

# Division HTO ÷ TO using the formal written method

- Use the formal written method of long division to calculate HTO ÷ TO
- Estimate and check the answer to a calculation



Work out the answers to these mentally.

- |                   |                   |                   |                   |
|-------------------|-------------------|-------------------|-------------------|
| 1 a $150 \div 15$ | 2 a $240 \div 12$ | 3 a $550 \div 11$ | 4 a $640 \div 20$ |
| b $360 \div 36$   | b $480 \div 24$   | b $600 \div 12$   | b $390 \div 30$   |
| c $620 \div 62$   | c $450 \div 15$   | c $560 \div 14$   | c $450 \div 50$   |
| d $240 \div 24$   | d $360 \div 18$   | d $840 \div 12$   | d $810 \div 90$   |
| e $310 \div 31$   | e $390 \div 13$   | e $340 \div 17$   | e $540 \div 60$   |

- 1 For each division calculation write your estimate, then use the formal written method to work out the answer. Record any remainders as a fraction in its simplest form. Be sure to compare your answer with your estimate.

## Example

$$644 \div 14 \rightarrow 600 \div 10 = 60 \text{ or } 600 \div 15 = 40$$

$$\begin{array}{r} 46 \\ 14 \overline{) 644} \\ \underline{- 56} \phantom{4} \\ 84 \\ \underline{- 84} \\ 0 \end{array}$$

- |                 |                 |                 |                  |
|-----------------|-----------------|-----------------|------------------|
| a $398 \div 24$ | b $645 \div 15$ | c $526 \div 16$ | d $632 \div 28$  |
| e $961 \div 17$ | f $676 \div 24$ | g $846 \div 14$ | h $245 \div 13$  |
| i $488 \div 24$ | j $475 \div 25$ | k $780 \div 25$ | l $1596 \div 18$ |

- 2 Copy and complete these division calculations, writing in the missing digits.

a

$$\begin{array}{r} 2 \text{ } \square \text{ r } \square \\ 27 \overline{) 602} \\ \underline{- \square 4} \phantom{2} \\ 6 \square \\ \underline{- \square 4} \\ \square \end{array}$$

b

$$\begin{array}{r} \square 3 \text{ r } \square \\ 18 \overline{) 781} \\ \underline{- \square 2} \phantom{1} \\ \square 1 \\ \underline{- \square \square} \\ \square \end{array}$$

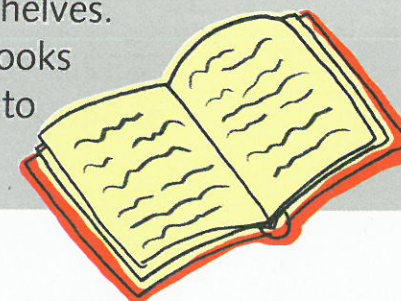
c

$$\begin{array}{r} 2 \text{ } \square \text{ r } \square \square \\ 37 \overline{) 873} \\ \underline{- 7 \square} \phantom{3} \\ 1 \square 3 \\ \underline{- \square 11} \\ \square \square \end{array}$$

## Challenge 3

Find the answer to each of these problems.

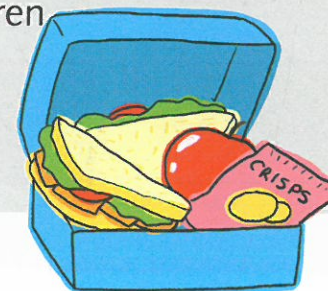
- a There are 792 books. The same number of books is placed onto 18 different shelves. How many books are placed onto each shelf?



- b A carton contains 672 pencils altogether. The pencils are in boxes of 12. How many boxes of pencils are there in the carton?



- c 770 packed lunches are shared equally between 35 classes. How many children in each class receive a packed lunch?



- d 912 playground items are shared equally among 24 classes. How many items does each class receive?

