History of Abacus

Abacus is actually a Latin word with origins in the Greek words ‘abax’ or ‘abakon’ meaning “table” or “tablet”. It is the oldest counting devices, which is still enjoying popularity with aplomb. This interesting device has a rich history that covers half the globe.

Can you imagine counting without numbers? No, but there was a time when there were no written numbers. What is even hard to imagine now was a way of life in the ancient times.

People used to count on fingers or used pebbles or twigs for larger numbers. Gradually counting devices came into existence and abacus was one such device. This simple calculating machine helped to count large numbers.

It is presumed that the earliest abacus was invented about 5000 years ago. Some historians believe that the abacus was invented by the ancient Chinese while some believe that it was invented by the Babylonians or the Egyptians. These claims are supported by historical evidence such as ancient texts and archaeological excavations.

The time line of the abacus history:

3000 BC : An early form of abacus finds its origin in China.
1000 BC : The counting boards are used by the Chinese.
500 BC : Counting boards are used by the Chinese.
300 BC : Abacus finds extensive usage as a counting device in China.
500 AD : Europe starts using abacus.

Babylonian abacus
Abacus was used by Babylonians for mathematical operation of addition and subtraction was difficult to use for complex calculations.

Egyptian abacus
According to the Greek historian ancient Egyptian used abacus. Many archaeologists have found some ancient disk of various sizes in support of their claims.

Greek abacus
In the year 1845, a tablet was found on the Greek Island dating back to 300 BC. Originally thought to be a gaming board it is the oldest counting board discovered so far.

Roman abacus
In ancient Rome, normally the calculation was done by moving counters on a smooth table. Calculi or pebbles were used for this purpose. The ‘counter casting’ system continued in the Roman Empire. Roman abacus was also used besides the counter method for calculation’. It is believed that the Romans made improvements in the primitive abaci. A series of wire or rods were used for counting beads, which were made of ivory or stone. The calculations were made by moving these beads back and forth according to a particular set of rules.
Indian abacus
Ancient texts such as the Abhidharmakosa throw light on the used of in India. In the year 5th century, new ways were being discovered of recording the contents of the abacus, Shunya of zero was indicated as an empty column on the according to the Hindu texts.

Chinese abacus
The Ancient Chinese tool ‘Abadus’ has been designed in such a way to activate both parts of the brain giving the child “Best of both” A longside academic proficiency controlled mainly by the left half of the brain, Abacus – stimulates the right half enabling creative thinking, excellent memory and more importantly brings in self esteem and confidence which is an asset to every individual.

What is abacus?
Abacus is a mathematical tool that is used to do basic arithmetic calculations such as addition, multiplication, subtraction, and division, as well as fractions and square roots. The tools is made up of a wooden frame, with rows of beads.

Concept of abacus
Abacus is one of the first calculating devices used for doing mathematical calculations. Initially a flat surface with sand spread across it was used for writing and counting. Later, the abacus transformed and a device much was followed by an abacus with writes or rods which counters could be moved freely back and forth was used.

Abacus is an educational tool that allows the children to learn calculations and numbers with fun. The child uses his or her fingers to move the beads on the abacus and this collaborative movement of the fingers and the brain are responsible for creating a pictorial memory in the child’s brain. During abacus calculation, the child used both his hands; this movement spurs activity in both left and right brains, thus initiating the development of cells. All this activity helps in nurturing the brain of the child making him much quicker and accurate in this process.

How to used abacus for counting?
The abacus counting method makes use of four basic processes. The users learn the processes easily as compared to other methods used for calculations. For success in abacas counting, the users should be aware of rote counting and have information about the concept “one more than “ and “one less than”.

Children with visual impairments can benefit by learning how to use an abacus. It can play a fundamental role in math education Abacus can be used without knowing number facts to ten while using the counter method.

Abacus helps in making the child understand number systems. It can adopt itself to any base system, quickly performing calculations such as subtraction, addition, division and multiplication, even with decimal places. If you want your child to improve his performance and truly realize his potential, teach him how to use an abacus. Most of the students find math as a daunting subject but abacus training helps them to mental math skills to grow their confidence.

How is an abacus different from an electronic calculator?
In an electric calculator, the user provides the input such as numbers, addition, and subtraction while the calculator provides the output.
In abacus, the child converts the number into beads, manipulates the beads and then brings out the result. Proper training equips the child with the skill to carry out the arithmetic calculations quickly.

**What are the benefits of a abacus learning?**
Abacus learning helps in developing the ability of mental calculation in children. It enables them to understand the basic number systems including base-ten and place values.

**What positives does the user get from using abacus?**
Abacus helps in boosting your child’s confidence, in carrying out math calculations and developing mental calculation abilities. It helps in offering a sense of achievement to the child with us improved efficiency.

Abacus helps in enhancing the problem solving abilities of the child along with improving the concentration and mental endurance.

**What is the recommended age to start learning abacus?**
There is no prescribed the problem age for learning Abacus but you can start using it for children in kindergarten and 4th grade.

**What is the difference between the arithmetic traditionally taught in our schools and abacus instruction?**
The difference between traditional methods and abacus calculation is quite distinct. Abacus relies on manipulation of the beads and draws upon the right brain resources increasing the calculation speed dramatically.

**Does abacus training conflicts with the school’s method of teaching math?**
In case your child starts the abacus learning program prior to learning the traditional program, then there is no conflict whatsoever, as if the child uses the program after receiving additional methods, the learning period may be slightly extended, but he can easily use both the methods for calculation.

**Is the abacus method good for students who are already getting an A?**
The students who are good in mathematics are also benefited from the abacus learning methods. As the child is relieved of the mechanics of arithmetic the child can focus his attention on more advanced concepts in mathematics.

**Importance of Abacus Mathematical Development**
The abacus was invented by Charles Babbage though it’s now being used by entire world to turn on the mental abilities of young brains. Abacus training sharpens our memory and increases our ability to perform mental calculations. Abacus was designed in such a manner so that the brain visualizes the abacus while performing calculations which automatically activates the right part of our brain especially when we move our fingers over the beads and talk aloud while solving the problems, However, one needs to enjoy the abacus education training process, only then will one be able to truly benefit from the technique.

The energy and abilities of our mind are not limited—it is the master organ which takes all the decisions of the body. The left brain is also known as the digital brain whereas the right brain helps in creative pursuits. Both sides of our brain need to work in sync with each other and that is where abacas training helps us. Abacas training has become increasingly popular in India of late and helps
the young minds understand the great number plan on which the universe is being run. The abacus calculation methods help us in learning in number manipulation skills, decimal grasp and digit correlation among other skills.

Write electronic calculators need numbers as inputs, in abacus education, children learn to convert the beads into numbers and this arrive at a result. The chain just goes on, the abacus sharpens the brains and the brain thus gains more expertise in solving mathematics problems using abacus. Even the most brilliant students find the use of abacus a great help while solving problems. The students can use the abacus training to calculate arithmetical problems rapidly. Later on the student can also perform the calculations without using the abacus, by just visualizing the abacus in their minds. **Abacus education** also helps them develop new and innovative methods of mastering arithmetic, rather than being dependent on just the orthodox methods of learning calculations otherwise taught by the conventional education system. Abacus answer the primary need of the students to make fast and accurate calculations.

**ABACUS: Mystery of the Beads**

Before the invention of abacus, even simple calculations were difficult to perform. Our ability to calculate was limited by our ability to memorize numbers and experience. The advent of abacus, however, changed the education picture completely as it led to rapid expansion of commerce as well. It’s only recently that the use of electronic calculator has completely overtaken the abacus.

The evolution of abacus

The first device to be used for the purpose was probably the counting board, which was used at several places across the global at different times in the history. The earlier counting boards used sand which was spread evenly on the surface and the users would simply draw the symbols. To start anew, they would simply shake the board or spread the sand evenly on the board again. The use of sands was later abandoned first in favor of pebbles, and then later for beads thought the momentum of abacus education was. The hand abacus consisting of metal plate with mental beads was probably invented by the Romans. The Chinese abacus, called suan pan, was in the 11th century.

The basics of using abacas

During actual calculations, when all the beads (or the other counters) are on one end, the result is zero, it doesn’t really matter whether you use Japanese or the Chinese abacus; the basic procedures remain the same.

- The Japanese abacus, called soroban, has a frame with vertical rods wherein the beads can be moved up and down.

- The upper and lower portion of the abacus is divided by a horizontal bar called beam or reckoning bar. The modern day soroban has one bead above the bar and four below. The beads located above the bar have value of five and these are called heaven beads. The ones located below are called earth beads and each have a value of one each.

- While going along the beam, we find that after two vertical rods, every third rod has been marked with a dot and these are called unit rods. Usually, which rod has to serve as the unit rod is decided by the operator.
• While beginning your calculators, you always start on an empty or cleared abacus. Another basic rule is to always make your calculations in the direction of left to right. This is important since we end up reading and solving numerical calculations the same way as we read them.

• Also it’s important that you learn making your finger movements quickly. Though the accuracy is of paramount importance, it’s been observed that the best abacus operations are also pretty quick.

**Why does Abacus work?**
While making calculations with the help of abacus is fun, it’s basically a way of recording of the place value of numbers while making calculations. This way, you can break a complicated calculation into various manageable segments which can then be quickly solved.

**ADVANTAGES TO STUDENTS:**
The magic Chinese Abacus is used for solving arithmetic functions like Addition, Subtraction, Multiplication and Division, In Math Abacus Programme, the children’s imaginably power or photographic memory is enhanced by using abacus. The Abacus method initiates the child to use both herebyusing both parts of the brain simultaneously. The child thereby benefits in terms of increased:
- Creativity  - Comprehension
- Listening ability  - Photographic memory
- Concentration  - Understanding
- Speed & Accuracy  - Better observation
- Self-Reliance  - Extraordinary Memory Power.

**ADVANTAGES TO PARENTS:**
Math Abacus Programme levels are designed in much a way that parents can gift their child the “best” at affordable costs.
• Less stress and strain to the parents.
• The course can be completed in any part of the country any time owing to widespread reach of abacus academies all over India.
• The Syllabus is child friendly in approach, Simplified and updated to meet the requirements of School Children.
• Uniform syllabus and teaching methods facilitate completion of all levels of abacus learning irrespective of change in places.
Since children start as early as their Kindergarten class, Abacus leaves a lasting impression on their future course of life and helps them emerge as winners in the long run.

**DURATIONS:**
Total duration of the course in 20 Months, That is 4 Levels and required timings is only 2 Hours per week plus students must practice at least half an hour per day so as to achieve the target in school in Regular basis 32 hours i.e. for 4 months.

**FOR MORE DETAILS: 09986054015**