

## Grade 2

# Race to Zero

## Module 12-Addition and Subtraction

Your child is learning to use number relationships to help him or her solve addition and subtraction problems with multi-digit numbers. He or she is learning to estimate the answers for 2 and 3-digit numbers. Use this activity to help your child practice estimating and solving two-digit subtraction problems.

### Object of the game:

The object of the game is to be the first player to arrive at zero.

### Materials:

- Digit Cards
- Paper and pencil (for keeping score)
- Container, paper bag, or cup to hold digit cards

### Directions:

#### Round One

1. Cut out both sets of digit cards and place the cards in a cup or paper bag.
2. Player 1 chooses 2 digit cards and creates a number. For example, if the player chooses 6 and 3, the number he or she creates could be 36 or 63.
3. On a sheet of paper, Player 1 subtracts this number from 99.
4. Player 1 returns the used digit cards to the cup.

5. Player 2 repeats the same process (#'s 2-4 above).

### **Round Two**

6. For round 2, Player 1 selects 2 new digit cards and creates a number.
7. Player 1 subtracts this number from the difference he or she obtained in round 1.
8. Player 1 returns the used digit cards to the cup.
9. Player 2 repeats this process (# 6-8)

### **Round Three and Subsequent Rounds**

10. Players choose 1 or 2 digit cards, create a number and subtract this number from the previous difference.
11. Players continue to take turns subtracting until one player reaches zero.
12. As differences come closer to zero, players may find that their numbers when subtracted would be less than zero (a negative number). In this case, the player skips his or her turn.
13. The first player to arrive at zero wins the game.

### **Challenge:**

- Begin with a number larger than 99 (for example, 200).
- Each time you play the game, begin with a different number.

### **Questions to ask your child while playing:**

- Estimate the difference before you subtract. How did you think about that?
- When or why might you choose only one digit card rather than two?

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## Digit Cards

1	2	3	4
5	<u>6</u>	1	2
3	4	5	<u>6</u>
1	2	<u>3</u>	4

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## Digit Cards

5	<u>6</u>	1	2
3	4	<u>5</u>	6
1	<u>2</u>	3	4
5	6	0	0