Rekenrek Activities for K-2

Meet the Rekenrek

This activity should be used the first time students use rekenreks. Allow ample time for free exploration of this tool and then ask the following questions;

- What did you notice about the rekenrek?
- How many beads did you see? What colors do you see?
- How did you count the beads? Did anyone count them another way?
- How do you think you will use this tool?

Establish the norms for using the rekenreks. The beads always begin on the right side and as they are used, move to the left. So all students are using the rekenrek colored beads in the same way, it might be helpful to place a sticker in the upper right had corner of the rekenreks.

How Many Do You See and How Do You See Them?

Push various numbers to the left and ask the students to quickly tell how many beads they see. Start with 1, then 5, 7, 9, 12, 16, etc. Ask students how they know how many they see and listen for answers that involve visualizing 5 and 10, or seeing doubles, as opposed to counting individual beads.

In 1 Push

Reinforce the idea of showing a number on the rekenrek in "one push." Say a number and ask students to show that number in "one push." Ask students to explain how they knew they were pushing the right number. Notice reasoning that involves visualization of 5s and 10s, as well as doubles.

In 2 Pushes

Reinforce the idea of showing a number on the rekenrek in "two pushes." Say a teen number and ask students to show that number in "two pushes." Ask students to explain how they knew they were pushing the right number. Notice reasoning that involves visualization of 10 and some 1s.

Make This Number

Use numeral cards from 1-20. Hold up a card at random and ask students to show that number on their individual rekenreks. Debrief various solutions and how students arrived at the position of beads. Notice the number of pushes students use to show their numbers. Encourage students to think about "chunking" their numbers by using the fewest number of pushes.

What's The Missing Number?

Play a team class game by pushing some of the top rod of beads and the class pushes the bottom set of beads to make the chosen number, e.g., To make 9, push 5 red beads to the left from the top row. Students push 4 on the bottom rod. Look and listen for strategies.

What's The Missing Number Partner Activity

To further this activity in pairs, students have a barrier between them. One student draws a card from the pile, saying the number out loud and making that number on their rekenrek in any manner they choose. The first player provides a clue as to how many beads they pushed on the top rod but the partner must figure out how many are pushed on the bottom rod to replicate the partner's solution.

Equal!

Use the rekenrek to develop an understanding of equality, e.g. $3 + 2 = 1 + 4$, $5 + 2 = 2 + 5$

Commutative Property

Ask: Is $7 + 8 = 8 + 7$? How do you know? Students should use their rekenreks to support their thinking.

Solve This Problem

There were 5 students playing on the play structure in the playground. 4 were on the top level. How many were on the bottom level?

6 students were on the stage in the gym practicing for the school play, while 4 were on the floor setting up chairs. 3 more students came to help. How many students were in the gym?

Out of the 20 cupcakes brought into class for Owen's birthday only 3 were left. How many were eaten?

5 birds were sitting on the top wire. Some birds came to the bottom wire. Now there are 11 birds on the wires. How many bird came to the bottom wire?

10 birds were sitting on the wires. Some were on the top wire and some were on the bottom wire. What are all the ways the birds could be sitting on the wires?

Additional Resources:

K-5 Math Teaching Resources

The Math Learning Center