

Conquer the multiplication blues form the start

Does your child struggle with the multiplication tables too?

Is reciting those rather boring 'poems' about so many times a certain number not helping to make the math facts stick in her brain? Don't worry, here's a suggestion to help your child grasp the concept of multiplication.

In our best effort to help children as fast as we can, we often present them with a list of way too many facts to memorize all at once. By doing so we reduce the information to a shapeless 'bulk'. Much like when we see a bag with many differently colored jelly beans: in our perception the colors blend together into one cluttered array of colors. We have no possibility of clearly seeing an individual red, yellow, or green one stand out to memorize. The beautiful numerical pattern that can help students to easily memorize the Math facts is drowning in the masses.

Every math fact is special and deserves individual attention, so stick to one or two new ones at a time. Believe me it's going to save you time in the end.

We can change learning to multiply from being an abstract number activity into a **fun and meaningful activity** by making the connection with the **real world**. It is particularly important to use examples that are of **direct interest to YOUR child**.

If he loves to ride his bike tell him the multiplication table of two is all about bike riders and wheels: for every one bike rider there are two wheels etc. Probably he is already figuring out in his head how many wheels there are when there are four bike riders. You can cut out adds with bikes and riders to count, so your child can find some more multiplication facts himself. Or you can use smilies as people and poker fiches as wheels and gradually complete the 2 times table.

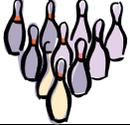
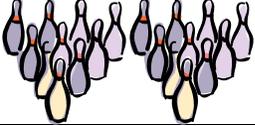
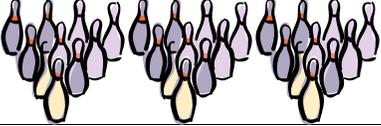
2 times table					
Riders	1	2	3	4	5
Wheels	2	4	6	8	...
Two times riders is wheels	$1 \times 2 = 2$	$2 \times 2 = \dots$	$3 \times 2 = \dots$		

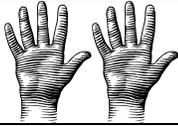
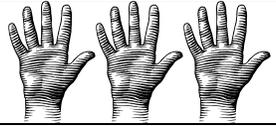
Check for understanding by asking questions:

- Can you complete the 2 times table from one times 2 till ten times 2? Can you skip count by two's?
- There are 7 people riding their bikes, how many wheels are there? Which Math fact did you use? ($7 \text{ times } 2 = 14$ or $\text{double } 7 = 14$)
- There are six wheels so how many people are there? What is the math fact you have just used? ($3 \text{ times } 2 = 6$ or $6 \text{ divided by } 2 = 3$) and do more examples like those.
- Does your child see that doubling two times is the same as four times the number?

Order

The order to go over the multiplication tables from easiest to hardest is: 0 times table, 1 time, 2 times, 10 times, and 5 times. Only when these have been memorized you can do 3 times, 4 times, 9 times, 6 times, 7 times, and 8 times. By the time you get to the 7 and 8 times table most of these facts have already been covered by the previous tables.

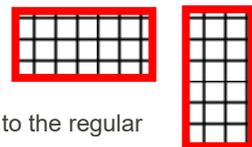
10 times table					
Bowling sets	1	2	3	5	9
Pins	10	20	...	50	...
Ten times bowling sets is pins	$1 \times 10 = 10$	$2 \times 10 = \dots$	$3 \times 10 = \dots$

5 times table								
Hands	1	2	3	4	6	7
Fingers	5	10	15	20	...	8	45	...
Five times hands is fingers	$1 \times 5 = 5$	$2 \times 5 = \dots$	$3 \times 5 = \dots$	50

Dogs have four paws, hands have five fingers, guitars have six strings, a rainbow has 7 colors and a week has 7 days. Be creative: it works as long as it appeals to your child. Ask your child to come up with suggestions for actual objects. Make drawings, cut out and paste advertisements, use Lego's, toys, counters, dice, playing cards, etc.

Check for understanding after completing each table

- Mention a number from one of the rows and ask your child for the numbers in the other rows in that column.
- Repeat questions with previous tables often, make arrays and draw rectangles.



The next step

After completing all of the multiplication tables on his own, your child is now ready to proceed to the regular textbook explanation of multiplication using grids: 5 rows of 10 = 50 and likewise 10 rows of five is 50.

Playing Cards

Play Multiplication War or games like Quick Pix Multiplication. At first only include cards of the tables that are familiar.

Flashcards and multiplication drills?

Flashcards and drills may be useful to develop speed, but they are often used prematurely. Only after a math fact has been worked out and memorized, can you start to use it on a flashcard. Flashcards and drills are for quick retrieval of previously learned facts. They are not useful for learning something new without comprehending the basic concept.