

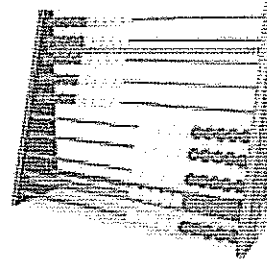
Rekenrek

Grade Level PK – 5

Description



20-Bead Rekenrek



100-Bead Rekenrek

The Rekenrek has a 5 and 10 structure, with a color change at 5 (eliciting the visual effect of grouping 5 and grouping 10). The 20-bead Rekenrek consists of 2 rows of 10 beads, allowing students to see numbers to 10 either as a number line on one row or a ten-frame (5 beads on two rows). A 100-bead Rekenrek has 10 rows of 10 beads. Other names for the Rekenrek are “Calculating Frame,” “Slavonic Abacus,” “Arithmetic Rack,” or “Math Rack.”

Instructional Strategies

Grades PK – 1

- Count up and down in short sequences (1, 2, 3, 2, 3, 4, 3, 2, ..., simulate the motion of a roller-coaster).
- Think of 7 as “2 more than 5.”
- See “inside” numbers (subitize – “instantly see how many”).
- Count in unit form (1 ten 1, 1 ten 2, 1 ten 3... 2 tens 1, 2 tens 2, etc.).
- Skip-count with complexity such as counting by 10’s on the 1’s (3, 23, 33, 43, ...).
- Group numbers in 5’s and 10’s. Compare Rekenrek to ten-frame.
- Build fluency with doubles.
- Make 10.
- Add across 10; subtract from 10.
- Build numbers 11-20.
- Show different strategies for adding $7 + 8$ ($5 + 5 + 2 + 3$, $7 + 7 + 1$, $10 + 5$, $8 + 8 - 1$).
- Compose and decompose numbers.
- Solve addition and subtraction story problems (e.g., putting together, taking away, part-part-whole and comparison).

Grades 2 – 5

- Show fluency with addition and subtraction facts.
- Find complements of numbers up to 10, 20, 30, ...100.
- Skip count by 2, 3, 4, 5, 6, 7, 8, and 9 within 100.
- Identify doubles plus one and doubles minus 1.
- Model rectangular arrays to build conceptual understanding of multiplication.
- Demonstrate the distributive property. Think of 3×12 as 3×10 plus 3×2 .