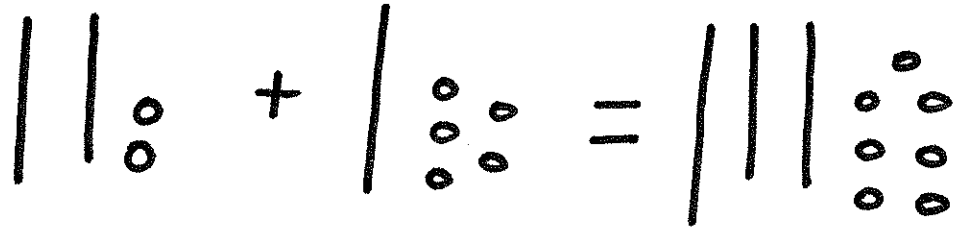


Addition

Drawing the base 10 (rod/stick = 10, cube/circle = 1)

E.g. $22 + 15 = 37$



Column addition (always start with ones)

E.g.

$$\begin{array}{r} \text{T} \quad \text{O} \\ 22 \\ + 15 \\ \hline 37 \end{array} \quad \begin{array}{r} \text{T} \quad \text{O} \\ 54 \\ + 21 \\ \hline 75 \end{array}$$

Column addition with renaming

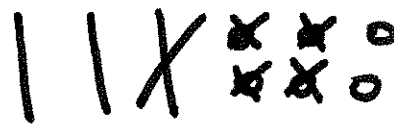
E.g.

$$\begin{array}{r} \text{T} \quad \text{O} \\ 36 \\ + 18 \\ \hline 54 \end{array} \quad \text{or} \quad \begin{array}{r} \text{T} \quad \text{O} \\ 36 \\ + 18 \\ \hline 54 \\ \hline 1 \end{array}$$

Subtraction

Drawing the base 10

E.g. $36 - 14 = 22$



Column subtraction (always start with ones)

$$\begin{array}{r} \text{T} \quad \text{O} \\ 36 \\ - 14 \\ \hline 22 \end{array}$$

Subtraction crossing 10 – partition into tens and ones. Take away ones first.

E.g.

$$36 - 18$$

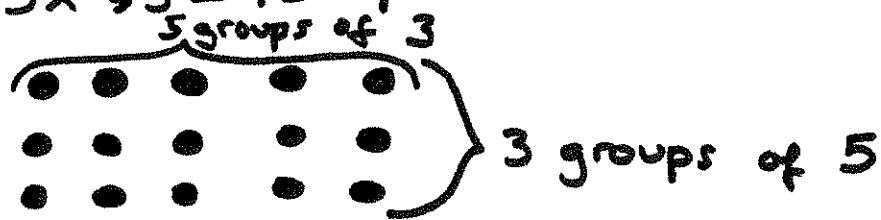
$$36 - 8 = 28$$

$$28 - 10 = 18$$

Multiplication (x means 'groups of')

Arrays

E.g. $3 \times 5 = 15$ / $5 \times 3 = 15$



Using knowledge of times tables to count on fingers.

E.g. 3×2 is '3 groups of 2' so count in 2s on 3 fingers.



Division

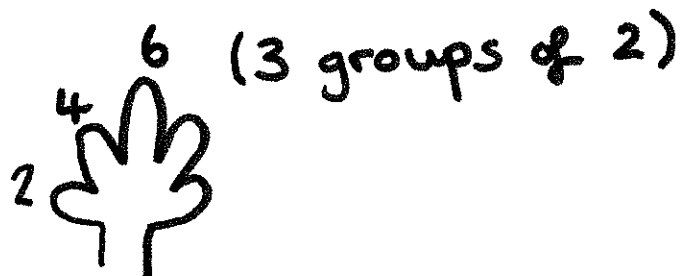
Shared into

E.g. $6 \div 2 = 3$



Groups of

E.g. $6 \div 2 = 3$



Fractions

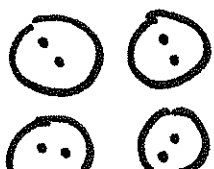
Relate the denominator (bottom number to division)

E.g.

$\frac{1}{2}$ of 6 is the same as $6 \div 2$

$\frac{1}{4}$ of 8 is the same as $8 \div 4$

If finding non unit fractions (e.g. $\frac{2}{3}$ $\frac{3}{4}$ $\frac{2}{4}$, multiply answer) E.g. $\frac{3}{4}$ of 8 = 6



$\frac{1}{4}$ of 8 = 2

$3 \times 2 = 6$
(2 + 2 + 2)