



## Count on Me Grade K

### Introduction

We all use our fingers to count sometimes but do we all use them the same way? This activity gives students an opportunity to use their fingers for counting and explore the multiple ways of using fingers to count the same number. Research tells us that it is very important for students to develop 'finger discrimination' that is, for students to know individual fingers really well. In this Atlantic article we share the importance of using fingers for the brain's development of numbers, see <https://www.theatlantic.com/education/archive/2016/04/why-kids-should-use-their-fingers-in-math-class/478053/>. Evidence from both behavioral and neuroscience studies shows that when people receive training on ways to perceive and represent their own fingers, they develop better representations of their fingers, which leads to higher mathematics achievement.

### Agenda

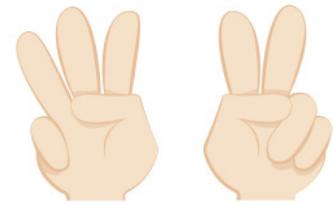
Activity	Time	Description	Materials
Mindset Message	5 min	Play the mindset video.	Mindset Video
Counting with Fingers	30-40	<ol style="list-style-type: none"> <li>How do you use your fingers on one hand (or two hands) to count to 5?</li> <li>What are all the different ways of counting three on two hands?</li> </ol>	Document camera Count on Me Handouts on pg 4 and 5
Debrief Mindset Message	5 min	Debrief the mindset messages for this activity.	Math journals (optional)



### Activity

Fingers are the most important representation for counting. We want to do finger activities when students are learning to count to develop finger perception as students learn to understand number as a quantity. This activity offers space for students to develop their finger discrimination because it is about exploring the different ways to use different fingers to count.

One of the many messages you might emphasize in this activity is that mathematicians know there are multiple ways of approaching problems. Making time for students to experience this early in the year will help them to define mathematics as an open and creative subject.



Start by inviting students to share how they count five using one or two hands, you can leave this open for students to decide or you can decide how many hands they use. You might consider having partners share with each other how they count to five. Then invite volunteers to share with the whole class. Continue to take ways of counting until there are no more different methods to share. Give lots of time for sharing so students know there are many ways to count five. Record the different methods shared. You might use the hand diagram on the Count on Me Handout pg 4 to record the different ways of counting five.

Next ask student pairs to explore the different ways of counting three (or another number of your choice) on their fingers using one or two hands with their partner. If students use two hands this activity will give students an experience that communicates how open and creative mathematics is. Give partners lots of time to explore. You might give each student the Count on Me Handout so they can record all of the different ways of counting three with fingers. Put several copies of the handout on the table so students can record as much as they need when exploring.

Once partners have explored several different ways of counting three bring the class together and ask how many different ways they counted three. Record the number of ways shared by each student, then ask volunteers to share the different ways they counted and record. Invite students to continue sharing until all of the ways students thought up are shared.

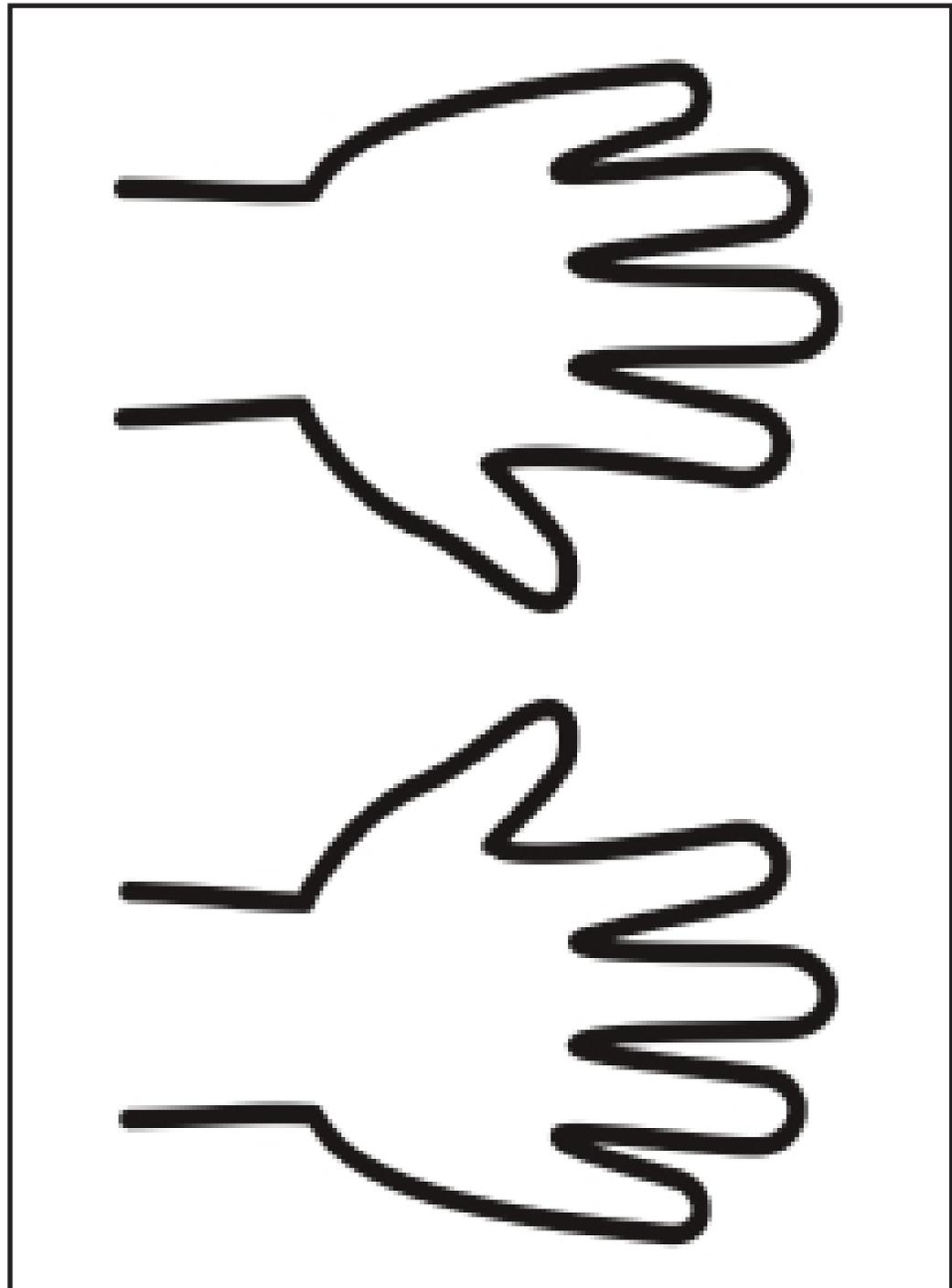
Close the exploration of this activity giving a message about how creative and open mathematics and counting are.

### Extensions

- Which number from 1-10 will have the most ways of counting using two hands? Which number will have the least ways for counting using two hands?
- What is the most common way of counting three with fingers? What is the least common way of counting three with fingers?



# Count on Me Handout





# Count on Me Handout

