

MA.K.NSO.1.4

Overarching Standard: MA.K.NSO.1 *Develop an understanding for counting using objects in a set.*

Benchmark of Focus

MA.K.NSO.1.4: Compare the number of objects from 0 to 20 in two groups using the terms less than, equal to or greater than.

Benchmark Clarifications

Clarification 1: Instruction focuses on matching, counting and the connection to addition and subtraction.

Clarification 2: Within this benchmark, the expectation is not to use the relational symbols =, > or <.

Related Benchmark/Horizontal Alignment

- MA.K.NSO.2.3
 - MA.K.AR.2.1
 - MA.K.M.1.2
 - MA.K.DP.1.1
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Vertical Alignment

Previous Benchmarks

- [VPK](#)

Next Benchmarks

- MA.1.NSO.1.4
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Purpose and Instructional Strategies

The purpose of this benchmark is to develop student understanding of comparing numbers and values relative to others. This benchmark may be used to connect to the counting sequence, forwards and backwards, and to addition and subtraction as strategies to compare numbers.

- Instructions encourage students to explain “how they know” a number is greater than, less than or equal to. (*MTR.6.1*)
 - For example, a student could explain that 5 is after 3 so 5 is greater than 3. A student could also pair objects one-to-one to determine that 5 is greater than 3.
- Instruction allows for students to compare sets and demonstrate their thinking using various strategies, such as addition and subtraction, counting on or back, and manipulatives. (*MTR.2.1*)
 - For example, 7 is greater than 5 because $5 + 2 = 7$ and because it is like starting at 5 and counting “5, 6, 7.”

- Instruction includes pairing objects in two sets one-to-one, students may observe that a set has more objects when there are no more to pair with. (MTR.5.1)
- Instruction includes the language “which is greater,” “which is less,” and “are they equal,” to help students develop vocabulary.
- Instruction includes comparing sets of objects as well as numbers.

Common Misconceptions or Errors

- Students may confuse the size of objects with the number of objects when comparing.

Strategies to Support Tiered Instruction

- Instruction includes presenting students with two sets of objects to compare in which modeling of a matching strategy is used to determine precisely which set has more.
 - For example, the teacher may use questions that can elicit student thinking about the relationship between quantity and size including
 - *“Do you think they have the same amount? How do you know?”*
 - *“When we want to see if one group has more, less or the same, we will compare the groups by matching one from each group.”*

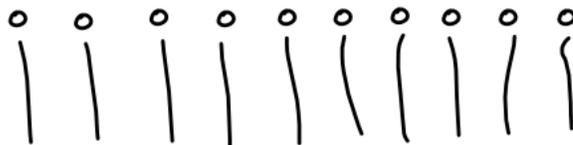
Students may record the numbers or drawings of their comparisons and describe how they determined which group was more, or less.



- Instruction includes a focus on “equal” by presenting students with two sets of objects with equal quantities in which the objects in one set are at least twice as large as the objects in the other set.
 - For example, students will need to be introduced to the idea that larger items don’t necessarily mean they are “more” or that smaller items mean there are “less.”



- For example, the teacher may use the following questions to elicit student thinking about the relationship between quantity and size and can include,
 - *“Do you think they have the same amount? How do you know?”*
 - *“When we want to see if one group has more, less or the same, we will compare the groups by matching one from each group.”*
 - *“Each group has the same amount. Another word for same is ‘equal.’”*



Questions to ask students:

Which number is greater? How do you know?

Which is less? How do you know?

What words or phrases do we use when we compare numbers?

How does knowing how to count help you compare numbers?

- Sample answer that indicates understanding: Every time you say another number, it is one more.

Are there more _____ or _____? How do you know?

Are there fewer _____ or _____? How do you know?

Show me/Build me a set that is has more/less than ____.

Instructional Tasks*Instructional Task 1*

Given two sets of objects (pictorially or concrete objects), students will count and record the number of objects in each set. Give time for students to discuss in groups and ask the following:

- Which number is greater? How do you know?
- Which number is less? How do you know?
- How many more is in one group than the other?

It is important for students to discuss each comparison, and begin to make connections.

Examples of student responses could include:

- 9 is greater than 5, because when I count, 9 comes after 5.
- I know 5 is less than 9, because 9 is greater than 5.
- I know that 9 is greater than 5, because I have to add 4 to 5 to get 9.
- I counted all of the objects.
- I subtracted the two numbers, I matched them and found the number left over.

Instructional Task 2

Teacher provides students with two sets of objects. Group A has 8 objects and Group B has 6 objects. Teacher asks student, *Is group A greater than or less than group B?* Teacher then asks, *How do you know; what would you do to make the groups equal?*

Instructional Items

Instructional Item 1

Who has more shirts? How do you know?

Steven's Shirts



Suzanne's Shirts



Additional Resources:

[CPALMS](#)

Video: [More or Less?](#)

[Blog Post: Quick images to represent and compare numbers](#)

Resources/Tasks to Support Your Child at Home:

Choose two different household items to use, such as: candy, dimes and pennies, red and green fruit loops cereal, etc. Count a specified number of each type of item (within 20). Have students explore to determine which amount is greater, less, or if there is an equal amount of the two items.

Continue having students compare two different sets of objects within 20 using real world scenarios and describe the sets using "greater, less, equal to." Example: "How does your number of M&Ms compare to your brothers? I have 8 and he has 3, so I have a greater amount."