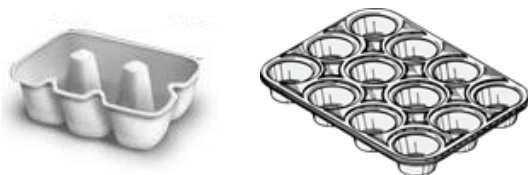


Reception Class and Year 1

Children are encouraged to develop a mental image of the number system in their heads to use for calculation. They should experience practical calculation opportunities involving **equal** groups and **equal** sharing.



They may develop ways of recording calculations using pictures.

A child's jotting showing halving six spots between two sides of a ladybird.



A child's jotting showing how they shared the apples at snack time between two groups.



Year 3

Children continue to use jottings to support their calculations until their times tables are secure:

$$43 \div 8 =$$



$$43 \div 8 = 5 \text{ remainder } 3$$

At this stage, children also learn if the remainder should be rounded up or down.

$$\text{E.g. } 62 \div 8 = 7 \text{ remainder } 6.$$

I have 62p. Sweets are 8p each. How many can I buy?
= 7 (The remaining 6p is not enough for another sweet.)

Apples are packed into boxes of 8. There are 62 apples. How many boxes do I need?
= 8 (The remaining 6 apples still need to be placed into a box.)

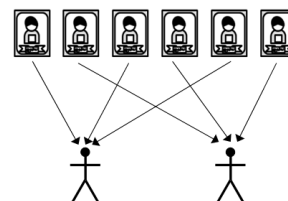
Children should be able to rapidly recall their 3, 4 and 8 times tables (x and $\div$ facts) by the end of the year, in addition to 2s, 5s and 10s learnt last year. (Double the 4 times table to work out the 8 times table.)

Year 1

Children explore practical contexts where they share equally and group equally. $6 \div 2 = ?$

Equal sharing (6 shared equally between 2)

6 football stickers are shared equally between 2 people, how many do they each get? Children may solve this by using a 'one for you, one for me' strategy until all of the stickers have been given out.



Equal grouping (How many groups of 2 are there in 6?)

There are 6 football stickers, how many people can have 2 stickers each?



Year 4: children should know all of their times tables (formal assessment in June).

Children will learn how to use short division (the bus stop method), dividing 2 or 3 digit numbers by 1 digit numbers:

$98 \div 7 = 1$ start by thinking about whether 7 will go into 9.
9 divided by 7 is 1 remainder 2.
I put the 1 over the 9.
1 put the remainder 2 next to the 8 to make 28.
I know that 28 can be divided by 7 four times, so I write 4 above 28.

$$\begin{array}{r} 14 \\ 7 \overline{) 98} \\ \underline{7} \\ 28 \\ \underline{28} \\ 0 \end{array} \quad \begin{array}{r} 86 \text{ r } 2 \\ 5 \overline{) 432} \\ \underline{40} \\ 32 \\ \underline{30} \\ 2 \end{array}$$

Year 5

Children will divide numbers with up to 4 digits by 1 digit numbers:

$$\begin{array}{r} 1420 \\ 6 \overline{) 8520} \\ \underline{6} \\ 25 \\ \underline{24} \\ 120 \\ \underline{120} \\ 0 \end{array}$$

Year 2

Children continue to use practical equipment to represent division calculations as grouping (repeated subtraction) and use jottings to support their calculation.

$12 \div 3 = ?$ Children begin to read this calculation as, 'How many groups of 3 are there in 12?'



At this stage, children will also be introduced to division calculations that result in remainders.

$$13 \div 4 = 3 \text{ remainder } 1$$



Children should be able to rapidly recall their 2, 5 and 10 times tables (multiplication and division facts) by the end of the year.

Year 6

Children will divide numbers with up to 4 digit by 2 digit whole numbers (integers):

$$547 \div 23 = \begin{array}{r} 23 \text{ r } 18 \\ 23 \overline{) 547} \end{array}$$

I start by working out how many times 23 will divide into 54. It goes in twice, so I put 2 above the 4.
There is a remainder of 8, which I put next to the 7.
I now think about how many times 23 will divide into 87. It goes in 3 times with a remainder of 18, so I put 3 over the 7 and then write 'r 18' at the end.

Children will also work out problems where the answer has two decimal places (tenths and hundredths) and where the remainder is converted to a fraction:

$$\begin{array}{r} 6.24 \\ 7 \overline{) 43.68} \end{array} \quad \begin{array}{r} 45 \text{ r } 1 \\ 11 \overline{) 496} \\ \underline{44} \\ 56 \\ \underline{55} \\ 1 \end{array}$$

Answer: $45 \frac{1}{11}$