Multiplication Strategies

"Multiplication facts can and should be mastered by relating new facts to existing knowledge. Although strategies can be suggested – the most general approach with children is to have them discuss ways that they can use to think of facts easily."

The Goal:
"Help children develop a **strong understanding** of number relationships and of the operations by developing efficient strategies for fact retrieval through practice."

Van de Walle & Lovin, 2006

Zeros and Ones
Your child should be given the opportunity to explore and make connections as to why a number multiplied by zero is equal to zero and multiplying by one the answer is that number. At first this may confuse your child as they connect their understanding of addition to their new learning (6+0=6, 6+1=7). Memorizing these facts without building meaning *won't* help children develop a strong sense of number.

Nifty Nines
Children are encouraged to look for patterns. Create a table of the facts for 9. What do you see?

9 X 1 = 9

9 X 2 = 18   One number increases while the other decreases!

9 X 3 = 27

The other nifty fact – if you add the digits of the answers together you get '9' (9X2=18, 1+8=9 Wow!)

Twos, Fours, & Fives
Your children have been skip counting by 2's and 5's since Grade 1 – now it's time to put that in the context of multiplication. For the four times tables – the strategy is to double the double (4X7 is the same as 2X7 times 2 or 14X2). Children pick up on doubles quite naturally when encouraged! (use an analogue clock to connect 5 times tables to something purposeful).

X	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9
2	0	2	4	6	8	10	12	14	16	18
3	0	3	6	9	12	15	18	21	24	27
4	0	4	8	12	16	20	24	28	32	36
5	0	5	10	15	20	25	30	35	40	45
6	0	6	12	18	24	30	36		48	54
7	0	7	14	21	28	35				63
8	0	8	16	24	32	40	48		64	72
9	0	9	18	27	36	45	54	63	72	81