



ABACUS - MENTAL ARITHMETIC



Montfort Learning uses the Abacus tool to teach math, however, the skills the children acquire during this learning process will help them in all aspects of their education. Abacus was designed in such a way that it automatically enhances the power of the right brain. Our right brain is the numerical center and also a place from



where analytical memory takes shape. Abacus training enables memory development in spatial orientation.

During the formative ages of 5-14, children have the capability of enhancing their brain power to the fullest. As your child's right brain develops more during the course of our program, they will be able to do complex calculations mentally. Our teaching methods will improve your child's concentration and overall thinking ability.

Benefits of Abacus

The abacus system of mental calculation is a system where users mentally visualize an abacus to do calculations. One particular use for the abacus is teaching children simple mathematics and especially multiplication. It's an excellent tool for teaching other base numbering systems since it easily adapts itself to any base. It is an excellent substitute for memorization of multiplication tables, which some young children find very difficult. Children naturally have great potential of energy and brain power, however most parents do not know how to tap into the depths of these young minds in the right way and thus fail to realize and nurture these young minds to their



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fullest potential. Learning Abacus system is the way to go for giving them a head start in today's world. Using an abacus, a child can do all arithmetic calculations up to 10 digits and master the skill of doing it mentally, without relying on modern devices such as calculators. There are procedures and training methodologies to master abacus use. When children use both hands to move the beads for small and large arithmetic calculations, the quick communication between hands and brain stimulates brain cells, promoting quick, balanced and whole brain development.



Using the abacus also helps in:

- Overall development of the brain.
- Creates a greater sense of numbers.
- Helps develop an intuitive understanding of numbers through their concrete representation.
- Builds one's trust in the process of calculation by enabling one to observe it in action.
- Manifests the concept of decimal places and the progression of units by tens physically.
- Instantly accomplishes addition and subtraction when numbers are placed on the abacus.
- Improves understanding of compounded numbers (through the use of supplementary numbers for 5 and 10).
- Helps in developing the beneficial qualities of concentration, patience, and endurance.
- Builds one's confidence in calculation.
- Uses a left to right calculation method, which makes quick estimation and rounding off possible.
- Works on the decimal rather than fractional system, an easy progression to digital systems.
- Develops mental calculation, which is the ultimate resource.



Recent studies have shown that the abacus method of mental calculation is effective in the development of the right brain. At first, this idea was only a hypothesis, but the recent development of high-tech machinery has helped provide tangible research data. This was verified when the right brain measured heightened EEG activity when calculating and compared with non-veterans who were using the abacus to perform calculations. Many veteran and prolific abacus users in China, Japan, South Korea, and others who use the abacus daily, naturally tend to not use the abacus anymore but perform calculations by visualizing the abacus.