

Mental Math: 2 X 2 multiplication when one factor is a multiple of 10

Step	Example
	$\begin{array}{r} 74 \\ \times 80 \\ \hline \end{array}$
Pretend the problem is a 1 X 2 multiplication	$\begin{array}{r} 74 \\ \times 8 \\ \hline \end{array}$
Multiply the 10s, then the 1s and add the products	$\begin{array}{r} 70 \times 8 = 560 \\ 4 \times 8 = \underline{+32} \\ 592 \end{array}$
Put a 0 at the end	5920

Practice

$\begin{array}{r} 14 \\ \times 80 \\ \hline \end{array}$	$\begin{array}{r} 93 \\ \times 60 \\ \hline \end{array}$	$\begin{array}{r} 82 \\ \times 60 \\ \hline \end{array}$	$\begin{array}{r} 77 \\ \times 10 \\ \hline \end{array}$	$\begin{array}{r} 52 \\ \times 80 \\ \hline \end{array}$
$\begin{array}{r} 24 \\ \times 80 \\ \hline \end{array}$	$\begin{array}{r} 49 \\ \times 50 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ \times 10 \\ \hline \end{array}$	$\begin{array}{r} 35 \\ \times 60 \\ \hline \end{array}$	$\begin{array}{r} 15 \\ \times 50 \\ \hline \end{array}$
$\begin{array}{r} 92 \\ \times 30 \\ \hline \end{array}$	$\begin{array}{r} 25 \\ \times 60 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ \times 30 \\ \hline \end{array}$	$\begin{array}{r} 28 \\ \times 50 \\ \hline \end{array}$	$\begin{array}{r} 37 \\ \times 70 \\ \hline \end{array}$

Answers to Practice

$\begin{array}{r} 14 \\ \times 80 \\ \hline 1120 \end{array}$	$\begin{array}{r} 93 \\ \times 60 \\ \hline 5580 \end{array}$	$\begin{array}{r} 82 \\ \times 60 \\ \hline 4920 \end{array}$	$\begin{array}{r} 77 \\ \times 10 \\ \hline 770 \end{array}$	$\begin{array}{r} 52 \\ \times 80 \\ \hline 4160 \end{array}$
$\begin{array}{r} 24 \\ \times 80 \\ \hline 1920 \end{array}$	$\begin{array}{r} 49 \\ \times 50 \\ \hline 2450 \end{array}$	$\begin{array}{r} 13 \\ \times 10 \\ \hline 130 \end{array}$	$\begin{array}{r} 35 \\ \times 60 \\ \hline 2150 \end{array}$	$\begin{array}{r} 15 \\ \times 50 \\ \hline 5250 \end{array}$
$\begin{array}{r} 92 \\ \times 30 \\ \hline 2760 \end{array}$	$\begin{array}{r} 25 \\ \times 60 \\ \hline 1500 \end{array}$	$\begin{array}{r} 13 \\ \times 30 \\ \hline 390 \end{array}$	$\begin{array}{r} 28 \\ \times 50 \\ \hline 1400 \end{array}$	$\begin{array}{r} 37 \\ \times 70 \\ \hline 2590 \end{array}$

Game: Roll and Flip Battle

Materials:

- 10-sided die (Or you can use a deck of cards with the face cards and 10s removed)
- Coin for flipping (Or you can roll dice again: Even = high, Odd = low)
- Dry erase markers/boards/erasers

Object of the game: Be the first to score a pre-determined number of points – for example, 10 or 20

To play:

1st player rolls the dice 3 times and records the results as a 2 X 2 multiplication problem with one of the factors being a multiple of 10 – like so

$$\begin{array}{r} 1^{\text{st}} \text{ Roll} \\ 6 \\ \times \\ 2^{\text{nd}} \text{ Roll} \\ 7 \\ \hline 3^{\text{rd}} \text{ Roll} \\ 3 \\ \hline 0 \end{array}$$

So, if you roll: 6,7,3 – your problem would be:

$$\begin{array}{r} 67 \\ \times 30 \\ \hline \end{array}$$

Do the math in your head (no fair writing it down). The second player does the same. Flip a coin to determine whether high or low wins the point. Heads = High, Tails = Low. Winner gets 1 point. First player to reach the pre-determined number of points wins.

Printing: 2-sided, black and white, landscape, flip on short edge