

Date _____

Counting Assessment

Have two jars or baggies with small items to count. (unifix cubes, buttons, beads etc.) One container should have no more than 10 items the other 20. First have the student estimate how many they think are in the container. Record their estimate and scribe their response to: "How did you make that estimate?" Have the students dump out the materials from one bag and ask them to count them. Record your observations on the observation sheet. Ask the children to count out a set of a specific number i.e. 6 then ask them to make a set that is 1 more, 2 less etc. Ask them to explain if the set they have made is bigger or smaller than the original set. How do they know? Repeat the process with the larger collection.

Estimate #1 _____

Counting a set of objects: (10)

- Randomly counts set
- Removes or touches one item at a time
- Other organizational strategy
- Double checks work
- Uses correct sequence of number names

Creating a new set of a given size:

- Recalls target number
- Counts out a new set
- Makes a new set each time.
- Uses known set and counts on to new number.
- Demonstrates some knowledge of combining /adding groups
- Compares the items in some way
- Double checks

Communication

How did they estimate?

- Explanation of comparative size
- clear, precise, complete, appropriate
- generally clear, generally complete and appropriate
- simple, somewhat clear, incomplete, somewhat appropriate
- unclear, inappropriate

Notes

Estimate #2 _____

Counting a set of objects: (20)

- Randomly counts set
- Removes or touches one item at a time
- Other organizational strategy
- Double checks work
- Uses correct sequence of number names

Creating a new set of a given size:

- Recalls target number
- Counts out a new set
- Makes a new set each time.
- Uses known set /counts on to new number.
- Demonstrates some knowledge of combining /adding groups
- Compares the items in some way
- Double checks

Conservation of Number

Name _____

Date _____

Show the student 6 unifix cubes in a row with a small space between each cube. How many cubes do we have?

- Counts accurately without pointing
- Points to each cube and counts accurately
- Counts inaccurately and needs prompt to touch each cube. Recounts accurately.
- Counts inaccurately and needs prompt to touch each cube. Recounts in accurately

Spread the cubes further apart. How many do we have now? How do you know?

- Immediately gives accurate count and explains that the number has not changed.
- Takes a close look, may start to count then gives correct number and says the number is the same.
- Recounts and gives the number. Explains they counted.
- Gives a larger number. Explains there are more or they take up more space.

Put the cubes together in a train. How many do we have now? How do you know?

- Immediately gives accurate count and explains that the number has not changed.
- Takes a look, may begin to count then give the correct number and says it is the same.
- Recounts and gives the number. Explains they counted.
- Gives a smaller number. Explains there are fewer or they take up less space.

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding	accurately counts sets up to 5, difficulty with larger sets, reforms set each time without counting on or combining, can create some sets of more and less,(less than 15) demonstrates a very limited understanding of estimating and number relationships by explaining inappropriately	accurately counts sets up to 10, some difficulty with larger sets reforms set each time without counting on or combining, can create some sets of more and less,(less than 10) demonstrates a basic understanding of estimating and number relationships by explaining simply and/or incompletely	accurately counts most sets up to 20, usually counts on to create a new set, can create a number of sets of more and less, combines some sets to make new sets demonstrates a general understanding of estimating and number relationships by explaining generally	accurately counts sets up to 20, counts on to create a new set, can create a variety of sets of more and less, combines sets to make new sets demonstrates a thorough understanding of estimating and number relationships by explaining completely and appropriately
Thinking	makes a guess with no clear strategy	uses a simple strategy to make a somewhat reasonable estimate	uses an appropriate strategy to make a reasonable estimate	uses an effective strategy to make a good estimate
Communication	communicates process, unclearly	communicates process somewhat clearly	communicates process generally clearly	communicates process clearly and precisely