


## Student Reference Page- Kindergarten

5-group- dots   
Dots are arranged in a linear (row) to represent numbers 1-5.  
1 .    2 ..    3 ...    4 ....    5 .....

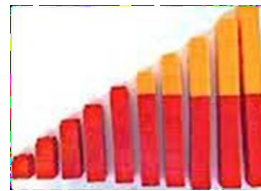
This leads to two 5 groups  
6 ..... 7 ..... 8 ..... 9 ..... 10 .....  
·        ··        ...        ....        .....



### Number Paths

**Summary:** The number path can be thought of as a visual (pictorial) representation of the number tower (see description below) and is foundational to understanding and using the number line. It also serves as a visual representation of 1:1 correspondence and the concept of whole numbers (one number, one space, and each being equal in size). The color change at 5 helps to reinforce the 5 and 10 benchmarks. The number path also serves as an early precursor to measurement concepts and a support for cardinal counting. (If the student places 7 objects in each of the 7 spaces on the path, they must realize that there are 7 objects, not 10. Simply because the path goes up to 10 does not mean there are 10 objects.)

### Number Towers



**Summary:** Number towers, also known as number stairs, are representations of quantity constructed by joining together interlocking cubes such as Unifix ©. In the beginning of the Story, they are used to help younger children quite literally build their knowledge of cardinality by erecting towers of various numbers. Number towers are then used to teach concepts of “more/less” globally and the patterns of “1 more/less” and “2 more/less” specifically. This model leads to an understanding of comparison and the word “than,” not only in the context of “more than” and “less than,” but also in the context of “taller than,” “shorter than,” heavier than,” “longer than,” etc. Children are encouraged to build towers for quantities 1 through 5 in one color. Quantities beyond 5 are added on in a second color. This color change provides support for several important developmental milestones. First, it facilitates children’s understanding of 5 as a benchmark.

## Rekenrek



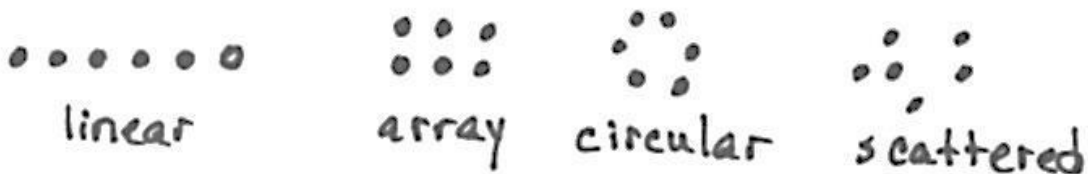
**Summary:** The Rekenrek has a 5 and 10 structure, with a color change at 5 (eliciting the visual effect of grouping 5 and grouping 10). The 20-bead Rekenrek consists of 2 rows of 10 beads, allowing students to see numbers to 10 either as a number line on one row or a ten-frame (5 beads on two rows). 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.”

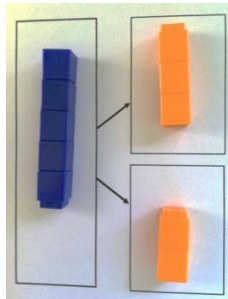
## Model: RDWW (Read, Draw, Write an Equation, Write a Statement) Process

### Summary:

- Read a portion of the problem
- Create or adjust a drawing to match what you’ve read. Label your drawing.
- Continue the process of reading and adjusting the drawing until the entire problem has been read and represented in the drawing.
- Write and solve an equation.
- Write a statement.

Ways that objects are displayed:





### Hidden Partners:

The numbers embedded within a given number. The numbers 3 and 2 are found within 5.