Multiplication Fact Strategies

from "Three Steps to Mastering Multiplication Facts," *Teaching Children Mathematics*. National Councilof Teachers of Mathematics. May, 2015.

Foundational Facts (to be learned first):	***Explanation***
• 2s, 5s, and 10s • 0s, 1s, multiplication squares (2x2, 3x3, etc.)	Use story problems, arrays, skip counting, and patterns on a hundred chart and a multiplication table to learn these facts.
Derived Fact Strategies	***Explanation***
• ***Adding or subtracting a group***	Start with a nearby 2s, 5s, or 10s fact, then subtract or add the group. Example: I don't know 9x6, so I think 10x6=60 and subtract one group of 6 to get 54.
• ***Halving and Doubling***	Look for an even factor. Find the fact for half of that factor, then double it. Example: I don't know 6x8, so I think 3x8=24 and double that to get 48.
• ***Using a square product***	Look for a nearby square. Find the fact and add on or subtract off the extra group. Example: I don't know 7x6. I use 6x6=36 and add one more 6 to get 42.
• ***Decomposing a Factor***	Partition one of the factors into a convenient sum of known facts, find the two known facts, and combine the products. Example: I don't know 7x6. I break the 7 into 2 and 5, because I know 2x6 and 5x6. Then I add 12 and 30 to get 42.