

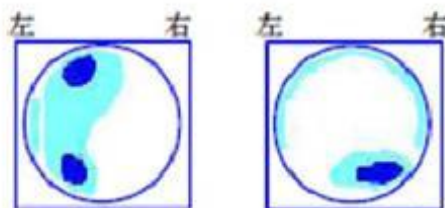


## Abacus Calculations

One of the three main parts of the human brain is called the cerebral hemisphere. The hemisphere is divided into two areas. The right and left hemispheres of the brain perform different functions. In general, the left hemisphere is responsible for processing information, while the right side records or retains information, such as images. When people do calculations, they are utilizing the left hemisphere. Mental calculation techniques require the use of the right hemisphere. Through instruction, our students are taught to "map" images, rather than to process each information (i.e. each digit) one at a time. Imaging techniques are also used in speed reading techniques. The advantage of abacus is that it will train students to "map" images, rather than to sequentially process each information. Abacus training will literally introduce a whole new way of "looking" at numbers and other information. Mental calculations is not a magic.. all about training. Using an abacus helps activate both left and right brain.

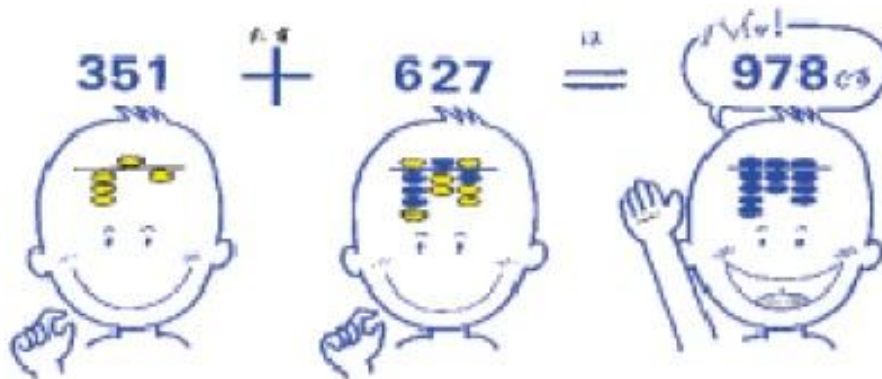
Left picture - normal people use left brain to calculate

Right picture – abacus people use **only right side** of the brain



## Why computers and calculators aren't enough?

As kids become more dependent on electronic devices, they lose their ability to calculate mentally. Unfortunately, today's kids have more access than ever before to these devices. Our abacus students learn to add and subtract multi-digit numbers as fast as or faster than someone using a calculator.

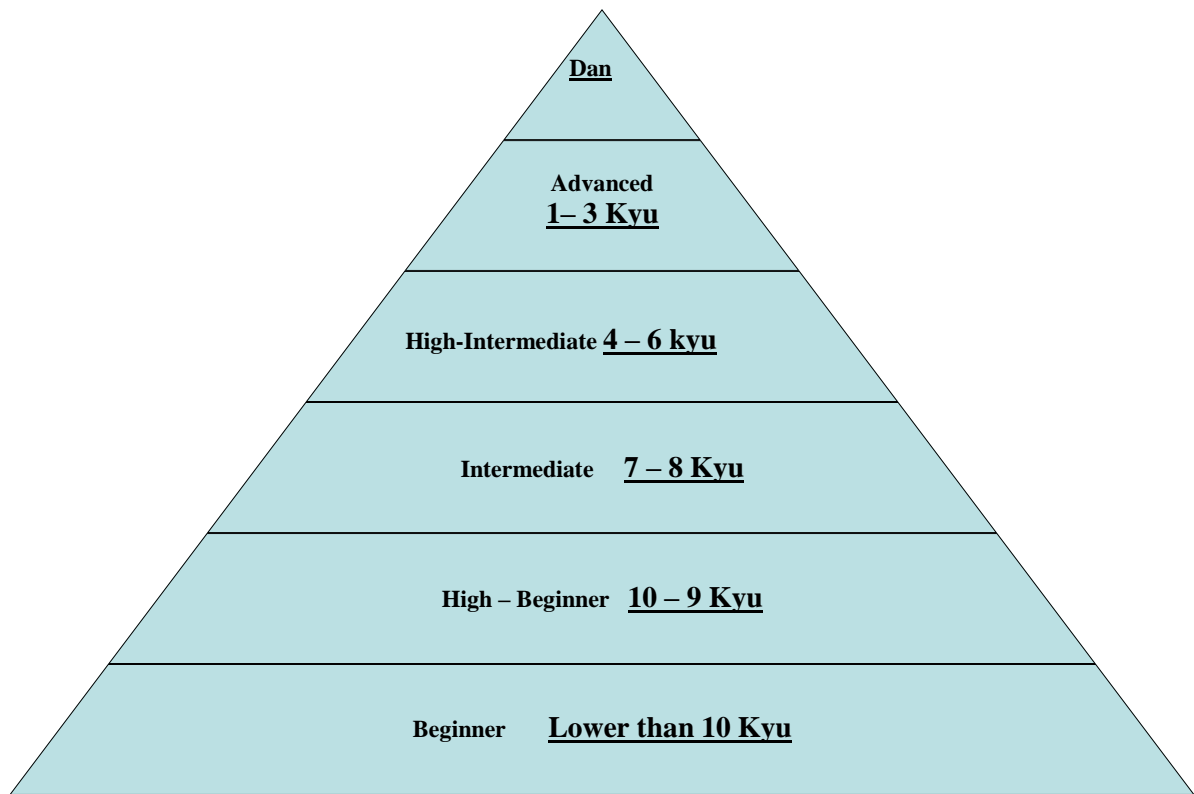


## Lifelong benefits and rewards

The ability to do mental calculations is a skill that one retains for life. Not only mental calculations, but also kids can concentrate. It is worth to start abacus training as soon as possible. The benefits and rewards are infinite.

## Each students is a different progress

Each student has own pace. Each student learns different level of calculations (level 1 – 10 kyu , after 1 kyu, there are 10 more high advanced levels), and progress each step.



- After High- beginner students, all students need to take an examination to advance levels
- Time tables is required to pass 9 kyu
- Division calculation required to pass 8 kyu
- Decimal calculation & Denpyo calculation requires after 3 kyu
  - All non-Japanese speaking students need to take Denpyo calculation
- All exams are followed by League for Soroban Education of America (Zenkoku Syuzan Kyouiku Renmei Japan)

