*Mathematics Instructional Plan – Kindergarten*

# Garbage

Strand: Number and Number Sense

Topic: Counting to 10, identifying numerals

Primary SOL:K.3 The student will

1. count forward orally by ones from one to 100;
2. count backward orally by ones when given any number between 1 and 10;
3. identify the number after, without counting, when given any number between 0 and 100 and identify the number before, without counting, when given any number between 1 and 10.

Related SOL:K.1,K.2

## Materials

* Large deck of cards for display
* Regular decks of cards with face cards removed (one deck per partner set, or small groups of three) or decks with numeral cards 1-10 (attached)

## Vocabulary

*count, number, numeral, one (1), two (2), three (3), four (4), five (5), six (6), seven (7), eight (8), nine (9), ten (10), before, after, more, less, fewer, same*

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

*Note: This activity focuses specifically on using relationships between the numbers one through ten to be able to sequence them correctly.*

1. Place cards 1 to 10 randomly on the floor. Call attention to the ace and explain that this card will represent the number one because it only has one symbol in the middle. Have students share numbers they recognize and can name. Ask, “Are the cards in order?” Have students share ideas about the order of numbers 1 to 10.
2. Teach students the game “Garbage.” Shuffle a deck of cards with the Jack, Queen, King, and Jokers removed. Deal 10 cards facedown to each player. Place extra cards in the draw pile. Players arrange their cards (facedown) in a 10-frame pattern as shown below.

The first player takes a card from the draw pile and looks at it. The player names the card and then places it in the proper place by counting. For example, “I have a 6 and it goes in the 1, 2, 3, 4, 5, 6 space.” The 6 is placed face up and the card underneath is revealed.

graphic of ten cards


1. The card revealed under the 6 is then named, and the player tries to explain where it goes in relation to the first card (i.e., the 6). For example, if the uncovered card is a 10, the student might say, “10 is more than 6,” and count on from 6 to get to 10. Or, the player may have to start back at 1 to count all the way to the 10’s space. Once the appropriate space is determined, that card is placed face up and the card beneath it is revealed. With each play, the student tries to articulate how the two numbers relate to one another in order to place the new card.
2. Play continues until a card is revealed that has already been played. If the player uncovers a card that has already been placed (face up), he or she calls, “Garbage!” and puts that card face up into a discard pile next to the draw pile.
3. Player Two begins the same way, by drawing from the draw pile. Or, the player may use the top card in the “garbage” pile to start play.
4. Each time “Garbage!” is called, play transfers to the next player. The object of the game is for the players to reveal and order their cards from 1 to 10. The game is over when the first player achieves that objective.
5. As you interact with children as they play, use the questions below. You should observe and listen for students to use counting on, counting back, before, and after, as well as other strategies to describe the placement of each number.

## Assessment

### Questions

* How did you know where the \_\_\_ went?
* Which numbers are you missing?
* Is there another way you know that the number goes in that space?
* What do you know about these two numbers: \_\_\_ and \_\_\_?
* Can you tell me where \_\_\_ goes? Is it before or after \_\_\_? How do you know?

### Journal/writing prompts

* Give students a blank ten frame with one or two numbers filled in. Ask them to write the number that goes in a spot that you have designated with a star.
  + Write the number that comes before 8. Write the number that comes after 3.

### Other Assessments

* Observe as students play the game to determine what strategies are being used. A student who always counts up from one, can be encouraged to think about one more, one less, counting on or counting back as another strategy.

## Extensions and Connections (for all students)

* Use the game to practice the numbers 11 – 20. Create a deck of cards that includes at least three of each of these numerals.\*
* Use the game to practice counting by tens. Create a deck of cards that includes at least three of each tens number. (10, 20, 30, etc.)
* To practice and encourage subitizing, use cards with dot patterns or dots in ten frames with no numerals.\*
* Because the cards are laid out in a ten frame arrangement, doing number talks or quick image activities with ten frames will encourage students to make connections to the dot patterns in the ten frame as they play this game.

## Strategies for Differentiation

* Play with a smaller range of numbers. Begin with 1 to 5 and slowly add numbers as the counting sequence is mastered.
* Provide a number path for students for students to refer to who know the oral sequence, but have difficulty with numeral recognition.\*

\* Please see MIP K.1 titled “How Many? Counting Centers” and MIP K.4 titled “Subitizing with Dot Cards” for a variety of cards that could be used for this game.

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**Numeral Cards 0-20**

| 1  ☺ | 2  ☺☺ | 3  ☺☺☺ | 4  ☺☺☺☺ | 5  ☺☺☺☺☺ |
| --- | --- | --- | --- | --- |
| 6  ☺☺☺☺☺ ☺ | 7  ☺☺☺☺☺ ☺☺ | 8  ☺☺☺☺☺ ☺☺☺ | 9 ☺☺☺☺☺ ☺☺☺☺ | 10  ☺☺☺☺☺ ☺☺☺☺☺ |
| 1  ☺ | 2  ☺☺ | 3  ☺☺☺ | 4  ☺☺☺☺ | 5  ☺☺☺☺☺ |
| 6  ☺☺☺☺☺ ☺ | 7  ☺☺☺☺☺ ☺☺ | 8  ☺☺☺☺☺ ☺☺☺ | 9 ☺☺☺☺☺ ☺☺☺☺ | 10  ☺☺☺☺☺ ☺☺☺☺☺ |