

Grade 1 Sample

Grade: 1 Groupings: Individual

Big Idea

Students gain a sense of the size of numbers by comparing them to meaningful benchmark numbers.

Prior Knowledge (scaffold)

Students have worked with 5 and 10 frames in different contexts i.e., counting the days and making tallies, pre 100's day celebration. Students have experience with comparing whole numbers, using the vocabulary more and less, and estimating numbers using anchors like 5 and 10.

Description of Activity (students' task)

Students were given an undisclosed number of similar objects and directed to decide if the collection contained more or less than 100 items. The question was posed orally as, "Here is a collection. Do you have more or less than 100 items?" Predictions were recorded by the teacher and the children were then instructed to prove and explain their results.

Demonstration of Knowledge

Five and ten frames were made available for students to use. The teacher then rotated around the room to take pictures of displayed results and record the explanations that were given orally by the students. A variety of strategies and depth of understanding were conveyed to the recording teacher.

The majority of students made accurate estimations for predicting more or less than 100 in their collection. Proving and explaining the results were difficult for some students. From a class of sixteen participating students the following provides a sampling of results:

- Student A looked at collection and started counting by 1's but did not complete because the beads were too little and there were too many to count.
- Student B sorted bird eggs into two colour groupings, then accurately counted all of the eggs by 1's and concluded that he had 319, more than 100.
- Student C counted out paper plates into piles of ten, counted the piles by 10 to 90 and concluded she needed one more group of ten to reach 100.

• Student D – counted out apples into buckets with groups of ten, stopped at 100. When questioned why she stopped, she pointed to the container of remaining apples and responded, "I know I have lots more than 100."

Reflections

Students showed a wide range of abilities in demonstrating their understanding of comparing amounts to benchmark numbers. Allowing oral response provided all students the opportunity to demonstrate skills and understanding. Students took a gallery walk to observe the arrangements that some children chose for checking their answers. A few minutes were provided to allow students to share some explanations with the group. Additional opportunities to repeat the activity with different collections (and perhaps smaller amounts) would be necessary for some students. For others, modeling of how to record their work and thinking will be the next step.

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