

# Rounding Numbers A Kit for 3<sup>rd</sup> and 4<sup>th</sup> Grades

# **Rounding Numbers**

It is important that students learn how to round numbers to an identified place value. This will help them as they work through more and more difficult mathematics. Following are eight activities to help youth learn this important mathematical skill.

# **Activity 1**

**Purpose:** The purpose of this activity is to give students practice round numbers less that 1,000 to the nearest hundred.

#### Materials:

Numerals written on 8.5" x 11" paper (1 per sheet) You should have three sets of numerals from 0-9 each number

Deck of cards (Remove 10, Jacks, Queens, and Kings—Leave the jokers to count as a zero

White Boards

Crayolas and erasers or socks

- Distribute the large numbers to the students. Some may have more than one number
- 2. Review the process of rounding numbers with students—establish that if the number in the place to the right of the place you are rounding to is 5 or ↑ the number is bumped up. If the number in the place to the right of the place you are rounding to is 4 or ↓, the number stays the same.
- 3. Have students practice several rounding operations.
- 4. Explain that you are going to be rounding to the hundreds place.
- 5. Call one student up to be the Number Generator and have the Number Generator draw three cards
- 6. Number Generator determines what his or her number will be and then calls the number out. For example: if a student draws a 3, 6, and 9, he/she could call out 369, 693, 936 and so on
- 7. Once the student has called out the number, the students with any one of the digits needed to make the number comes to the front of the room and form the number.
- 8. The Number Generator then calls on a student who believes he/she knows how to round the number. If the number goes up, the student must have the next highest number. If the number stays the same, the student must have the number that will remain.
- 9. If the student rounds the number correctly, he/she becomes the next Number Generator.

**Purpose:** The purpose of this activity is to have students practice rounding numbers to the hundreds place.

#### Materials:

White boards Chart paper Crayolas or pens, erasers or socks

#### Directions:

- 1. Write the following numbers on the board
- 2. Ask students to round each number to the nearest hundred and write the answer on the individual white board
- 3. When finished, have students give themselves a point for each correct answer
- 4. Students with 10 or more points earn 5 minutes of math games.

## List of numbers to write on the chart:

869	554
345	972
432	856
723	389
685	143
269	899

# **Activity 3**

**Purpose:** The purpose of this game is to give students and opportunity to round numbers to the nearest 10 or 100, dependent on how you set up the Rounding Bingo Boards.

#### Materials:

Bingo Grids (5 x 5 with the center space marked with FREE) Two-three 9 sided dice Tokens or paper to create tokens

#### Directions:

1. If you are going to round to the tens place, students should randomly place the numbers 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, and 100 randomly in the 24 spaces on the card. If you are going to round to the hundreds place, you will need three 9-sided dice and students should randomly write the numbers 0, 100, 200, 300, 400, 500, 600, 700, 800; 900, and 1,000 in the 24 spaces on the card.

- 2. Choose one student to be the Number Generator
- 3. The Number Generator rolls 2 or 3 dice (dependent on what you are rounding to) and rolls the dice.
- 4. Number Generator calls out the number rolled, for example 6, 4 or 6, 4, and 9. If the two numbers are 6 and 4, the player may call the number 64 or 46. The student would choose 64 if they needed to cover a 60 on the board, and they would choose 46 if they had a 50 on the board to cover.
- 5. BINGO is generated by either all spaces being covered horizontally, vertically, or diagonally.
- 6. If the number has a chip on it, the student should reverse the digits to determine if there is a play.
- 7. Winner is the students who calls "BINGO"

**Purpose:** The purpose of this game is to help children practice rounding numbers in the game, Rounding War.

#### Materials:

Two decks of cards with the tens, Jacks, Queens, and Kings removed. Note: The Joker will count as 0.

- 1. Shuffle the two decks of cards together.
- 2. Equally divide the cards between the two players.
- 3. Players leave the deck face down in front of them and will choose cards from the top of the deck for each hand.
- 4. Players must choose whose card will be in the tens place and whose card will be in the ones place. Note: the suit of the card does not matter
- 5. At the same time each player turns over his/her card
- 6. Player looks at the cards and round the number to the nearest 10. Example, if the tens player has a 4 and the ones player has and 8, then the value of the cards is 48 and when the number is rounded off it would be 50—which Is what the student calls out.
- 7. Game continues at a fast pace, winner taking all of the cards
- 8. Player wins when he/she has all of the cards, or if time is called, the most cards.

**Purpose:** The purpose of this game is for students to practice round numbers by playing Around the World

#### Materials:

2 or 3 digit numbers written on cards (have twice as many cards as students)

#### **Directions:**

- 1. Choose one child to be the challenger
- 2. Have the rest of the class sit in a circle
- 3. Hold up a card with a two or three digit number on it and the first student who provides the rounded number moves forward to stand next to the person in the circle
- 4. Student who doesn't win, sits in the chair.

# **Activity 6**

**Purpose:** The purpose of this activity is to provide students with an opportunity to practice rounding numbers by playing Rounding Can.

#### Materials:

11 baskets or tubs

40 number cards with numbers printed on them between 1 and 99—be sure to skip the numbers that will be placed on the bucket as outlined below

- 1. Label each container either 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, and 100.
- 2. Spread the containers out (you may want to play outside)
- 3. Spread the number cards out in front of the containers
- 4. Divide students into two teams (this game will be played like a relay)
- 5. When you say "Go", student from each team runs out, gets a number and rounds it to the nearest 10 and places it in the appropriate container.
- 6. Once the student places the number in a container, if the student is correct, the team gets one point.
- 7. Student then return to his/her team mates, tags hands, and then the next player begins
- 8. Team wins if they have the most numbers in the containers

**Purpose:** The purpose of this game is for students to practice round numbers to the nearest hundred by rolling the dice in groups of three.

#### Materials:

3 die of different colors (for example: red for hundreds, blue for tens, and green for ones)

White Boards

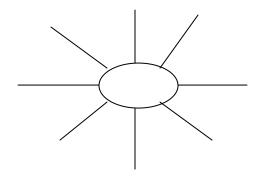
Crayolas, pens, socks and erasers

- 1. Divide students into groups of three
- 2. Remind student which color die is for which place value
- 3. Students roll the dice at the same time
- 4. Students each write down the number on the white board and round to the nearest hundred
- 5. Student who gets the correct answer first, gets one point.

**Purpose:** The purpose of this game is for students round numbers to the nearest hundred.

#### Materials:

2 game board that looks like the following



- 1. In the center write "Nearest 100"
- 2. In between each spoke, write different three digit number
- 3. Create a second game board that looks exactly the same
- 4. Divide students into two teams
- When you say, "Go" one person from each team comes forward and rounds a number on the game board—writing the rounded number beside the target number
- 6. Student returns to his team and a second team member repeats the process
- 7. The winning team will be the first team that has successfully rounded all numbers on the game board to the nearest 100,

