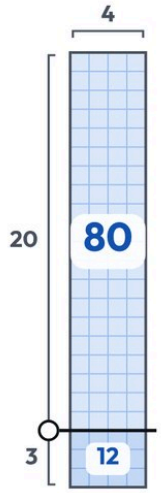
Names (pair) _____ Date _____

Written Multiplication by a One-Digit Number

Example

$$23 \times 4 = 20 \times 4 + 3 \times 4 = 80 + 12 = 92$$

The rectangle is cut into 2 parts. The products in the parts add up to the whole product.



WRITTEN METHOD

$$\begin{array}{r} 23 \\ \times\ 4 \\ \hline 92 \end{array}$$

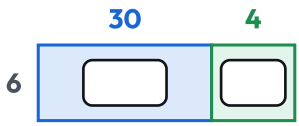
Multiplying by a one-digit number takes a single line.

$$\begin{array}{r} 2\ 3 \\ \times\ 4 \\ \hline 9\ 2 \end{array}$$

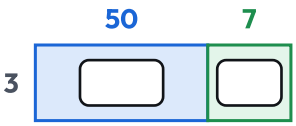
Split $23 = 20 + 3$: $20 \times 4 = 80$ and $3 \times 4 = 12$, together 92.

In writing we multiply **from the ones**: $3 \times 4 = 12$, we write 2 and carry 1 ten; $2 \times 4 = 8$, plus 1 is 9.

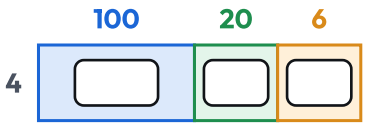
1 ON YOUR OWN Split the first factor by place value. Write the products in the parts of the rectangle and add them.



$34 \times 6 =$ ☐



$57 \times 3 =$ ☐



$126 \times 4 =$ ☐

2 ON YOUR OWN Estimate first, then work it out in writing.

$$\begin{array}{r} 4\ 7 \\ \times\ 3 \\ \hline \square\square\square \end{array}$$

estimate: ☐

$$\begin{array}{r} 1\ 2\ 5 \\ \times\ 4 \\ \hline \square\square\square \end{array}$$

estimate: ☐

$$\begin{array}{r} 3\ 0\ 8 \\ \times\ 7 \\ \hline \square\square\square\square \end{array}$$

estimate: ☐

$$\begin{array}{r} 1\ 2\ 0\ 6 \\ \times\ 5 \\ \hline \square\square\square\square \end{array}$$

estimate: ☐

Names (pair) _____ Date _____

Remember

We multiply by a one-digit number from the ones to the greater places. When a product in some place is 10 or more, we write the ones digit and **carry** the tens to the next product. Before calculating we estimate: 308×7 is about $300 \times 7 = 2{,}100$.

3 IN PAIRS **Find the mistake.** Luke: $47 \times 3 = 1{,}221$. Iva: $38 \times 5 = 150$. What went wrong? Work them out correctly.

4 ON YOUR OWN **Without calculating**, circle the answer that can be right.

198×4	592	792	7,920
51×9	359	459	4,590
703×6	4,218	42,180	618

5 IN PAIRS Solve the problems. Draw a bar model if it helps.

A cinema ticket costs 7 euros. 26 pupils go to the cinema. How much do they pay altogether?

calculation: ☐

Mark has 125 stickers and Ana has 4 times as many. How many stickers does Ana have?

calculation: ☐

The Multiplication Rectangle app · otooly.com/multiplication-rectangle

Enter 23 rows and 4 columns, press **Split by place value** and turn on **Written method**. Try 126 rows too: how many parts are there?

★ ON YOUR OWN **Exit card.** $86 \times 7 =$ ☐ estimate: ☐