

Whilst this is part of the long multiplying method for 2-digits, it also follows the method known as 'short multiplication'. Children should be very familiar with short multiplication of 2-digits by 1-digit before starting this.

The stages are as follows:

Step 1: write the sum out correctly

The question may be shown in a different layout eg $38 \times 70 =$

Make sure it is laid out with the units under each other as shown and the tens also in a column.

$$\begin{array}{r} \text{h} \quad \text{t} \quad \text{u} \\ 38 \\ \times 70 \\ \hline \end{array}$$

Step 2: place a zero in the units

This has the effect of making any other digits placed to the left 10 times larger, so when multiplying by 7 the effect will be to multiply by 70. Easy!

$$\begin{array}{r} \text{h} \quad \text{t} \quad \text{u} \\ 38 \\ \times 70 \\ \hline 0 \\ \hline \end{array}$$

Step 3: multiply by the 7 (tens)

$7 \times 8 = 56$

Place the 6 in the tens column and carry the 5 into the hundreds.

$7 \times 3 = 21$. Add on the 5 makes 26. Place the 26 in the answer as shown.

$$\begin{array}{r} \text{Th} \quad \text{h} \quad \text{t} \quad \text{u} \\ 38 \\ \times 70 \\ \hline 2660 \\ 5 \end{array}$$

$$\begin{array}{r} 1. \quad \begin{array}{cc} \text{t} & \text{u} \\ 3 & 8 \\ \times & 30 \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad \begin{array}{cc} \text{t} & \text{u} \\ 5 & 6 \\ \times & 40 \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad \begin{array}{cc} \text{t} & \text{u} \\ 7 & 4 \\ \times & 50 \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad \begin{array}{cc} \text{t} & \text{u} \\ 9 & 7 \\ \times & 20 \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad \begin{array}{cc} \text{t} & \text{u} \\ 2 & 3 \\ \times & 70 \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad \begin{array}{cc} \text{t} & \text{u} \\ 5 & 5 \\ \times & 50 \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad \begin{array}{cc} \text{t} & \text{u} \\ 7 & 7 \\ \times & 60 \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad \begin{array}{cc} \text{t} & \text{u} \\ 4 & 8 \\ \times & 70 \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad \begin{array}{cc} \text{t} & \text{u} \\ 3 & 9 \\ \times & 80 \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad \begin{array}{cc} \text{t} & \text{u} \\ 5 & 6 \\ \times & 90 \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad \begin{array}{cc} \text{t} & \text{u} \\ 6 & 9 \\ \times & 80 \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad \begin{array}{cc} \text{t} & \text{u} \\ 7 & 8 \\ \times & 90 \\ \hline \end{array} \\ \hline \end{array}$$

Answers

1. 1140

2. 2240

3. 3700

4. 1940

5. 1610

6. 2750

7. 4620

8. 3360

9. 3120

10. 5040

11. 5520

12. 7020