#### **READING MATERIAL**

# Read About Numbers in Expanded and Word Form (1,000 & Beyond)

#### WHAT ARE NUMBERS IN EXPANDED AND WORD FORM?

The expanded form of a number rewrites a number as a sum of the values of its digits: 423 = 400 + 20 + 3. The word form of a number rewrites a number using words that represent the value of its digits: 423 = four hundred twenty-three.

To better understand numbers in expanded and word form...

# LET'S BREAK IT DOWN!

# The Hundred Thousands Place

You already know about place values for numbers under one thousand, like 857. Place value is the value of a digit based on its position in a number: in 857, the 7 is in the ones place, the 5 is in the tens place, and the 8 is in the hundreds place.
857 is made up of 8 hundreds, 5 tens, and 7 ones. Tens are 10 times larger



than ones and hundreds are 10 times larger than tens. The one thousands place is 10 times larger than the hundreds place. The ten thousands place is 10 times larger than the one thousands place. The hundred thousands place is 10 times larger than the ten thousands place. In 72,561, 7 is in the ten thousands place, 2 is in the thousands place, 5 is in the hundreds place, 6 is in the tens place, and 1 is in the ones place. Now you try: Name the value of each position in 426,141.

### **Medals**

April, Adesina, and Marcos organize a fun run with 5,327 participants.

They need to buy a ticket for each participant, and tickets come in packs of 1,000, 100, 10, or individually.

The larger the pack, the better the value. To get the best value, they can expand 5,327 to 5,000 + 300 + 20 + 7.

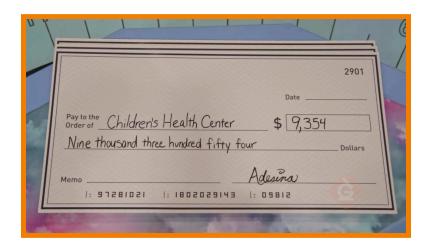
Now they know that they can buy 5



thousand packs, 3 hundred packs, 2 ten packs, and 7 individual tickets. From this fundraiser, they raised 2 million 257 thousand 16 dollars. To break this number into expanded form, they write 2,000,000 + 200,000 + 50,000 + 7,000 + 10 + 6 dollars. If there is a zero for a place value, we can just skip it when we are writing in expanded form. Now you try: Expand 6 million 53 thousand 509 dollars.

# **Writing Checks**

Adesina, April, and Marcos write checks to charities with the money they raised at the run. The Children's Health Center receives \$9,354. When writing a check, numbers have to be written in both standard form and word form: 9,354 is nine thousand three hundred fifty-four. When we write large numbers in standard



form, we use commas to separate the thousands from the hundreds. The Kids Foundation receives \$95,214, which we write out as ninety-five thousand two hundred fourteen dollars. The last check goes to the Children's Research Hospital and is for \$2,104,515. We write two million one hundred four thousand five hundred fifteen dollars. Now you try: Write 7,042,390 in word form.

# **Comparisons**

Adesina hosts a game show called "Greater Than or Less Than?!" You must decide which number is greater. Compare 4,205 to 4,109. We compare the place values from largest to smallest. They both have 4 in the thousands place, so next, we check the hundreds place. 2 hundreds is greater than 1 hundred



so 4,205 is greater than 4,109. Using symbols, this is written as 4,205 > 4,109. To compare 74,825 and 74,852, the ten thousands, thousands, and hundreds places are the same, so we look at the tens place next. Since 5 is greater than 2, we write 74,852 > 74,825. Now you try: Which place value tells us if 539,709 or 539,791 is greater?

# NUMBERS IN EXPANDED AND WORD FORM (1,000 & BEYOND) VOCABULARY

Place value	The value of a digit based on its position in a number.
Base 10	The number system we use. It means that every digit is 10 times the digit to its right.
Expanded form of a number	A number broken up by place value and written as a sum.
Standard form of a number	A number written using only digits. 234 is in standard form.
Word form of a number	A number written using only words. Two hundred thirty-four is in word form.
Sum	The result of addition.

NUMBERS IN EXPANDED AND WORD FORM (1,000 & BEYOND) DISCUSSION QUESTIONS

### What is the value of each digit in 2,593,203?

2 millions, 5 hundred thousands, 9 ten thousands, 3 thousands, 2 hundreds, 0 tens, and 3 ones.

#### How do we say or write 2,953,203?

Two million nine hundred fifty-three thousand two hundred three. Skip the 0 in the tens place.

# Compare 2,953,203 and 2,942,030. Which place value did you use to identify the greater number?

2,953,203 > 2,942,030; The ten thousands place: the numbers in the millions and hundred thousands places are the same, but in the ten thousands place, 5 is greater than 4.

## How do you write twenty-six thousand four?

26,004.

# How do you write three million nine hundred three thousand four hundred twenty?

3,903,420.