Year 5 Term 2

Multiplying and dividing by 10, 100 and 1000

millions, digit, round, multiple, positive, negative

M	HTh	TTh	Th	100s	10s	1s	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
					1	3	•	6		
				1	3	6				
			1	3	6	0	0			
					2	4	•	7		
						2	•	4	7	
						0	•	2	4	7

Each digit is ten times greater

Each digit is ten times smaller

136×10
move digits 1 column left

136×1000
move digits 3 columns left

$24.7 \div 10$
move digits 1 column right

$24.7 \div 100$
move digits 2 columns right

A prime number has exactly 2 factors:
2, 3, 5, 7, 11, 13, 17, 19…

A composite number has more than 2 factors: 4, 6, 8, 9, 10, 12…

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

If I know… then I also know… because…

Factors of 15 = {1, 3, 5, 15}
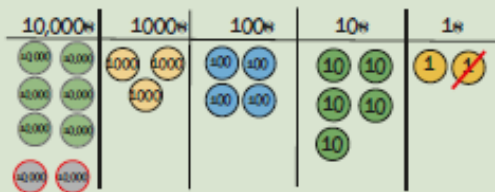Factors of 21 = {1, 3, 7, 21}
1 and 3 are common factors of 15 and 21

Multiples of 3 are 3, 6, 9, 12
Multiples of 4 are 4, 8, 12, 16
12 is a common multiple of 3 and 4

$1^2 = 1 \times 1 = 1$
$2^2 = 2 \times 2 = 4$
$3^2 = 3 \times 3 = 9$

A square number is the result of multiplying a number by itself.

$1^3 = 1 \times 1 \times 1 = 1$
$2^3 = 2 \times 2 \times 2 = 8$
$3^3 = 3 \times 3 \times 3 = 27$

A cube number is the result of multiplying a whole number by itself, then by itself again.

prime, common, factor, multiple, multiplier, divisor

63,452 + 19,999
Round then adjust

10,000s	1000s	100s	10s	1s

Add 20,000 then subtract 1

+20,000
−1
63,452   83,451   83,452
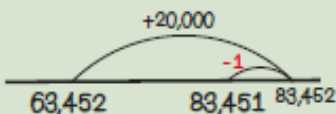
2.452 − 0.999
Round then adjust

1s	•	$\frac{1}{10}$s	$\frac{1}{100}$s	$\frac{1}{1000}$s

Take away 1 then add 1 thousandth

−1
+0.001
1.452 1.453   2.452
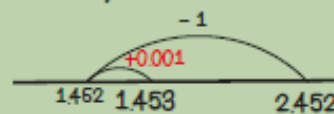
40,007 − 39,995
Find the difference between two numbers

40,007
39,995   12
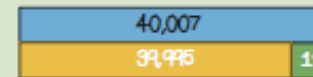
Count on 5 from 39,995 to 40,000, then 7 more so the difference between them is 12

+5   +7
39,995   40,000   40,007
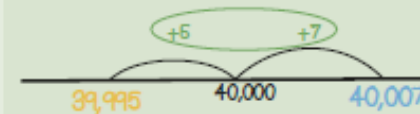
sum, total, subtract, difference

Written methods

```
  25,648
+ 42,524
  68,172
```

```
  45,748
- 26,374
  19,374
```

```
  25,648
+ 42,524
  68,172
```

```
  45,748
- 26,374
  19,374
```

Round - express to a required degree of accuracy

Prime - A whole number greater than 1 that has exactly two factors, itself.

Common factor - A number, which is a factor of two or more other numbers, for example 3 is a common factor of the numbers 9 and 30.

Negative number - A number less than zero.

Square number – the result of multiplying number by itself.

Divisor - The number by which another is divided.