

Year Four- Division

- Recall multiplication and division facts for multiplication tables up to 12×12
- Use place value, known and derived facts to divide mentally
- Divide two-digit and three-digit numbers by a one-digit number using formal written layout (not explicitly stated in the programmes of study but implied in the non-statutory guidance)

NB Ensure that children are confident with the methods outlined in the previous year's guidance before moving on.

Continue to write and calculate mathematical statements for division using the multiplication tables that the children know e.g.

$$32 \div 8 = 4$$

Continue using the **formal written layout** for division using multiplication tables that they know:

$$\begin{array}{r} 4 \\ \hline 8 \overline{) 32} \end{array}$$

'How many eights are there in thirty two?'

Continue using the formal written layout, introducing remainders:

$$25 \div 3 = 8 \text{ r } 1$$

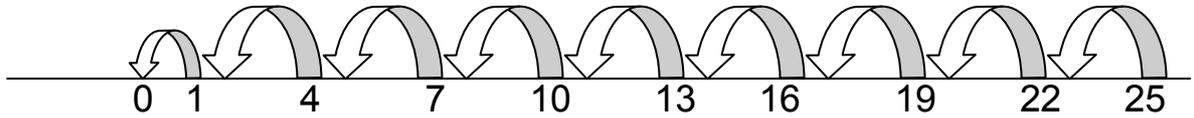
$$\begin{array}{r} 8 \text{ r } 1 \\ \hline 3 \overline{) 25} \end{array}$$

NB Remainders are not specifically referred to until Y5 in the National Curriculum. However, this may be an appropriate point to introduce them using familiar multiplication facts.

This could be modelled using an empty number line, if necessary:

'Eight jumps of three and one left over.'

$$25 \div 3 = 8 \text{ r}1$$



Alternatively you could jump forwards in multiples of three from zero to twenty four ('and one more makes 25')

Division using partitioning (two digits divided by one digit):

$$65 \div 5 = 13$$

$$65 = 50 + 15 \quad \text{Partition 65 into 50 and 15}$$

$$50 \div 5 = 10$$

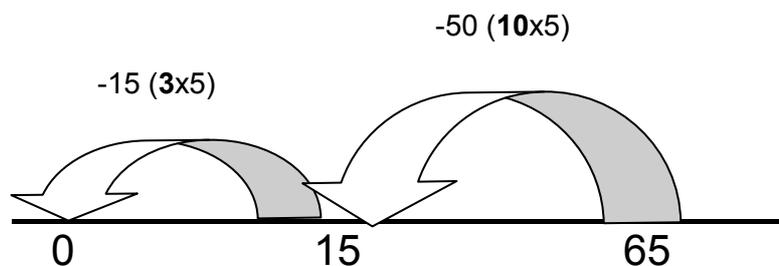
$$15 \div 5 = 3$$

$$10 + 3 = 13$$

NB Children will need to practise partitioning in a variety of ways.

Continue to use **empty number lines**, as appropriate, using multiples of the divisor:

$$65 \div 5 = 13$$



$$98 \div 7 = 14$$

$$98 = 70 + 28 \quad \text{Partition 98 into 70 and 28}$$

$$70 \div 7 = 10$$

$$28 \div 7 = 4$$

$$10 + 4 = 14$$

This could be modelled on an empty number line to further develop understanding.

NB Children will need to practise partitioning in a variety of ways.

$$98 \div 7 = 14$$

'We have partitioned 98 into 70 and 28 (90 = 70 + 28).

Seven 'goes into' 70 ten times and seven 'goes into' 28 four times. Ten add four equals 14'

$$\begin{array}{r} 10 + 4 = 14 \\ 7 \overline{) 70 + 28} \end{array}$$

This will lead into the formal written method of short division:

$$98 \div 7 = 14$$

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

Use the vocabulary of place value to ensure understanding and make the link to partitioning.

Continue to practise the formal method of short division throughout Y4.

If children are confident develop further, by dividing three-digit numbers by a one-digit number using the formal method of short division with whole number answers (no remainders).

NB If, at any time, children are making significant errors, return to the previous stage in calculation.