## JTORKING <br> WTITエ TH尸

## REKENREK

Activities for Counting, Subitizing, Place Value, and Operations

CAligns to
STANDARDS


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## Correlation to Common Core State Standards

| Standard | Activity No. |
| :---: | :---: |
| Grade K |  |
| Counting and Cardinality (K.CC) |  |
| Know number names and the count sequence. (K.CC.1-3) | 1-12, 25 |
| Count to tell the number of objects. (K.CC.4-5) | 2-15 |
| Compare numbers. (K.CC.6-7) | 16, 17 |
| Operations and Algebraic Thinking (K.OA) |  |
| Understand addition as putting together and adding to, and undersand subtraction as taking apart and taking from. (K.OA.1-5) | 18-23, 26-33 |
| Number and Operations in Base Ten (K.NBT) |  |
| Work with numbers 11-19 to gain foundations for place value. (K.NBT.1) | 5, 8, 9, 12, 24 |
| Grade 1 |  |
| Operations and Algebraic Thinking (1.0A) |  |
| Represent and solve problems involving addition and subtraction. (1.OA.1-2) | 36, 40-43 |
| Understand and apply properties of operations and the relationship between addition and subtraction. (1.OA.3-4) | 26, 29, 30, 44 |
| Add and subtract within 20. (1.OA.5-6) | 26, 31, 33-39, 45-48 |
| Work with addition and subtraction equations. (1.OA.7-8) | 27, 28, 32-39 |

## 1: Counting Forward

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## (i) Number of Students

Individual students
(®) Materials
For each student:

- Student Rekenrek
- Number Cards 1-10 (page 106)
- Paper bag
(3) Overview

In this activity, students use the Rekenrek to count forward from any given number.


## Common Core State Standards

## Content Standards:

Grade Level: K
Domain: Counting and Cardinality (K.CC)
Know number names and the count sequence.
2. Count forward from a beginning number within the known sequence (instead of having to begin at 1).

## Practice Standards:

2. Reason abstractly and quantitatively.

Kindergarten students are beginning to count on from any given number without starting back at 1 .

## (1) Presenting the Activity

1. Make a copy of the Number Cards and cut the cards apart. Place them in a paper bag to draw.
2. Distribute a Rekenrek to each student.
3. Say to students:
(66) I am going to tell you a number. For example, I may start with the number 6 . You will show that number on your Rekenrek.

Then, I will draw a number from my bag. We will all start counting at the number 6 and count forward with the number that I draw. If I draw the number 3, we will start at 6 and together we will count forward three more numbers to say "7, 8, 9."

If I tell you the number 12, you will show it on your Rekenrek. I will draw a card for you to count forward with, such as 7 . We will start at 12 and count forward seven more numbers: " $13,14,15,16,17,18,19$." We counted on seven more numbers.
4. Continue the activity by calling out other numbers from 1 to 10 . Students will show the called number on the Rekenrek and then orally count forward using the Number Card selected from the bag.

## © Assessing Student Responses

The following questions will help you assess your students' responses to the activity:

- Did the students correctly show the called number using the Rekenrek?
- Did the students correctly count forward orally from any given number?


## Number Cards 1-12



## 2: Write and Count

## (i) Number of Students

Entire class

## (1) Materials

For each student:

- Student Rekenrek
- Individual student whiteboard and markers

For the teacher:

- Question Cards (page 118)
- Paper bag


## (5) Overview

In this activity, the teacher draws a Question Number Card and reads it out loud. Students answer the number question and write the answer on their individual whiteboards. Then students represent the number using the Rekenrek.


## Common Core State Standards

## Content Standards:

Grade Level: K
Domain: Counting and Cardinality (K.CC)
Know number names and the count sequence.
3. Write numbers from 0 to 20 . Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

Count to tell the number of objects.
4. Understand the relationship between numbers and quantities; connect counting to cardinality.
5. Count to answer "how many" questions.

## Practice Standards:

2. Reason abstractly and quantitatively.

Kindergarten students are beginning to make sense of quantities and the numerals representing those quantities.

## (1) Presenting the Activity

1. Cut apart the Question Cards and place them in a paper bag.
2. Distribute Rekenreks, individual whiteboards, and markers to students.
3. Say to students:
(66) I am going to draw a Question Card from my paper bag and read it out loud to you. For example, I may read the question card that asks, "How many fingers on your hand?"

When you know the answer, share the answer with your partner in a whispering voice. Then write the answer, 5, on your whiteboard with your marker.

When I say"Show it if you know it," you will hold up your whiteboard with the number 5. I will look to see if you know the answer to my question card.

Next, I will say, "Move all of your beads to the right side. Then, show me five using your Rekenrek."
4. Continue by drawing other Question Cards for students to answer. Have the students write the quantity and show the number on their Rekenreks.

## (C) Assessing Student Responses

The following questions will help you assess your students' responses to the activity:

- Did the students know the answers to the Question Cards?
- Did the students correctly write the numbers on their whiteboards or on paper?
- Did the students correctly show the numbers on their Rekenreks?
- Did any particular numbers cause difficulties?


## Question Cards


| What is the number of shoes in a pair? $\vdash--------+--------\quad-$
| What is the number of seasons in a year?

What is the number of wheels on a bicycle?
| What is the number of
singers singing a solo?
$\begin{array}{lll}\mid \text { What is the number of } & \mid \text { What is the number of legs } & \mid \\ \mid \text { cookies in a dozen? } & \mid \text { on a spider? } & \mid \\ \vdash---------------------------------~\end{array}$
$\vdash--------\quad+---------\downarrow$

What is the number one | What is the number one | more than ten?
$\vdash--------+-------\quad-\quad-$
What is the number of fingers on one hand?
$\vdash--------+--------\perp$ What is the number of letters that rhyme with tree?
| What is the number of letters in your first name?
| What is the number of |
| corners on a triangle? |
| What is the number of |
fingers and toes you have?
$\vdash--------+---------1$
| What is the number five and one more?

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