



**STATE COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING  
TELANGANA, HYDERABAD**

**ACADEMIC YEAR 2020-21**

**LEVEL-2**

Class: III

Medium : English

Subject : Mathematics

Name of the Chapter :

**NUMBERS**

Worksheet No. : **08**

Topic/Concept :

**Writing the expanded and short forms for the numbers upto 999.**

**I. Learning outcomes :**

1. Able to calculate the sum by counting hundreds, tens and ones and write the number of hundreds, tens and ones in a number.
2. Able to write expanded form of a number from its short form and short form of a number from its expanded form.

**II. Conceptual understanding/Activity/Model problems:**

- Have you ever seen counting in groups? In what situation have you seen it ?
- Sita has 4 hundred rupee notes, 2 ten rupee notes, 5 one rupee coins. Then how much money she has in total ?
- We use 100s, 10s and ones in groups for counting money and objects on many occasions in everyday life. This method is suitable for number concept.

**Hint :** See the activity “Bricks in groups” on page number 24 and understand how Mayuri counted the bricks.

**1. Bricks in groups.**



- How did Mayuri count the bricks?
- Did you ever count like this? If so, when?

Mayuri's method of calculation:

Groups of 100 bricks	Groups of 10 bricks	Bricks left	Total number of bricks
2	7	4	$200 + 70 + 4 = 274$

Counting like this is an easy process. So we notice that the money is also calculated like above.

We have just learnt how to count the total number of bricks when the bricks are arranged in groups as shown above.

Now let's understand how to arrange the total number of bricks in groups.

Total number of bricks	Groups of 100 bricks	Groups of 10 bricks	Bricks left
375	3	7	5

## 2. Learn how to write expanded and short form of three digit numbers.

### a. Write the expanded form of 375

$$\begin{aligned}
 375 &= 3 \text{ hundreds} + 7 \text{ tens} + 5 \text{ ones} \\
 &= 3 \times 100 + 7 \times 10 + 5 \times 1 \\
 &= 300 + 70 + 5
 \end{aligned}$$

### b. Write short form of $400 + 20 + 3$

$$400 + 20 + 3 = 4 \text{ hundreds} + 2 \text{ tens} + 3 \text{ ones}$$

=	Hundreds	Tens	Ones
	4	2	3

$$= 423$$

### 3. Observe the following model Problems.

- a. Raheem has 2 hundred rupee notes, 7 ten rupee notes and 4 one rupee coins. How much money does Raheem have in total ?

**Solution :** Total money that Raheem has =  $2 \times 100 + 7 \times 10 + 4 \times 1$   
 $= 200 + 70 + 4$   
 $= 274$

- b. Raju has 7 hundred rupee notes, 0 ten rupee notes and 8 one rupee coins. How much money does Raju have in total ?

**Solution:** Total money that Raju has =  $7 \times 100 + 0 \times 10 + 8 \times 1$   
 $= 700 + 0 + 8$   
 $= 708$

#### Hint :

For more information on number expansion form See the activity on page number 25 from your textbook.

### III. Worksheet :

#### 1. Write the correct digit of the place mentioned in the blank boxes.

**Example:**  $563 = 5 \text{ Hundreds} + 6 \text{ Tens} + 3 \text{ Ones}$

a.  $769 = \square \text{ Hundreds} + \square \text{ Tens} + \square \text{ Ones}$

b.  $407 = \square \text{ Hundreds} + \square \text{ Tens} + \square \text{ Ones}$

c.  $333 = \square \text{ Hundreds} + \square \text{ Tens} + \square \text{ Ones}$

d.  $220 = \square \text{ Hundreds} + \square \text{ Tens} + \square \text{ Ones}$

e.  $130 = \square \text{ Hundreds} + \square \text{ Tens} + \square \text{ Ones}$

**2. Write the following numbers in expanded form.**

**Example:**  $325 = 300 + 20 + 5$

a.  $215 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

b.  $446 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

c.  $809 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

d.  $753 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

e.  $620 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

f.  $373 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

**3. Write short forms for given expanded forms.**

**Example:**  $400 + 50 + 6 = 456$

a.  $500 + 30 + 7 = \underline{\hspace{2cm}}$

b.  $600 + 0 + 8 = \underline{\hspace{2cm}}$

c.  $800 + 80 + 8 = \underline{\hspace{2cm}}$

d.  $200 + 0 + 4 = \underline{\hspace{2cm}}$

e.  $300 + 50 + 0 = \underline{\hspace{2cm}}$

**4. Find and circle the number from the given numbers for the expanded forms given below.**

**Example:**  $300 + 0 + 8 :$       38      83      308

a.  $400 + 20 + 3 :$       324      423      420

b.  $300 + 60 + 7 :$       367      376      360

c.  $500 + 40 + 0 :$       504      540      450

d.  $80 + 7 :$       807      87      780

e.  $800 + 80 + 8 :$       850      880      888

5. Expand the number 920.
6. Raju has 7 hundred rupee notes, 8 ten rupee notes and 4 one rupee coins.  
How much does Raju have in total ?
7. Write the short form for the expanded number  $500 + 50 + 5$ .
8. How many hundreds, tens and ones are there in 706 ?
9. Ramya has 4 hundred rupee notes and 9 one rupee coins. How much does Ramya have in total ?
10. How many hundreds, tens and ones are there in 890 ?

#### Instructions :

- ★ Practice the problems on page number 26 and 28.
- ★ Similarly, collect some more problems and discuss them with your friends.

#### IV. What I have learnt :

1. I can calculate the sum by counting hundreds, tens and ones and write the number of hundreds, tens and ones in a number.  

A. Can do (     )B. Can't do (     )
2. I can write expanded form of a number from its short form and short form of a number from its expanded form.  

A. Can do (     )B. Can't do (     )