DEVONSHIRE HILL PRIMARY SCHOOL – CALCULATION POLICY – YEAR 5

Where needed and when introducing new concepts children will have access to a wide range of practical resources focusing on Numicon, number squares and vertical horizontal number lines to help them work out calculations and worded problems

ADDITION

Calculations with missing numbers need to be placed in all possible places.

Partition

Either partition both numbers and recombine or partition the second number only.

e.g.: 358 + 73 = 431

```
  300 + 50 + 8
+       70 + 3
-------------
      431
```

Number line

Extended column method or column method pg 46 Appendix 1

e.g.:3587 + 675 = 4262

```
3587
 675
-----
  12
 150
1100
3000
----
4262
```

SUBTRACTION

Calculations with missing numbers need to be placed in all possible places.

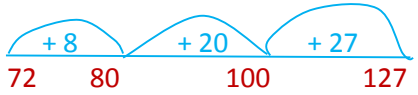
Partition

e.g.:3 58 – 73

```
300 + 50 + 8
      70 + 3
-------------
```

Number Line

e.g.: 127 - 72



Column method

e.g.: 42.7 – 13.6 = 29.1

```
3  12
4  ~~2~~ . 7
1  3 . 6
-------
2  9 . 1
```

MULTIPLICATION

Children must be aware of how to combine table

Partition

E.g.: 47 x 6 = 282

47 x 6 = (40 x 6) + (7 x 6)

= 240 + 42

= 282

Column Method

E.g.: 36 X 42 = 1512

```
  36
X 42
----
  72
1440
----
1512
```

Long Multiplication

```
  2
  2 4
X1 6
-----
24 0
14 4
-----
38 4
```

DIVISION

Quotients expressed as fractions or decimal fractions

Chunking

e.g: 256 ÷ 7 =

Estimate 256 ÷ 7 lies between 210 ÷ 7 = 30 and 280 ÷ 7 = 40

```
 256
-70      ( 10 x 7 )
---
186      ( 20 x 7 )
140
---

 46      ( 6 x 7 )
-42
---
  4
```

10 + 20 + 6 = 36

Short Division

```
    14
   ----
7 ) 98
    2
```

Long Division

e.g.: 275 ÷ 8 = 34 R 3

```
   34
8 ) 275
   24
   ---
    35
    32
    --
     3
```