

Educational Memory Aids

Memory Aids for Math

Philosophy

The concept of addition and subtraction isn't hard. It is the memorization of the facts that is hard. The brain has trouble storing information that it can not associate to a picture. Mnemonics create "rhyming links" or "associations" that give the brain an organizational framework on which to hook new information. A dissemination of this program under a federal Christa McAuliffe Fellowship Grant showed an average gain of 14 percentile points in math in individual classrooms.

Process

Beginning Memory Aids for Math (M-10) sets a framework that can be used in later grades. For example, students turn a 10 into a hen to remember the number 10. Later, in Addition and Subtraction Math Facts (M-8 & M-11), students associate all facts of ten (1&9, 2&8, 3&7, etc.) to hen characters to learn the addition and subtraction facts of ten. Students in Kindergarten have learned all their addition and subtraction facts this way because they love the stories and characters associated with each fact family 3 - 18. Finally, because the Multiplication and Division Math Facts (M-9) use many of the same characters as the addition and subtraction posters, both addition/subtraction and multiplication/division facts can be taught at the same time or introduced earlier than usual. Although the process is sequential, order only the memory aid products that correspond with the needs of your child or class.

After students fully understand the concept of addition and subtraction and you are ready for them to memorize facts, use our memory aid posters and/or flashcards.

<http://www.memoryaids.com/math.html>

Children's Corner



$$\begin{array}{r} 9 \\ +9 \\ \hline \end{array} \quad \begin{array}{r} 18 \\ -9 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ +9 \\ \hline \end{array}$$

- Draw the picture association and go on a fact hunt.
Do you know the answers to the above problems?

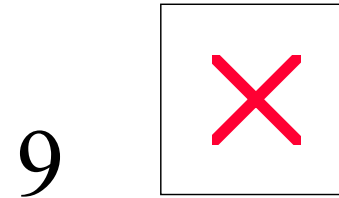
Same family addition and subtraction facts have the same memory aid character on the back of our flashcards to help children understand the algebraic concept that subtraction is the opposite of addition...a concept that is not readily obvious to students.



- $9 + 9 = ?$ (Say 18, "gateteen", and turn the 9's into a gate. First write the numbers and then draw the gate. You may also make cut out numbers and ask, "What do these two numbers make?")

9 9

- $18 - 9 = ?$ (Say 18, "gateteen", take away one gate post and the other gate post is left.)



$$18 - 9 = 9 \text{ because } 9 + 9 = 18$$

For multiplication, put running shoes on the gate and say "81 Gatey-won" (the race)! (Students taught memory aid tricks can use them on their own and gain confidence in their memory ability.)