The Soroban

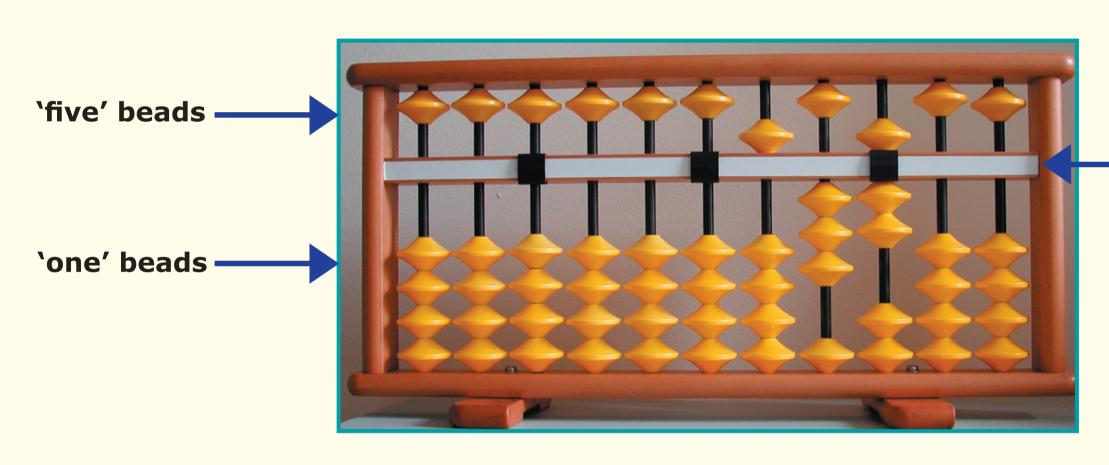
What Place in the Mathematics Classroom?



The *soroban* is used in Japan to support calculation. Skilled users can also use their knowledge of the *soroban* to carry out mental calculations very quickly and effectively.

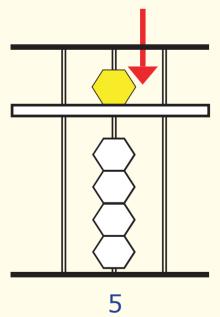
Can basic soroban lessons improve numeracy?

Pupils in their first year at two secondary schools took part in a research project run by the Edinburgh Centre for Mathematical Education. They had up to twelve lessons in basic *soroban* calculation.

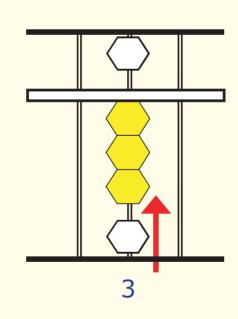


Beads are moved towards

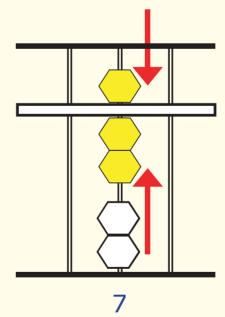
the bar to represent a number



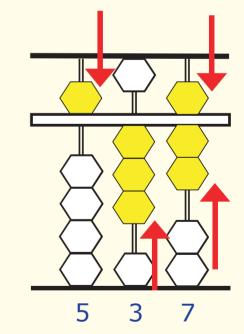
The index finger is used to move the 'five' beads



The thumb is used to push up the 'one' beads



Pinch with finger and thumb to show 7



Work left to right: 'finger, thumb, pinch' to show 537

This research was supported by The Nuffield Foundation.



Edinburgh Centre for Mathematical Education Classroom based research, working reflectively with teachers

www.education.ed.ac.uk/ecme

