YEAR 4 Maths – *Number Knowledge Organiser*
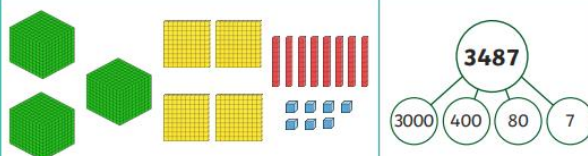
Represent 4-Digit Numbers

3487

three thousand, four hundred and eighty-seven

1000s	100s	10s	1s

Thousands	Hundreds	Tens	Ones
1000 1000 1000	100 100 100 100 100	10 10 10 10 10 10 10 10	1 1 1 1 1 1 1

3487 → 3000 400 80 7

Addition and Subtraction Methods

Add 4-digit numbers

No exchange

```
  5162
+ 3427
------
  8589
```
Starting with the ones, add each column in turn.

One exchange

```
  5162
+ 3497
------
  8659
  1
```
Starting with the ones, add each column in turn. When adding 6 tens + 9 tens = 15 tens = 1 hundred + 5 tens. Place 1 hundred under the hundreds answer and 5 tens in the answer.

Multiple exchanges

```
  5864
+ 3497
------
  9361
  111
```
Starting with the ones, add each column in turn. Exchange tens, hundreds and/ or thousands as required.

Subtract 4-digit numbers

No exchange

```
  5789
- 3421
------
  2368
```
Starting with the ones, subtract each column in turn.

One exchange

```
   6 1
  5749
- 3471
------
  2278
```
Starting with the ones, subtract each column in turn. When subtracting 4 tens -7 tens, exchange 1 hundred to make:
14 tens – 7 tens = 7 tens

Multiple exchanges

```
   6 131
  5742
- 3476
------
  2266
```
Starting with the ones, subtract each column in turn. Exchange tens, hundreds and/ or thousands as required.

Use Place Value to Multiply and Divide Mentally

$$5 \times 1 = 5$$
$$5 \div 1 = 5$$

$$5 \times 10 = 50$$
$$50 \div 10 = 5$$

$$5 \times 100 = 500$$
$$500 \div 100 = 5$$

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

Key vocabulary

- Add
- Total
- Plus
- Sum
- More
- Altogether
- Difference
- Subtract
- Less
- Minus
- Take away
- Mentally, orally
- Column addition
- Column subtraction
- Exchange
- Inverse operation
- Thousands
- Hundreds
- Tens
- Ones
- Greater than
- Less than
- Round to
- Digit
- partition