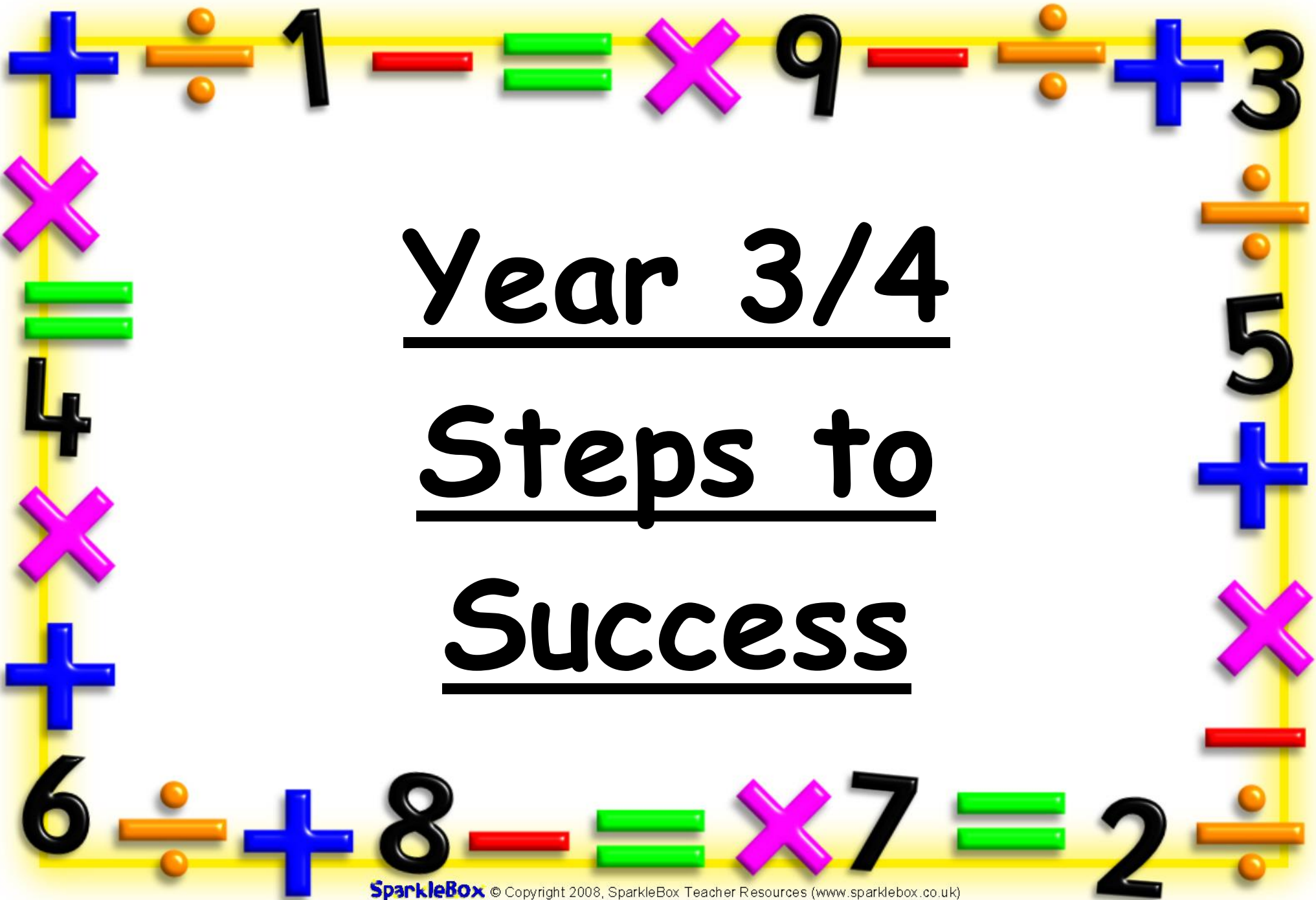


Year 3/4
Steps to
Success



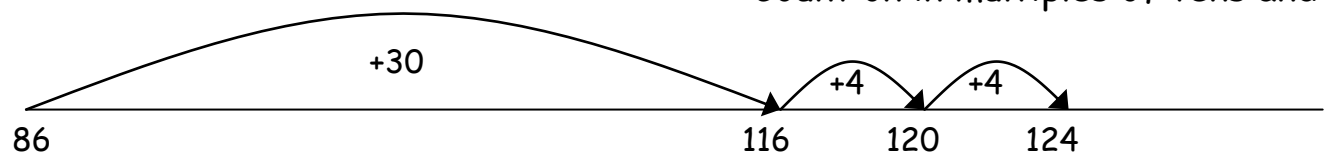


Addition +

put together, add, addition, altogether, total, more than, sum, difference, calculation, partitioning, columnar addition, inverse, estimate

Method 1: $38 + 86 = 124$

- count on from the largest number
- Count on in multiples of tens and units



Method 2: $67 + 24 = 91$

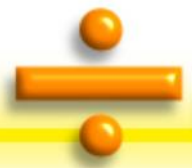
$$\begin{array}{r}
 67 \\
 + 24 \\
 \hline
 11 \text{ (7 + 4)} \\
 \underline{80} \text{ (60 + 20)} \\
 91
 \end{array}$$

- line up tens and units
- add units first then tens

Method 3: $367 + 85 = 452$

$$\begin{array}{r}
 367 \\
 + 85 \\
 \hline
 452 \\
 1
 \end{array}$$

- line up H,T and U
- carry below the line



Subtraction (-)

take away, distance between, difference between, less than, least, inverse, sum, difference, columnar subtraction, estimation, rounding, exchange

Method 1: $89 - 57 = 32$

$$\begin{array}{r} 80 / 9 \\ - 50 / 7 \\ \hline 30 + 2 = 32 \end{array}$$

- partition tens and units
- line up tens and units
- subtract units first then tens
- add the numbers below the line

Method 2: $71 - 46 = 25$

$$\begin{array}{r} 60 \\ \cancel{70} / 11 \\ - 40 / 6 \\ \hline 20 + 5 = 25 \end{array}$$

- if you can't take the number away, exchange ten from the tens column
- take from units first

Method 3:
 $754 - 86 = 668$

$$\begin{array}{r} 6141 \\ \cancel{7}54 \\ - 86 \\ \hline 668 \end{array}$$

- line up H, T & U
- take from units first
- exchange from the column to the left

Multiplication (x)

group, lots of, double, array, repeated addition, times, multiply, product, partitioning

Method 1:

$$\begin{array}{r} \times \quad 20 \quad 3 \\ 8 \quad \boxed{160} \quad \boxed{24} \\ \hline 160 \\ + \quad 24 \\ \hline 184 \end{array}$$

$$\begin{array}{r} \times \quad 70 \quad 2 \\ 30 \quad \boxed{2100} \quad \boxed{60} \\ 8 \quad \boxed{560} \quad \boxed{16} \\ \hline 2100 \\ + \quad 560 \\ + \quad 60 \\ + \quad 16 \\ \hline 2736 \\ 1 \end{array}$$

- partition into H, T & U
- add your answers using column addition

Method 2: $23 \times 8 = 184$

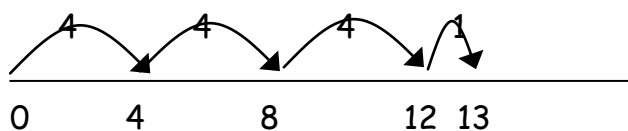
$$\begin{array}{r} 23 \\ \times 8 \\ \hline 24 \\ 160 \\ \hline 184 \end{array}$$

- line up H, T & U
- approximate an answer first E.G. $25 \times 8 = 200$

Division (÷)

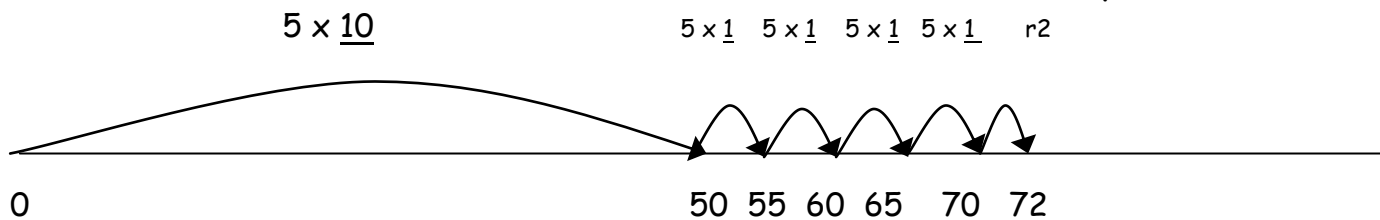
Share, groups, halve, divide, repeated addition/subtraction, remainder, quotient

Method 1: $13 \div 4 = 3 \text{ r } 1$



- start from zero
- count the jumps on an ENL
- is there a remainder?

Method 2: $72 \div 5 = 14 \text{ r } 2$



- start from zero on an ENL
- subtract multiples of the divisor

Method 3: $98 \div 7 = 14$

$$\begin{array}{r} 14 \\ 7 \overline{) 98} \\ \underline{7} \\ 2 \\ \underline{14} \\ 2 \\ \underline{14} \\ 2 \\ \underline{14} \\ 2 \\ \underline{14} \\ 2 \end{array}$$

- put the divisor to the left of the bus stop
- is there a remainder?