

**Peppard CE Primary Calculation Policy 2017 onwards.
KS1 Multiplication and Division.**

(Adapted from the Abacus maths scheme).

Year 1

Counting in steps ('clever' counting)

Count in 2s

2 2 2 2 2 2 2 2 2

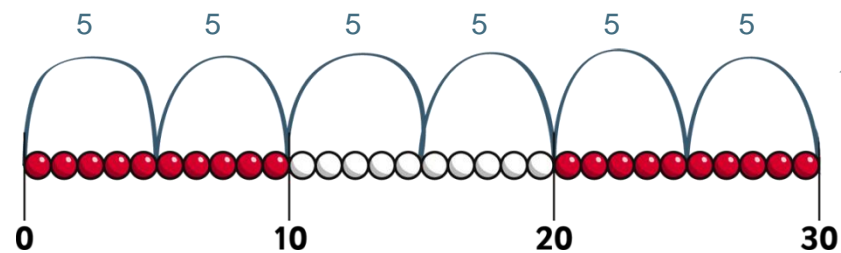
Count in 10s

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

Year 2

Counting in steps ('clever' counting)

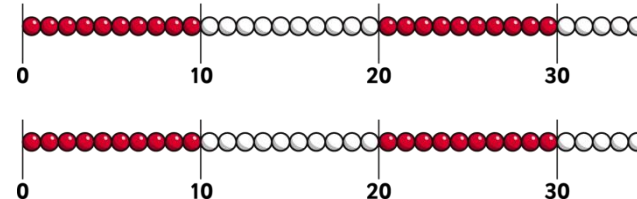
Count in 2s, 5s and 10s



Begin to count in 3s

Doubling and halving

Begin to know doubles of multiples of 5 to 100

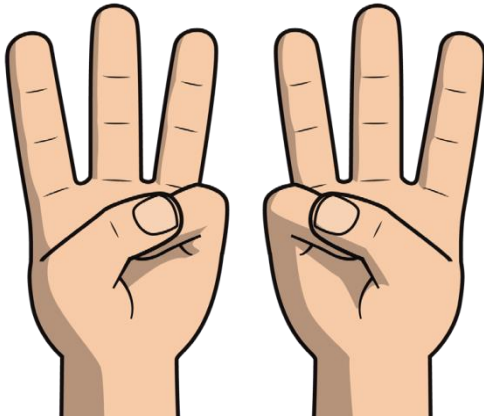
e.g. *double 35 is 70*

Begin to double 2-digit numbers less than 50 with 1s digits of 1, 2, 3, 4 or 5

Year 1

Doubling and halving

Find doubles to double 5 using fingers
e.g. *double 3*



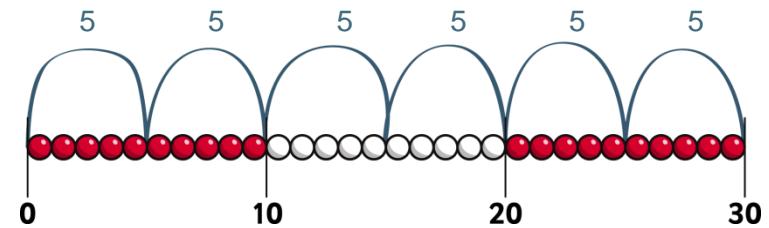
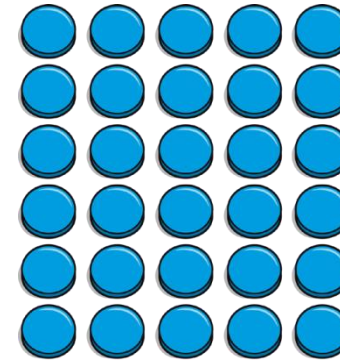
Year 2

Grouping

Use arrays to find answers to multiplication and relate to 'clever' counting

e.g. 3×4 as *three lots of four things*

e.g. 6×5 as *six steps in the 5s count as well as six lots of five*



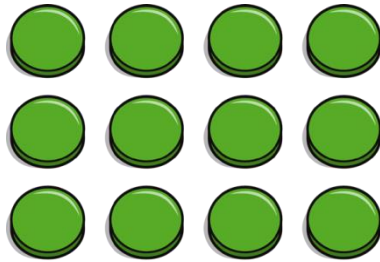
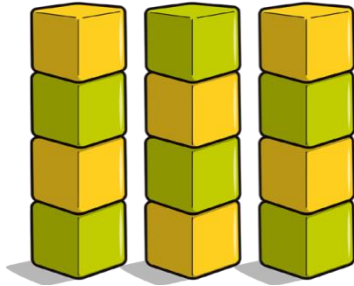
Understand that 5×3 can be worked out as three 5s or five 3s

Year 1

Grouping

Begin to use visual and concrete arrays and sets of objects to find the answers to 'three lots of four' or 'two lots of five'

e.g. *three lots of four*

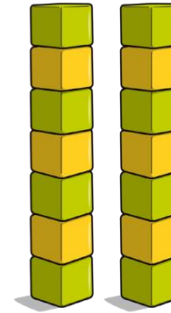


Year 2

Using number facts

Know doubles to double 20

e.g. *double 7 is 14*



Start learning $\times 2$, $\times 5$, $\times 10$ tables, relating these to 'clever' counting in 2s, 5s, and 10s

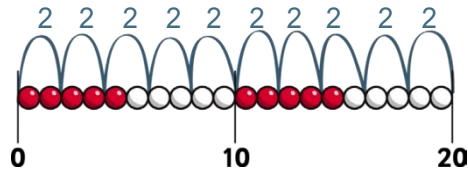
e.g. $5 \times 10 = 50$, and *five steps in the 10s count = 10, 20, 30, 40, 50*



Year 1

Counting in steps ('clever' counting)

Count in 2s

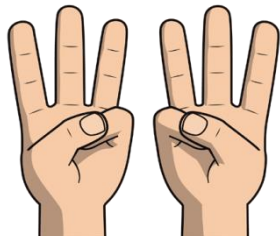


Count in 10s

1	2	3	4	5	6	7	8	9	
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
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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

Doubling and halving

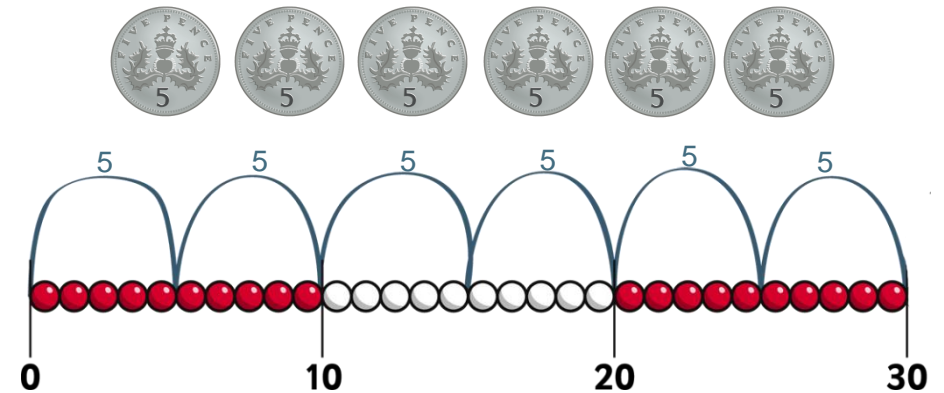
Find half of even numbers up to 12, including realising that it is hard to halve an odd number



Year 2

Counting in steps ('clever' counting)

Count in 2s, 5s and 10s

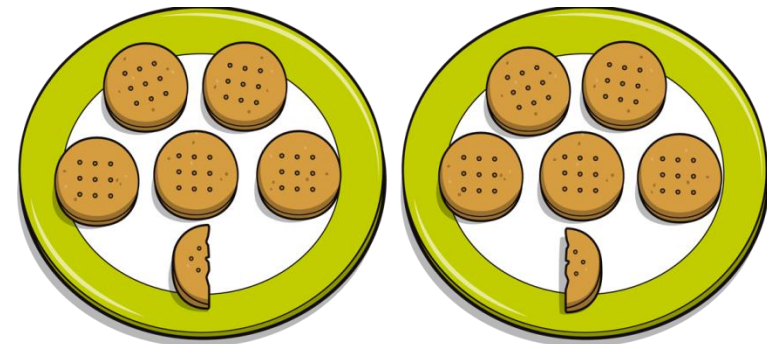


Begin to count in 3s

Doubling and halving

Find half of numbers up to 40, including realising that half of an odd number gives a remainder of 1 or an answer containing a $\frac{1}{2}$


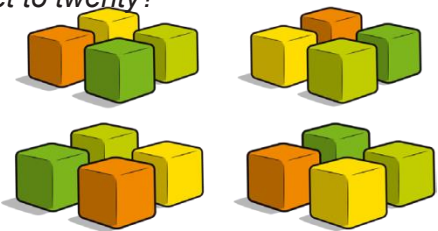
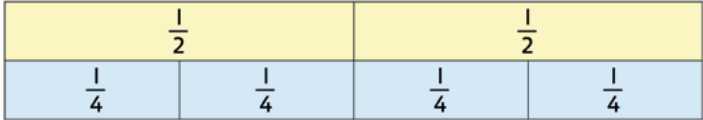
e.g. $\frac{1}{2}$ of 11 = $5 \frac{1}{2}$



Begin to know half of multiples of 10 to 100

e.g. half of 70 is 35

Overview of Strategies and Methods – Division

	Year 1	Year 2
Mental Division	<p>Grouping Begin to use visual and concrete arrays and ‘sets of’ objects to find the answers to questions such as ‘How many towers of three can I make with twelve cubes?’</p> <p>Sharing Begin to find half of a quantity using sharing e.g. find half of 16 cubes by giving one each repeatedly to two children</p>	<p>Grouping Relate division to multiplication by using arrays or towers of cubes to find answers to division e.g. ‘How many towers of five cubes can I make from twenty cubes?’ as $_ \times 5 = 20$ and also as $20 \div 5 = _$</p>  <p>Relate division to ‘clever’ counting and hence to multiplication e.g. ‘How many fives do I count to get to twenty?’</p> <p>Sharing Begin to find half or a quarter of a quantity using sharing e.g. find a quarter of 16 cubes by sorting the cubes into four piles</p>  <p>Find $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ of small quantities</p>  <p>Using number facts Know half of even numbers to 24 Know $\times 2$, $\times 5$ and $\times 10$ division facts Begin to know $\times 3$ division facts</p>