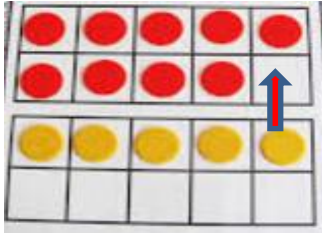
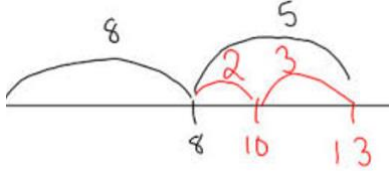


Addition Facts

First of all understand the commutative law, $3 + 4 = 4 + 3$

+ 0 (Stays the same)	+ 1 (next number)	Up to 5 and with 5	Pairs to 10	Doubles
<p>$1+0, 2+0, 3+0,$ $4+0, 5+0, 6+0,$ $7+0, 8+0, 9+0,$</p> 	<p>$1+1, 2+1, 3+1,$ $4+1, 5+1, 6+1,$ $7+1, 8+1, 9+1$</p> 	<p>$2+2, 2+3,$ $5+0, 5+1, 5+2,$ $5+3, 5+4, 5+5$</p> 	<p>$0+10, 1+9, 2+8,$ $3+7, 4+6, 5+5$</p> 	<p>$1+1, 2+2, 3+3,$ $4+4, 5+5, 6+6,$ $7+7, 8+8, 9+9$</p>  <p>$4+4=8$</p>

Near Doubles	Remaining facts to 10 (count on)	+ 10 (teen numbers)	+ 9 (add 10 then minus 1)	Remaining facts to 20 (make 10)
<p>$1+2, 2+3, 3+4,$ $4+5, 5+6, 6+7,$ $7+8, 8+9$</p> 	<p>$4+2, 6+2, 7+2,$ $4+3, 6+3$</p> 	<p>$10+0, 10+1, 10+2,$ $10+3, 10+4, 10+5,$ $10+6, 10+7, 10+8,$ $10+9$</p> 	<p>$9+2, 9+3, 9+4,$ $9+5, 9+6, 9+7,$ $9+8, 9+9$</p> 	<p>$4+7, 5+7$ $3+8, 4+8, 5+8,$ $6+8,$</p> 

Name:

Date:

Basic Addition Facts Diagnostic

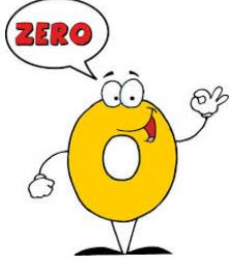

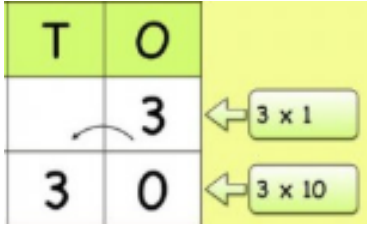
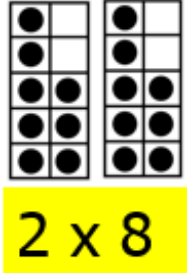
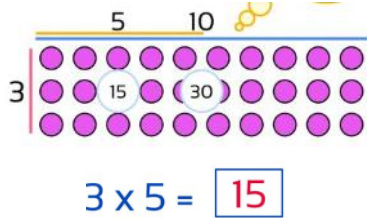
+0 -0	+1 -1	Up to 5 and with 5	Pairs to 10	Doubles
$3 + 0 =$	$4 + 1 =$	$3 + 2 =$	$7 + \square = 10$	$4 + 4 =$
$2 + 1 =$	$3 + 1 =$	$2 + 5 =$	$1 + \square = 10$	$3 + 3 =$
$4 + 0 =$	$2 + 1 =$	$4 + 5 =$	$6 + \square = 10$	$7 + 7 =$
$0 + 3 =$	$5 - 1 =$	$8 - 5 =$	$10 - 4 =$	$8 + 8 =$
$0 + 5 =$	$3 - 1 =$	$6 - 5 =$	$10 - 8 =$	$12 - 6 =$
$0 + 2 =$	$4 - 1 =$	$7 - 5 =$	$10 - 3 =$	$18 - 9 =$

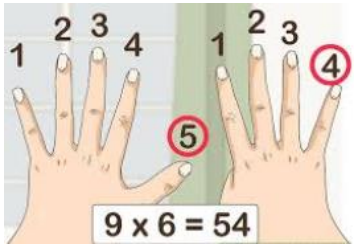
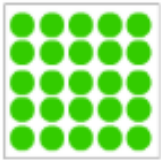

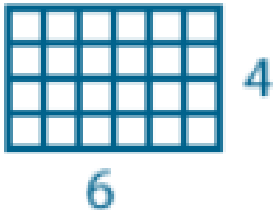
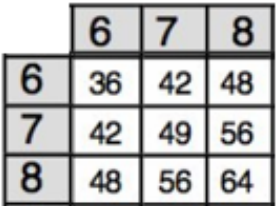
Near Doubles	Remaining facts to 10	+ 10	+9 -9	Remaining Facts to 20
$4 + 3 =$	$4 + 2 =$	$10 + \square = 17$	$9 + 2 =$	$4 + 7 =$
$7 + 6 =$	$6 + 2 =$	$10 + \square = 14$	$9 + 5 =$	$5 + 7 =$
$6 + 5 =$	$6 + 3 =$	$6 + \square = 16$	$6 + 9 =$	$3 + 8 =$
$15 - 8 =$	$7 - 4 =$	$15 - 5 =$	$17 - 9 =$	$12 - 4 =$
$13 - 6 =$	$9 - 6 =$	$13 - 3 =$	$13 - 9 =$	$13 - 8 =$
$9 - 4 =$	$8 - 2 =$	$12 - 10 =$	$14 - 9 =$	$14 - 6 =$

Multiplication Facts

First of all understand the commutative law, $3 \times 4 = 4 \times 3$

+ - Special
× ÷ Addition

x 0	x 1	x10	x2	x5
Product is always 0	the same number you multiply by	move digits 1 place value along	double	half of x10
$1 \times 0, 2 \times 0, 3 \times 0, 4 \times 0,$ $5 \times 0, 6 \times 0, 7 \times 0, 8 \times 0,$ $9 \times 0, 10 \times 0$	$1 \times 1, 1 \times 2, 1 \times 3, 1 \times 4,$ $1 \times 5, 1 \times 6, 1 \times 7, 1 \times 8,$ $1 \times 9, 1 \times 10$	$2 \times 10, 3 \times 10, 4 \times 10,$ $5 \times 10, 6 \times 10, 7 \times 10,$ $8 \times 10, 9 \times 10, 10 \times 10$	$2 \times 2, 2 \times 3, 2 \times 4, 2 \times 5,$ $2 \times 6, 2 \times 7, 2 \times 8, 2 \times 9$	$3 \times 5, 4 \times 5, 6 \times 5, 7 \times 5,$ $8 \times 5, 9 \times 5$
	$1 \times 3 = 3$ 			

x9	squares	x3 remaining facts	x4 remaining facts	x6, x7, x8 remaining facts
x10 then subtract 1 set finger tricks		Double then add 1 set	double then double again	Derive from other facts
$3 \times 9, 4 \times 9, 6 \times 9, 7 \times 9,$ $8 \times 9, 9 \times 9$	$2 \times 2, 3 \times 3, 4 \times 4, 5 \times 5,$ $6 \times 6, 7 \times 7, 8 \times 8, 9 \times 9$	$3 \times 4, 3 \times 6, 3 \times 7, 3 \times 8$	$4 \times 6, 4 \times 7, 4 \times 8$	$6 \times 7, 6 \times 8, 7 \times 8$
	25 	3×4 		

Name:

Date:

Basic Multiplication Facts Diagnostic

x 0	x 1	x10	x2	x5
5 x 0 =	5 x 1 =	3 x 10 =	2 x 8 =	5 x 3 =
7 x 0 =	7 x 1 =	6 x 10 =	2 x 9 =	5 x 9 =
0 x 8 =	1 x 8 =	10 x 8 =	7 x 2 =	4 x 5 =
0 x 6 =	1 x 6 =	10 x 4 =	3 x 2 =	6 x 5 =
7 x <input type="text"/> = 0	1 x <input type="text"/> = 7	10 x <input type="text"/> = 50	2 x <input type="text"/> = 8	7 x <input type="text"/> = 35
3 x <input type="text"/> = 0	9 x <input type="text"/> = 9	7 x <input type="text"/> = 70	6 x <input type="text"/> = 12	5 x <input type="text"/> = 40
x9	squares	x3	x4	x6, x7, x8
9 x 3 =	5 x 5 =	3 x 4 =	4 x 6 =	6 x 7 =
9 x 6 =	7 x 7 =	3 x 8 =	4 x 7 =	6 x 8 =
8 x 9 =	8 x 8 =	7 x 3 =	8 x 4 =	7 x 8 =
7 x 9 =	6 x 6 =	6 x 3 =	9 x 4 =	7 x 9 =
9 x <input type="text"/> = 45	3 x 3 =	3 x <input type="text"/> = 27	4 x <input type="text"/> = 32	7 x <input type="text"/> = 56
4 x <input type="text"/> = 36	9 x 9 =	7 x <input type="text"/> = 21	7 x <input type="text"/> = 28	6 x <input type="text"/> = 42

Name :

Colour the squares in the chart once you have learnt that basic fact.

Addition Facts Chart

+	0	1	2	3	4	5	6	7	8	9	10
0	0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10	11
2	2	3	4	5	6	7	8	9	10	11	12
3	3	4	5	6	7	8	9	10	11	12	13
4	4	5	6	7	8	9	10	11	12	13	14
5	5	6	7	8	9	10	11	12	13	14	15
6	6	7	8	9	10	11	12	13	14	15	16
7	7	8	9	10	11	12	13	14	15	16	17
8	8	9	10	11	12	13	14	15	16	17	18
9	9	10	11	12	13	14	15	16	17	18	19
10	10	11	12	13	14	15	16	17	18	19	20

I know I have learnt my basic facts when I can...

- Show the fact and understand it.
- Recall the basic fact
- Say the family of facts
- Apply the basic fact.

Multiplication Facts Chart

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