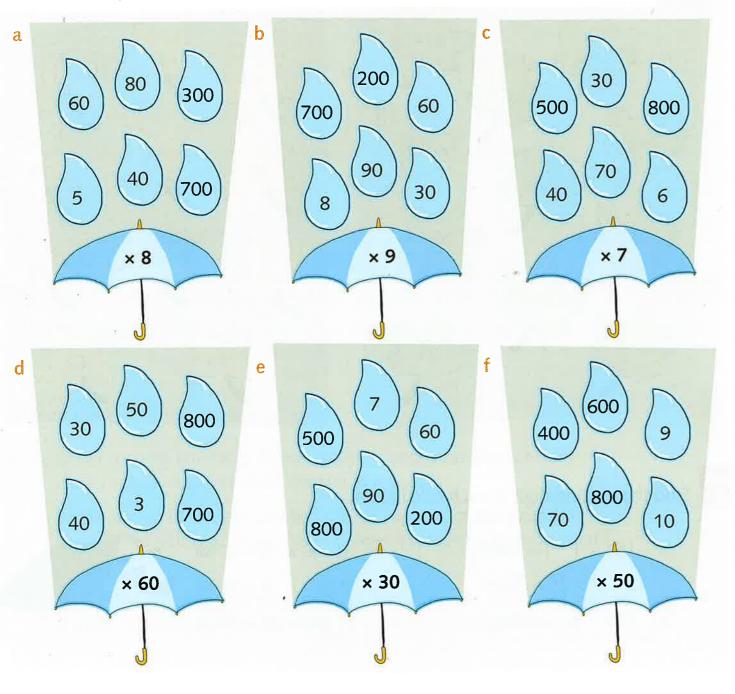
## Iltiplication HTO x TO using the panded written method

Jse the expanded written method of long nultiplication to calculate HTO × TO stimate and check the answer to a calculation

Write a multiplication fact and answer for each number in the raindrops.



Challeng **2** 

1 Approximate the answer to each calculation.

## Example $537 \times 33 \rightarrow 500 \times 30 = 15000$

416 × 28

267 × 42

c 272 × 17

326 × 44

e 196 × 26

f 518 × 26

g 882 × 33

1 558 × 67

i 364 × 23

 $274 \times 38$ 

k 345 × 37

476 × 39

2 For each of the calculations above use the expanded written method to work out the answer.

| Example |     |                |                |                |   |                   |   |     |                |                |                |   |                   |  |
|---------|-----|----------------|----------------|----------------|---|-------------------|---|-----|----------------|----------------|----------------|---|-------------------|--|
|         | TTh | Th             | Н              | T              | 0 |                   |   | TTh | Th             | Н              | T              | 0 |                   |  |
|         |     |                | 5              | 3              | 7 |                   |   |     |                | 5              | 3              | 7 |                   |  |
| ×       |     |                |                | 3              | 3 |                   | × |     |                |                | 3              | 3 |                   |  |
|         |     | 1              | 6 <sup>1</sup> | 1 <sup>2</sup> | 1 | $(537 \times 3)$  |   | 1   | 6 <sup>1</sup> | 1 <sup>2</sup> | 1              | 0 | $(537 \times 30)$ |  |
|         | 1   | 6 <sup>1</sup> | 1 <sup>2</sup> | 1              | 0 | $(537 \times 30)$ |   |     | 1              | 6 <sup>1</sup> | 1 <sup>2</sup> | 1 | $(537 \times 3)$  |  |
|         | 1   | 7              | 7              | 2              | 1 |                   |   | 1   | 7              | 7              | 2              | 1 |                   |  |

Challenge

For each calculation wall, multiply adjacent pairs of numbers in the bottom row, writing the answers in the 'bricks' immediately above each pair of numbers. Then multiply the two numbers in the middle row, writing the answer in the top 'brick'.

Calculate the answers mentally for as long as you are able, then use the expanded written method.

