

# National Curriculum For Mathematics



## Calculation Policy

### Times tables

2021

## Most children in Year 2

In Year 1, children learn to count forward in 2's, 5's and 10's as their key facts to know. So then in year 2 most pupils will recall and use multiplication and division facts for the:

- 2 times tables
- 5 times tables
- 10 times tables.

Representation and models to use:

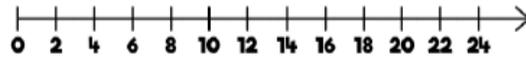
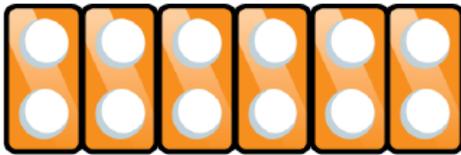
- Bar models
- Number lines

Practical:

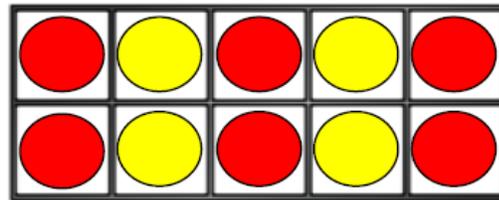
- Number shapes
- Counters
- Money
- Tens frame
- Bead strings
- Everyday objects (2 and 5 times tables)
- Base 10 (10 times tables)
- 100 square

## 2-times tables:

Encourage daily counting, forwards and backwards, using a 100 square or number line. Using concrete materials look for patterns and notice how all the numbers are even.

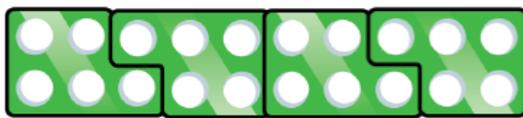


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

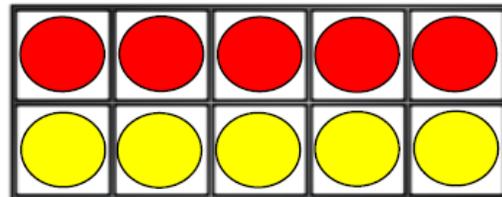
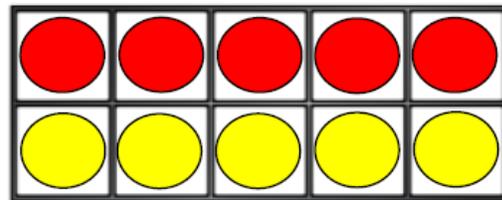
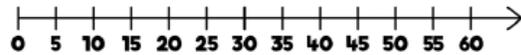


5- times tables:

Encourage daily counting, forwards and backwards, using a 100 square or number line. Using concrete materials look for patterns and notice the pattern in the ones as well as highlighting the odd, even, odd pattern.

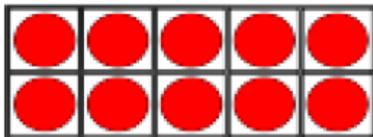
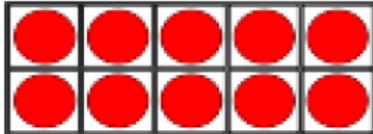
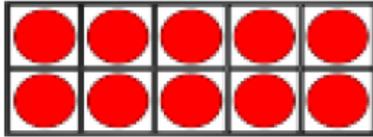
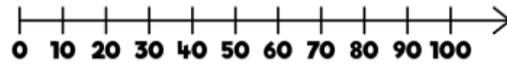


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50



10-times tables:

Encourage daily counting, forwards and backwards, using a 100 square or number line. Notice the patterns in the ones and that they are always 0 and the tens increase by 1 each time.



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

### Most children in year 3

Recall and use multiplication and division facts for the:

- 3 times tables
- 4 times tables
- 8 times tables.

Representation and models to use:

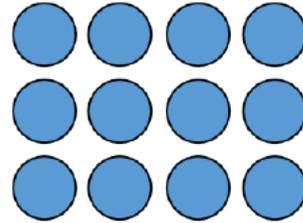
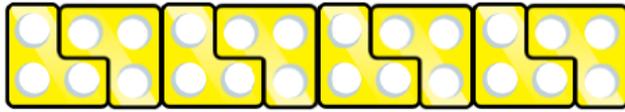
- Number lines

Practical:

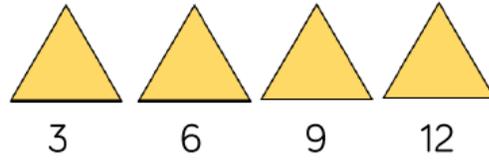
- Number shapes
- Counters
- Hundred square
- Bead strings
- Everyday objects
- Counters
- Number tracks

### 3- times tables:

Encourage daily counting, forwards and backwards, using a 100 square or number line. Using concrete materials look for patterns. Notice the odd, even, odd, even pattern and highlight the pattern of the ones using a 100 square.

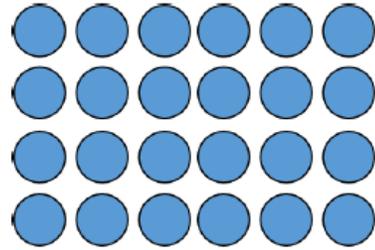


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

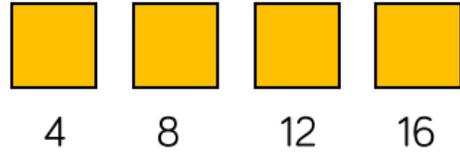


4- times tables:

Encourage daily counting using a 100 square or number line. Using concrete materials look for patterns and make links to the 2 times tables. Notice how each multiple is doubles from the twos. Notice the pattern within each group of 5 multiples and that all the multiples are even using number shapes.



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

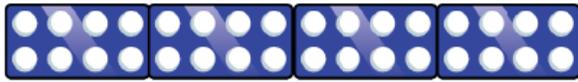


4	8	12	16	20
24	28	32	36	40
44	48	52	56	60



**8- timestables:**

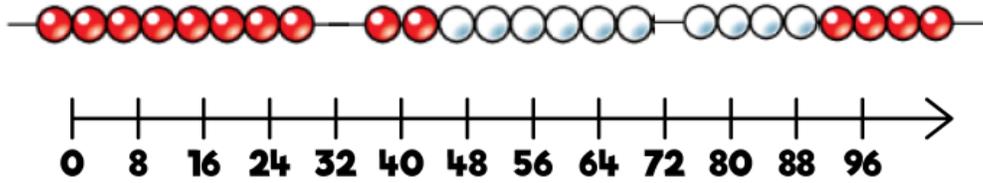
Encourage daily counting using a 100 square or number line. Using concrete materials look for patterns and make links to the 4 times tables. Notice how each multiple is doubles from the fours. Notice the pattern within each group of 5 multiples and that all the multiples are even using number shapes. .



8                      16                      24                      32

8	16	24	32	40
48	56	64	72	80

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



**Most children in Year 4**

Recall and use multiplication and division facts for the:

- 6 times tables
- 7 times tables
- 9 times tables.
- 11 times tables
- 12 times tables.

Representation and models to use:

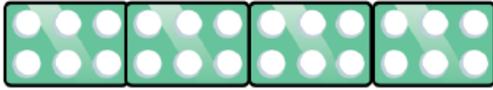
- Number lines

Practical:

- Number shapes
- Hundred square
- Bead strings
- Everyday objects
- Counters
- Number tracks
- Base 10

6-times tables:

Encourage daily counting using a 100 square or number line. Look for patterns using concrete materials. Make links to the 3-times tables by seeing how each answer doubles from the threes. Notice the pattern within each group of 5 multiples and that all the multiples are even using number shapes.



6	12	18	24	30
36	42	48	54	60
66	72	78	84	90

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



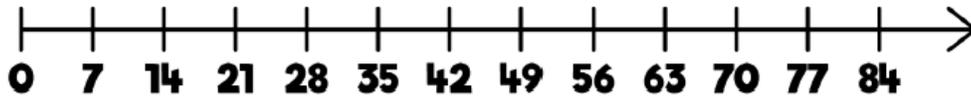
**7- times tables:**

Encourage daily counting forwards and backwards using a 100 square or number line. These times tables are trickier to learn due to the lack of pattern. Allow children to recognise the several facts they already know due to commutativity. Identify the odd and even pattern by using number shapes to support this.



7	14	21	28	35
42	49	56	63	70

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



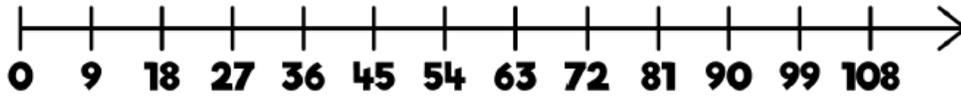
9- times tables:

Encourage daily counting forward and backwards using a 100 square. Look for patterns in the 9 times tables and notice the relationship between the tens and ones as well as noting the odd, even pattern within the multiples.



9	18	27	36	45
54	63	72	81	90

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

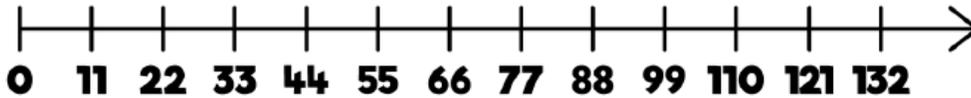
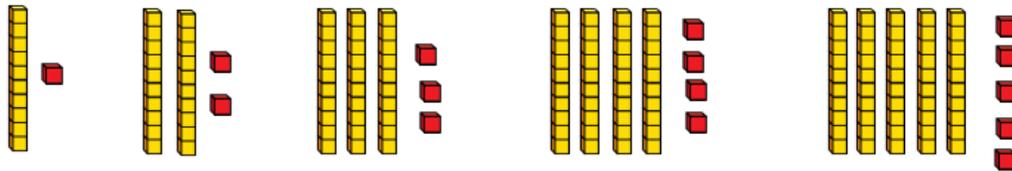
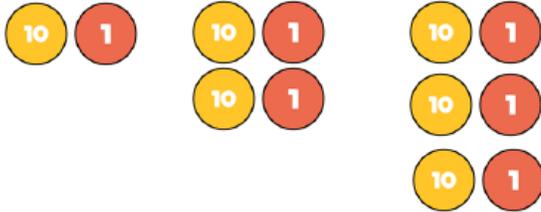


11- times tables:

Encourage daily counting forwards and backwards in the 11-times tables using a 100 square. Look for patterns using concrete materials and notice the patterns in the tens and ones. Consider the patter after crossing 100.

11	22	33	44	55	66
77	88	99	110	121	132

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



12- times tables:

Encourage daily counting in multiples with use of a number line or 100 square.

Encourage children to look for patterns in the 12-times tables and make links with the 6- times tables by noticing each multiple is double the sixes. Notice the patterns of the ones within each group of 5 multiples.

12	24	36	48	60
72	84	96	108	120
132	144			

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

