More, Fewer, or the Same?

Strand: Number and Number Sense

Topic: Comparing two sets using the words more, fewer, and same

Primary SOL: K.2 The student, given no more than three sets, each set containing 10 or fewer concrete objects, will
   a) compare and describe one set as having more, fewer, or the same number of objects as the other set(s)

Related SOL: K.1a, K.3a

Materials

- *Just Enough Carrots*, by Stuart J. Murphy (if available)
- Bags of counting items (e.g., counters, buttons, pom-poms, gumballs) in various amounts, enough for two bags for each student
- Paper prefolded into thirds, one for each student

Vocabulary

equal, fewer, less, more, same, set, zero (0), one (1), two (2), three (3), four (4), five (5), six (6), seven (7), eight (8), nine (9), ten (10)

Student/Teacher Actions: What should students be doing? What should teachers be doing?

Note: This is meant to be an introductory lesson. Once students are comfortable with the skill, the bags of counting items may be placed in a center and students may repeat the activity in small groups.

1. Call seven students to the front of the class. Split them into two groups: two students in one and five students in the other. Explain that students are now looking at two sets, or collections, of objects. In this case, our objects are people. Ask: *What do you notice about these sets of people? What makes you say that?*

2. Guide students to realize that one set is "bigger," or has *more* students than the other set. They may or may not mention the words *fewer* or *less*. If *fewer* or *less* are not mentioned, use them to describe the sets and explain how they are often used with *more* when comparing sets. When comparing sets of different amounts, one set has more and one set has fewer. Demonstrate that you can match up the people in the sets to see that the set with five people has extras, so it has more people. Therefore, the set with two must have fewer people.

3. Ask one student to return to their seat, and divide the students into two groups of three students each. Ask: *What do you notice about these sets? How do you know?* Guide students to understand that the sets are equal, or they have the *same* number in both sets. Demonstrate that the items in the sets can be matched up and there are no extras in either set.

4. If you have access to the book *Just Enough Carrots*, by Stuart J. Murphy, read and discuss the book. A [free video](#) of this book is available online. In the book, the little rabbit communicates that he wants more carrots and fewer worms and peanuts. Some

of the characters purchase the same amount of a food choice. Focus on the direct-comparison pages to further explain the vocabulary words (p. 11, p. 17, p. 23). Call students up to count each set on these pages to promote cardinality. (If the book is not available, continue working with groups of students and create an anchor chart for students to reference.)

5. Display a bag of five counting items. Count the set out loud with students. Spread the set out a bit more, count aloud with students again, and ask: *Has the number of objects changed?* Rearrange the items one more time, and ask again. Guide students to see that the set can be arranged differently while still containing the same number.

6. Open a second bag of the same counting item containing a set of three. Count the set aloud with students. Ask: *What do you notice about these two sets? What makes you say that?* Call a student up to demonstrate how to count, using one-to-one correspondence, to show that one set has more than the other.

7. Open a third bag of the same item. This time, be sure the set has the same number of items as one of the bags you have already shown. Count the set aloud with students. *What do you notice about this set? Where have we seen this number before? What does this mean about these two sets?*

8. Repeat this activity with two more sets of counting items. Have a student review counting the sets with one-to-one correspondence. This time, ask students: *Can you make a set that would be more than one of these bags?* Allow a volunteer to demonstrate. Repeat by asking students to make a set of *fewer* than one of the bags. Observe how children do this. Do they make a same-size set and then add items or take items away from it? Do they just make a set that has more or fewer than the given set, already having a quantity in mind? Ask students: *How do you know that has more? How do you know that has fewer?*

9. Repeat as time permits.

10. Using a piece of pre-folded paper, label the columns *More, Fewer*, and *Same*. Choose two counting bags, one with five objects and one with three objects. Ask students to tell you how many are in each bag and where they think they could place the bags on the paper. (The bag with five objects should go in the "More" column and the bag with three objects should go in the "Fewer" column.)

11. Next, choose two bags with five objects. Let students tell you where to place these bags. (The bags should both go in the "Same" column because they have the same amount.)

12. Distribute prefolded paper and ask students to label the columns with the words *More, Fewer,* and *Same*. Give each student two bags of counting items. (Note: It will help students keep track of which items were in which bag if the two bags contain different types of items.) Have students count their sets and determine where on their paper they would place each bag. Visually assess how students are classifying the bags. Notice: *Are students counting and using the numbers to compare? Are students matching the items to determine which set is more or fewer?* Have students turn and talk to the person on their left and share what they have done. Have those two students trade bags with another pair of students and repeat the activity.

13. Come together as a whole group and have students explain what they did to decide whether their bags held *more, fewer* or *the same* and how they decided where to place the bags on the paper.

Assessment

- **Questions**
  - How do you know whether one set has more than another?
  - If I have a set of six counters, and you have a set that shows the same, how many counters do you have?

- **Journal/writing prompts**
  - Draw a picture of two sets of counting items. Circle the set that has more. Underline the set that shows fewer. Draw two sets that are the same and put them in a box.
  - Johnny has 3 apples. Susie has a set of more apples. Kathy has a set of fewer apples. Draw a picture to show these sets.

- **Other Assessments**
  - Have students make More/Fewer/Same collections based on a number. For example, if the student's number is 5, he/she would make a pile of counters to show more than 5, a pile to show fewer than 5, and a pile to show the same as 5.
  - Have students use dot cards or dominoes to find pairs that show the same quantity. You could also have students find a card that shows a quantity that is more than or fewer than a quantity shown on a given card.

Extensions and Connections (for all students)

- Offer students a graph to complete, using data from their bags of counting items. Have students identify which set has more, fewer, or the same, according to their graph.
- As a station activity, provide a three-column mat with the words *fewer*, *same*, and *more* at the top of each column. Students choose a bag of items, count to see how many items they have and then create sets that have fewer, the same, and more counters on the mat.
- After students have become comfortable with comparing two sets, provide three sets for students to compare. Students may use phrases like, "There are more objects in this set than in the other sets," or "This bag has more objects than that set, but fewer objects than this set," or "This bag has fewer objects than all of the other sets."
- When working with equal shares, draw attention to the idea that equal shares are the same, not more or less.

Strategies for Differentiation

- Depending on the needs of your students, you may wish to prelabel the columns on the response paper with *More, Fewer,* and *Same*.
- Sentence frames can be used when asking students to form responses.

- Students may work with partners or with the teacher to complete the classification of sets portion of the lesson.
- Vary the size of the collections based on numbers students are comfortable counting.

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