Multiplication Tips and Tricks

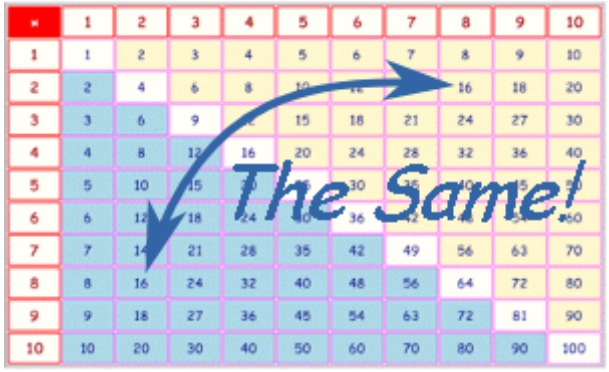
Here are some tips and tricks to help you with multiplication.

Everyone thinks differently, so just ignore any tricks that don't make sense to you.

The Best Trick

Every multiplication has a twin, which may be easier to remember.

For example if you forget 8×2, you might remember 2×8=16. This way, you only have to remember half the table.



Tricks by Number

2	Add the number to itself (in other words, double it). Example 2×9 = 9+9 = 18
3	To work out if a number is a multiple of 3, the sum of its digits will total a multiple of 3. Example, 75: 7 + 5 = 12, so 75 is a multiple of 3 because 12 is in the 3 times table.
4	Double, then double again. Example 4×9: double 9 is 18, double 18 is **36**
5	Cut in half, then times 10 Example: 5x6: Cut 6 in half to get 3, then times 10 for 30 Or times 10 then cut in half Example: 5x9: 9 times 10 is 90, then cut in half for 45 Also the last digit goes 5, 0, 5, 0, ... like this: 5, 10, 15, 20, ...
6	When you multiply 6 by an even number, they both end in the same digit. Examples: 6×**2**=1**2**, 6×**4**=2**4**, 6×**6**=3**6**, etc The number in the tens place will be half of the number in the ones place.
7x8	Think "5,6,7,8": **56=7×8**
8	Double, double, double! Example: 8×6: double 6 is 12, double 12 is 24, double 24 is **48**

	8 x 8: He (8) and he (8) until he stuck in the door, 8x8 is 64.
9	10× the number minus the number. Example: 9×6 = 10×**6**−**6** = 60−6 = 54 The ones digit goes 9, 8, 7, 6, ...: **9**, 1**8**, 2**7**, 3**6**, 4**5**, ... The tens digit goes 0, 1, 2, 3, ...: 9, **1**8, **2**7, **3**6, **4**5, ... Subtract one to get the tens digit, and the tens and ones digit together make 9 Example: 9×**5**: tens digit is **4**, 4 and **5** make 9, so **45** Example: 9×**8**: tens digit is **7**, 7 and **2** make 9, so **72**  Your hands can help! Example: to multiply 9 by 8, hold your 8th finger down, and count "7" and "2", the answer is **72**
10	Add a zero after it. Example: 10×**2** = **20** **WARNING:** This must be taught alongside knowing why this is the case. Place value understanding

	and knowing that the number is getting 10x bigger is key.
11	Seeing double! Up to 11x9: just repeat the digit. Example: 11x**4** = **44** For 11×10 to 11×18: write the sum of the digits between the digits Example: 11×15 = 1*(1+5)*5 = 165 Note: this works for any two-digit number, but when the sum of the digits is more than 9, we need to" exchange the one ". Example: 11×75 = 7*(7+5)*5 = **7*(1*2)**5 = **8**25.
12	10× plus 2× Example: 12×4 = 40+8 = 48 Notice the pattern of the tens digits: 1, 2, 3, 4 And of the ones digits: 2, 4, 6, 8 But, every fifth row, the tens digit gets boosted by an extra one.
15	Multiply by 10, then add half again Example: 15×**4** = **40**+**20** = 60 Example: 15×**9** = **90**+**45** = 135
20	Multiply by 10, then double Example: 20×**4** = **40**+**40** = 80 Example: 20×**7** = **70**+**70** = 140