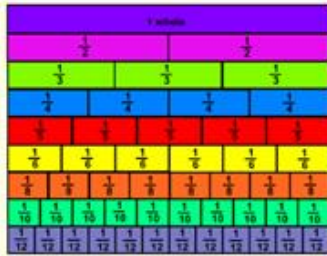


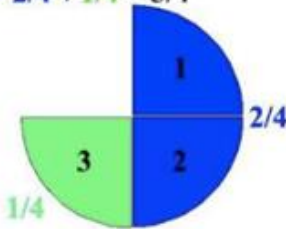
Year 4 1st Aut. Half-Term [For Parents & Carers](#) | [White Rose Maths](#)

Year 4 Recall +/-/x/÷	Ex. Mental Calculations ... jottings if needed	Mental Strategies +/-/x/÷ ...how & when to apply strategies
<ul style="list-style-type: none"> • sums and differences of pairs of multiples of 10, 100 or 1000 • addition doubles of numbers 1 to 100, e.g. $38 + 38$, and corresponding halves • what must be added to any three-digit number to make the next multiple of 100, • pairs of fractions that total 1 • multiplication facts to 12×12 and the corresponding division facts • count in multiples of 6, 9, 7, 11, 12, 25, 50, 100 and 1000 • doubles of numbers 1 to 100, e.g. double 58, and corresponding halves • doubles of multiples of 10 and 100 and corresponding halves • fraction and decimal equivalents of one-half, quarters, tenths and hundredths, 	<ul style="list-style-type: none"> • add or subtract any pair of two-digit numbers, including crossing the tens and 100 boundary, e.g. $47 + 58$, $91 - 35$ • add or subtract a near multiple of 10, e.g. $56 + 29$, $86 - 38$ • add near doubles of two-digit numbers, e.g. $38 + 37$ • add or subtract two-digit or three-digit multiples of 10, e.g. $120 - 40$, $140 + 150$, $370 - 180$ • double any two-digit number, e.g. double 39, • double any multiple of 10 or 100, e.g. double 340, double 800, and halve the corresponding multiples of 10 and 100, • halve any even number to 200 • find unit fractions and simple non-unit fractions of numbers and quantities, e.g. $\frac{3}{8}$ of 24, • multiply and divide numbers to 1000 by 10 	<ul style="list-style-type: none"> • count on or back in Hs, <u>Ts</u> and <u>Os</u> • partition: add tens and ones separately, then recombine • partition: subtract tens and then ones, e.g. subtracting 27 by subtracting 20 then 7 • subtract by counting up from the smaller to the larger number • partition: + or - a near multiple of 10 and adjust, e.g. $56 + 29 = 56 + 30 - 1$, or $86 - 38 = 86 - 40 + 2$ • partition: double and adjust • use knowledge of place value and related calculations, e.g. work out $140 + 150 = 290$ using $14 + 15 = 29$ • partition: count on or back in minutes and hours, bridging through 60 (analogue and digital times) • partition: double or halve the <u>Ts</u> & <u>Os</u> separately, then recombine

e.g. $3/10$ is 0.3 and $3/100$ is 0.03
 factor pairs for known multiplication facts



$$2/4 + 1/4 = 3/4$$



12 X 12 Multiplication Table

x	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

and then 100 (whole-number answers, e.g. 325×10 , 42×100 , $120 \div 10$, $600 \div 100$, $850 \div 10$),

- multiply a multiple of 10 to 100 by a single-digit number, e.g. 40×3 300×3
- multiply numbers to 20 by a single-digit, e.g. 17×3 ,
- identify the remainder when dividing by 2, 5 or 10
- give the factor pair associated with a multiplication fact, e.g. identify that if $2 \times 3 = 6$ then 6 has the factor pair 2 and 3

Factor Pairs
 What are all the numbers you can multiply together to get your target number?
 Target Number = 36

1, 2, 3, 4, 6, 9, 12, 18, 36

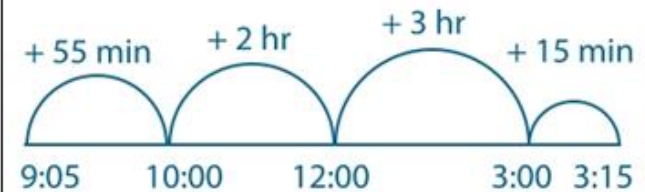
23 + 10 = 33

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



- use understanding that when a number is multiplied or divided by 10 or 100, its digits move one or two places to the left or the right and zero is used as a place holder
- use knowledge of multiplication facts and place value, e.g. $7 \times 8 = 56$ to find 70×8 , 7×80
- use partitioning and the distributive law to multiply, e.g. $13 \times 4 = (10 + 3) \times 4 = (10 \times 4) + (3 \times 4) = 40$

34 + 82 = 116

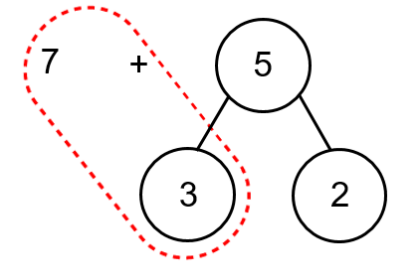


Wk 1: Mental Maths Strategy... Counting up through a multiple of 10

Strategy... 17 split the 8 into 3 and 5 = $17 + 3 = 20 + 5 = 25$

Sums and differences of pairs to 100

a. $26 + 74 =$ b. $37 + 63 =$ c. $44 + 56 =$ d. $62 + 38 =$



$7 + 3 = 10$

$10 + 2 = 12$

Addition / Plus / More / Total / Sum / Altogether / Increase by

Subtraction / Take Away / Less than / Difference / Fewer / Minus / Decrease by

Wk 2: a. $315 + 523 =$ b. $321 + 512 =$ c. $315 + 542 =$ d. $5703 + 196 =$

Wk 3: a. $4364 + 618 =$ b. $2907 + 606 =$ c. $6793 + 164 =$ d. $2184 + 5019 =$

Wk 4: a. $357 - 225 =$ b. $789 - 250 =$ c. $355 - 245 =$ d. $723 - 303 =$

Wk 5: a. $1254 - 1126 =$ b. $2735 - 1208 =$ c. $4429 - 2079 =$ d. $7546 - 5280 =$

Wk 6: a. $3098 + 4076 =$ b. $4076 - 3098 =$ c. $187 + 5980 =$ d. $6782 - 709 =$

	Th	H	T	O
	1	0	2	9
+		9	8	3
	2	0	1	2
	1	1	1	



3 and 6 times tables
4 and 8 times tables

Maths Calculations on The Redeemer Website

		²	¹³	
	2	3	4	¹ 5
-	1	2	5	6
	1	0	8	9