Helping with Maths Calculations
Getting ready for SATs

Countdown to success

1 10 9 2 3 8 4 5 6 7

City Wide Learning Body SHEFFIELD

Sheffield City Council

A Parents' Guide

Calculations: What strategies does my child use to add, subtract, multiply and divide?

Outlined in this leaflet are some of the methods used by children in calculations when they get to Y6. It is important to note that these are just some examples of calculation policies and those used in your child's school may be slightly different.

Your child needs to be secure in one method for addition, subtraction, multiplication and division. At the end of the leaflet is a progression of the types of numbers that they should be using when carrying out these operations.

If your child is finding this aspect of maths difficult, ask to see their class teacher to see if there is an alternative method that they can use or see if they can take you through the method that the school uses; chances are it will look very different to the method that you used at school yourself.

Addition

Formal compact method.

```
  287
   45
 ----
  332
 ----
  1 1
```

Extend to numbers with any number of digits and decimals with 1 and 2 decimal places.

124.9 + 117.25 = 242.15

```
  124.9
+ 117.25
 -------
  242.15
 -------
  1 1
```

Subtraction

Use counting on to find the difference

483 – 289

$$+11 \qquad +100 \qquad +83$$

289   300   400   483
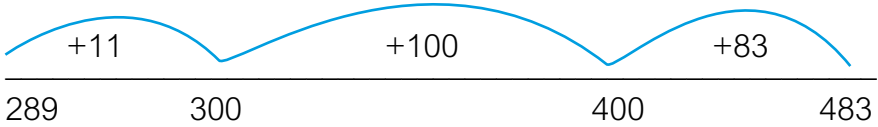
The partitioned chunks are then either added mentally or using the column method

Multiplication

34 x 27

x	30	4
20	600	80
7	210	28

600 + 210 + 80 +28 = 918

Children can use column method for addition if necessary. This can be extended to multiply three digit numbers.

Division

When children are secure in the method of using a number line to subtract chunks of numbers they can then move onto using formal chunking method.

```
  5 √ 73
   - 50  (10 x 5)
  _____
    23
    20 (4 x 5)
  _____
     3
```

73 ÷ 5 = 14 r3

Addition

U + U (FS)
TU + U (Y1)
TU + multiples of 10 (Y1)
TU + TU (Y2)
HTU + TU (Y3)
HTU + HTU (Y3/4)
£.p + £.p (Y4)
U.t + U.t (Y5)
U.th + U.th (Y5)
HTU.thth + HTU.thth (Y6)
Fractions + fractions (Y6/7)

Subtraction

U - U (FS)
TU - U (Y1)
TU - multiples of 10 (Y1)
TU - TU (Y2)
HTU - TU (Y3)
HTU - HTU (Y3/4)
£.p - £.p (Y4)
U.t - U.t (Y5)
U.th - U.th (Y5)
HTU.thth - HTU.thth (Y6)
Fractions - fractions (Y6/7)

Multiplication

U x U (Arrays) (Y1/2)
U x U (Y3)
U x 10/100 (Y3)
U x TU (Y3)
ThHTU x 10/100 (Y4)
HTU.th x 10/100/1000 (Y5)
HTU x U (Y5)
TU x TU (Y5)
U.t x U (Y5)
HTU x TU (Y6)

Division

U ÷ U (Sharing) (Y1/2)
TU ÷ U (Sharing) (Y1/2)
TU ÷ U (Y3)
ThHTU ÷ 10/100 (Y4)
TU ÷ U (Including remainders) (Y4)
HTU.th ÷ 10/100/1000 (Y5)
HTU ÷ U (Y5)
U.t ÷ U (Y6)
HTU ÷ TU (Y6/7)
TU ÷ 0.t

This document can be supplied in alternative formats, please contact 0114 273 5141

Sheffield City Council
CYPF - Children's Commissioning Service
www.sheffield.gov.uk/sats