

What is a Number Talk?

A Number Talk is a brief routine (about 10 minutes) focused around developing flexibility and fluency with numbers. Through frequent opportunities to work with dot images and expressions, students develop an understanding of number relationships and structure. This supports the development of early fluency skills.

Through frequent Number Talks, students will recognize:

- Numbers are composed of smaller numbers.
- Numbers can be decomposed and combined with other numbers in a variety of ways.
- What we know about one number can help us work with other numbers.
- What we know about small numbers can help us work with large numbers.
- Numbers are organized into groups of ones, tens, hundreds, etc...

What's Special about Kindergarten Number Talks?

Kindergarten students work with quick images to find “how many”. A quick image is briefly displayed for about three seconds, encouraging students to use strategies other than *counting all* to find the total quantity. At first, kindergarten students may rely solely on *counting all* dots to find the quantity. Through frequent experiences, students will begin to rely on perceptual subitizing (instantly seeing the amount), conceptual subitizing (seeing parts within the set, and using mental processes to find the total quantity), and known number facts.

Facilitating Number Talks in Kindergarten

1. **Teacher selects a set of set of images (scattered dots, dots on a five/ten frame, or rekenrek images), and reveals the first image for three seconds.**
2. **Students find the total quantity of dots on the first image.** Students put a thumb up when finished.
3. **A few students share answers and thinking.** The teacher records so thinking is visible to all students.
5. **Steps 1-4 are repeated for the remaining problems.** Teacher reveals the next expression/image. Students find the value, and make connections to the previous expression/image since they are typically related (*see below*).

Sample Beginning of Year Kindergarten Number Talk

Goal: Develop flexibility using a variety of strategies to determine the total quantity.

Dot Images

The first dot image shows a five-frame with four black dots in the first four boxes from the left. The second dot image shows a five-frame with four black dots in the first, second, third, and fifth boxes. The third dot image shows a five-frame with four black dots in the first, second, fourth, and fifth boxes.

Possible Strategies & Methods for Recording

Count all:

Count on:

Subitize

Doubles:

One's missing

Questions to Ask Students

Questions to Understand Student Thinking	Questions to Making Connections and Build Efficiency
<ul style="list-style-type: none"> How many dots are there? How did you see four? Did anyone have a different way? How are the dots arranged? Who can explain how they found the amount of dots without counting every one? 	<ul style="list-style-type: none"> What changed between the first and second set? What's the same? How does knowing there are 4 dots in the first set help you know there are four dots in the next set? How does know this is a five frame help you quickly know there is four in this set?