

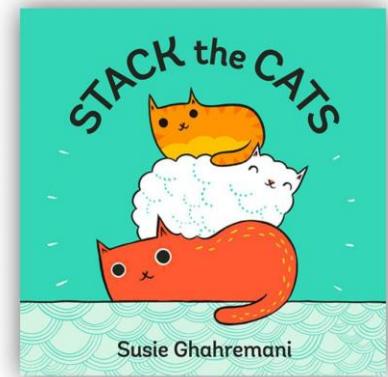
Primary Task

Two companion counting books

Stack the Cats by Susie Ghahremani

One cat sleeps. Two cats play. Three cats stack!

Stack the Cats is a charming book about counting and organizing cats in various formations. But when the cats decide to go their own way—as cats often will—it's time to count down until there's only one sweet cat left.



Counting forward and backward, understanding when there are more or fewer of something, grouping and recognizing the number of items in a group!

Roll A Tower

Roll A Tower Materials: Roll a Tower game board, 1 for each player Connecting cubes 1-6 dice, 1 for each player Roll a dice. Build a tower of cubes to match. Place the tower on your game board in the column that matches your number.

12345 Roll A Tower - Let's Race! 6 Keep rolling and building towers. Which number will fill up first? Developing Number Concepts Book 1 (1999) p.54

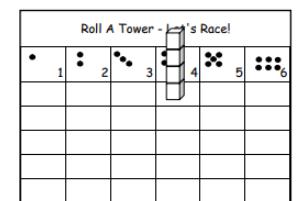


COUNTING with **TINY CAT**

Viviane Schwarz

Counting with Tiny Cat by Viviane Schwarz

At first Tiny Cat has none. Then, what's that? One! Two! Three! And ... four! Oops, *bonk*, now there's more! Soon Tiny Cat has as many red balls of wool as you can get. Then some extra. Too many...?! Will Tiny Cat ever have just enough?



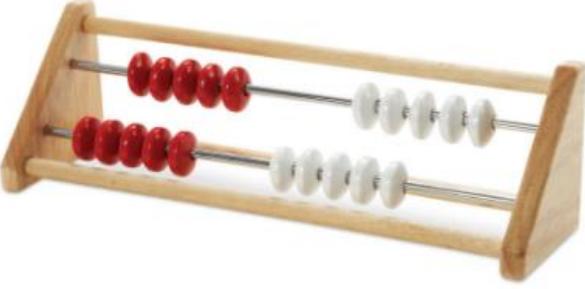
REKENREKS or Math Racks

Excellent picture book to introduce the Rekenreks to early primary. Children create and retell the story of the number of red balls of yarn. See below for other Rekenrek activites.

Rekenrek Activities

There are various ways to structure Rekenrek exploration. All of the routines below involve whole-class participation. Ideas include the 4 relationships that matter: **spatial relationships, one/two more/less, benchmarks of 5 & 10 and part/part/whole.**

Routine	Helps with....	How it works	Ways to use the routine and questioning strategies
Play	<ul style="list-style-type: none"> • Orientation • Discovery • Inquiry 	<ul style="list-style-type: none"> • Only rule is to put “white on right” and push beads to left • Beads on the left can be “in play”. Beads on the right can be “out of play”. 	<ul style="list-style-type: none"> • Share with students that because we read left to right our eyes will be drawn to ‘read’ the beads on the left • Open exploration of <i>six</i> that allows the teacher to assess the children’s understanding of composing and decomposing six
Number Strings/Talks	<ul style="list-style-type: none"> • Showing quantities students can subitize • Focus on the relationship between quantities • Relationship of one/two more or less 	<ul style="list-style-type: none"> • Start by showing 5, and then after show 4 and ask; “How many is it and how do you know?” • Then you might come back and show five again, and then show six and hope that they start to notice relationships 	<ul style="list-style-type: none"> • Pay attention to see if children are counting or do they understand it’s got to be one less than the one we just showed • <i>Fluency Number Talks Using the Rekenreks</i> p. 82-88 & 107-113 <u>Number Talks</u> by Sherry Parrish
Quick Images	<ul style="list-style-type: none"> • Visualization • Subitizing 	<ul style="list-style-type: none"> • Quickly show Rekenrek and then have it disappear • With teacher demo cover with large sticky Post-it paper • Leave it up just long enough for those still in the counting phase to build visualization skills 	<ul style="list-style-type: none"> • How quickly you show them and make them disappear depends upon the level of the students and the amount
Show Me	<ul style="list-style-type: none"> • Visualization • Spatial reasoning • Building part-part-whole understanding 	<ul style="list-style-type: none"> • Directions “<i>show me eight</i>” and no other instructions • Some will show one by one along the top, others 4 on top and four on bottom • Teacher builds the number students represent one way 	<ul style="list-style-type: none"> • What are all the different ways to make 8? • Show a number with as few moves as possible, in two moves? • Offers a window into decomposing/composing • Encourage students to see it and push it over as a group instead of one by one

Can you guess my way?			<ul style="list-style-type: none"> Does the student create their representation on both rows?
Modeling Story Problems	<ul style="list-style-type: none"> Building number sense Real world context engagement 	<ul style="list-style-type: none"> Modelling a story problem i.e. Sandy has three balloons, she blows up 5 more. Some might show the math on the top and bottom, others may go back and count one by one 	<ul style="list-style-type: none"> Pay attention to the strategies students use (i.e doubles, near doubles, making tens)
Number Strings/Talks	<ul style="list-style-type: none"> Showing quantities students can subitize Focus on the relationship between quantities Relationship of one/two more or less 	<ul style="list-style-type: none"> Start by showing 5, and then after show 4 and ask; "How many is it and how do you know?" The you might come back and show five again, and then show six and hope that they start to notice relationships 	<ul style="list-style-type: none"> Pay attention to see if children are counting or do they understand it's got to be one less than the one we just showed <i>Fluency Number Talks Using the Rekenreks</i> p. 82-88 & 107-113 <u>Number Talks</u> by Sherry Parrish
Quick Images	<ul style="list-style-type: none"> visualization 	<ul style="list-style-type: none"> Quickly show Rekenrek and the have it disappear With teacher demo cover with large sticky Post-it paper Leave it up just long enough for those still in the counting phase to build visualization skills 	<ul style="list-style-type: none"> How quickly you show them and make them disappear depends upon the level of the students and the amount
<u>Curricular Competencies:</u> Use reasoning and logic to explore, analyze and apply mathematical ideas. Use tools to explore relationships and test conjectures. Model mathematics in contextualized experiences. Represent mathematical ideas in concrete, pictorial and symbolic forms.	<ul style="list-style-type: none"> Reasoning and logic Modelling mathematics Representing mathematical ideas in concrete form Explain and justify mathematical decisions and ideas Develop understanding and solving through play, inquiry and problem solving 	<ul style="list-style-type: none"> Determine all the ways to make 10, using beads from each row. Use the Rekenrek to prove that $3 + 2 = 1 + 4$ 	<ul style="list-style-type: none"> Use the tool for problem solving (i.e. When you add 6 and 5, you can see it as 5 and 5 with one more. Show 5 red on the top rod and 5 red on the bottom rod with one additional white bead, making the 5+5 pattern explicit. 5+5 and one more)

