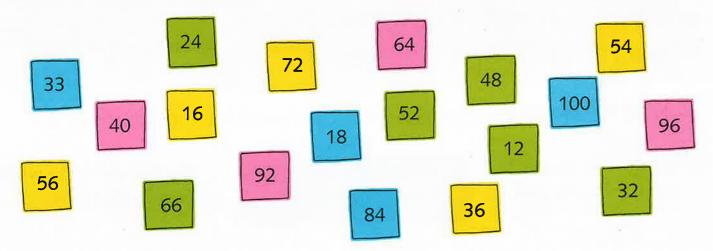# vision ThHTO ÷ O with a fraction remainder

Use the formal written method of short division to calculate ThHTO ÷ O (fraction remainder)
Estimate and check the answer to a calculation

These multiples are all jumbled. Sort them into multiples of 4, 6 and 8. You may use the same multiple more than once.

Example

6 → 24, 36, …

24 72 64 54

33 48

40 16 52 100

18 96

56 92 12

66 32

84 36

1 For each division calculation, write your estimate. Then use the formal written method of short division to work out the answer. Record any remainders as a fraction.

Example

$4276 \div 8 \longrightarrow 4000 \div 8 = 500$

Th	H	T	O
	5	3	4

r 4 $= 534\frac{4}{8} = 534\frac{1}{2}$

$8 \overline{\smash{\big)}\, 4\ 2\ {}^2 7\ {}^3 6}$

a 1598 ÷ 5   **b** 3275 ÷ 6   **c** 3645 ÷ 4

d 2664 ÷ 8   **e** 4391 ÷ 4   **f** 2765 ÷ 3

g 6472 ÷ 9   **h** 2854 ÷ 3   **i** 4538 ÷ 8

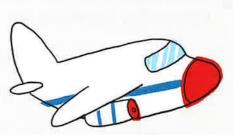**j** 3186 ÷ 4   **k** 5266 ÷ 6   **l** 8743 ÷ 9

2 Find the answers to these problems.

a The market stall owner sells 2768 bowls of oranges to 8 people. Each person receives the same number of bowls. How many bowls do they each receive?

b Michael has 447 stamps to put into his stamp album. If each page fits 6 stamps, how much of the stamp album does he fill?

c A plane travels 3513 km from London to Cairo. If the journey takes 6 hours, how many kilometres does the plane travel in one hour?

d 516 small packs of sweets are shared out equally between 8 classes. How many packs do each class receive?

Challenge 3 Write a calculation to match each of the clues.

a When I divide a 4-digit number by 4, my answer has a remainder of $\frac{1}{2}$.

b When I divide a 3-digit number by 6, my answer has a remainder of $\frac{1}{3}$.

c When I divide a 4-digit number by 9, my answer has a remainder of $\frac{2}{3}$.

d When I divide a 4-digit number between 2000 and 4000 by 4, my answer has a remainder of $\frac{3}{4}$.

e When I divide a 4-digit even number by 5 my answer has a remainder of $\frac{2}{5}$.