Multiplication Facts Check

You were probably in the third grade when you first started learning your multiplication facts, so when your teacher announced that you would need to memorize 100 math problems, many of you may have said, "No way, I can't remember 100 of anything!"

Trying to remember 100 of anything can be a daunting task.

Take a look at the chart below. You should recognize it as an old-fashioned multiplication chart. Notice that almost half of the squares are shaded in. That is because they aren't necessary. If you know 7 x 4, you also know 4 X 7, so all of the duplicates have been shaded out. This means that there are only 55 facts to learn, and not 100!

X	1	2	3	4	5	6	7	8	9	10
1										
2	▓									
3	▓	▓								
4	▓	▓	▓							
5	▓	▓	▓	▓						
6	▓	▓	▓	▓	▓					
7	▓	▓	▓	▓	▓	▓				
8	▓	▓	▓	▓	▓	▓	▓			
9	▓	▓	▓	▓	▓	▓	▓	▓		
10	▓	▓	▓	▓	▓	▓	▓	▓	▓	

Follow the instructions below and on the next page to complete the activity/assessment.

- Fill in the top row – the ones times row. Even students who struggle with some of the multiplication facts know the one times facts. Just doing that takes the number of squares left to 45.

- Next fill in the 2 times row. Even if you don't know what 2 X 7 is, you can count by 2's, keeping track on your fingers, until you get to 2 X 7 or 14. Just don't pick up your calculator to figure it out.

Even though it may be a little more work to begin with, that is one way to convince your brain that something is worth memorizing. Your brain doesn't want to do any more work than necessary, so at some point, it figures out that it is better to just memorize that 2 X 7 is 14, than to go 2, 4, 6, 8, 10, 12, 14 every time.

- Next, do the same thing for the 5 times row and the 5 times column. Again, everyone learns to count by 5's so even if you don't remember a 5 times fact, you can figure it out pretty quickly.

- Lastly for now, fill in the 10 times column. Just by eliminating the facts you already know (or can figure out quickly without a calculator) the number of basic facts has dwindled to 21.

Your chart should look like this now…

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2		4	6	8	10	12	14	16	18	20
3					15					30
4					20					40
5					25	30	35	40	45	50
6										60
7										70
8										80
9										90
10										100

Most students know at least some of the rest of these facts (often 3 X 3, 3 X 4, 6 X 6, etc.). Fill in those that you know (or can figure out quickly without the use of a calculator). Hopefully you now have less than 20 facts left.

If you don't know your 3 times facts, practice skip counting – counting by 3's to 30 just like you can count by 2's. --- 3, 6, 9, 12, 15, 18, 21, 24, 27, 30. You were pretty young when you learned to count by 2's, so you can also learn to count by 3's. This is probably the quickest way to learn any multiplication by 3 facts that you may be missing.

If you don't know your 9 times facts, look up "finger trick for multiplying by 9" on the internet. There is a finger trick that only works for the 9's. It is easy to do and generally novel enough that it is easy to remember.

You should now be down to less than 10 facts that are problematic. List them here:

It is now time to work on memorizing them. There are also other strategies for linking problematic facts to ones you know, but if there are less than 10 it might be just quicker to memorize them. If you learn 1 a day for the next 10 days, you will have them all!!!!