Abstract

The abacus is an instrument that makes solving of problems of addition, subtraction, multiplication and division very fast and efficiently with less effort. Despite its numerous benefits, most Ghanaian Basic schools teachers resort to the use of “counters”, “pebbles” or “sticks” system to teach basic mathematics of addition, subtraction, multiplication and division. In this paper, we designed an Abacus system of seven (7) rods to help Ghanaian Basic school pupils learn to solve arithmetic problems between zero (0) and one million (1,000,000). The system contains well-structured lessons and user-friendly interfaces designed to encourage the student to learn to solve arithmetic operations.

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Index Terms

Computer Science  Information Systems

Keywords

Abacus, Chinese Suanpan, Japanese Soroban, heaven beads, earth beads