

# Primary

# MATHEMATICS

(Class-III)



Publication Division

**D.A.V. College Managing Committee**

Chitra Gupta Road, New Delhi-110055

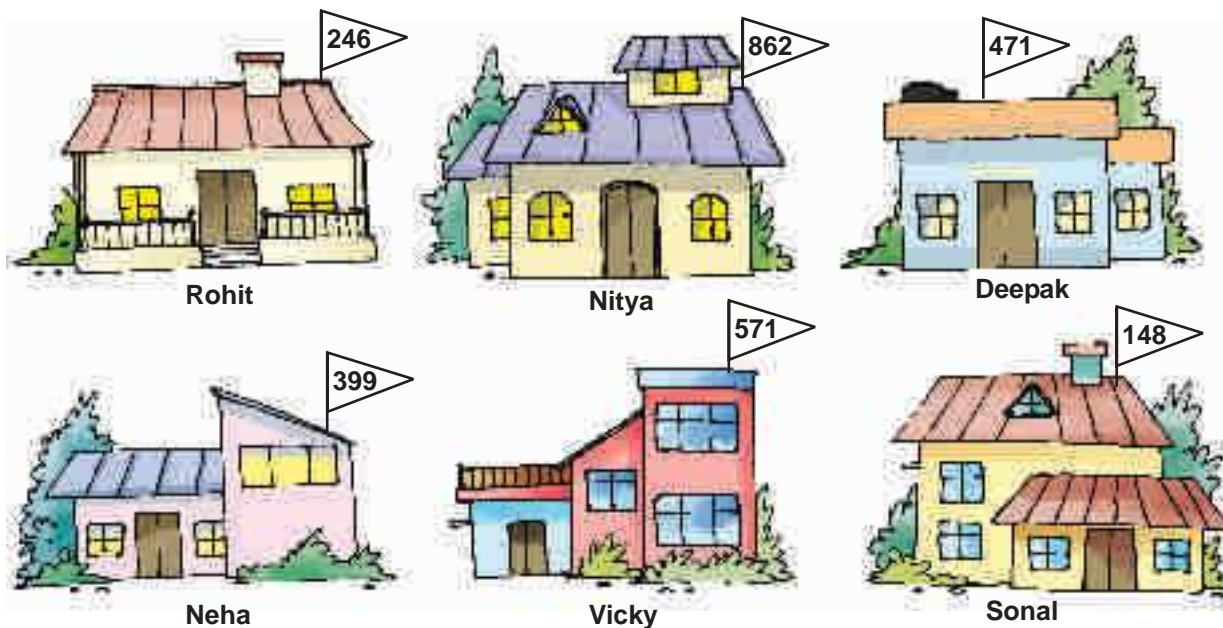
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## Unit – 1

## NUMBERS UP TO 9999

Let us play with Numbers.



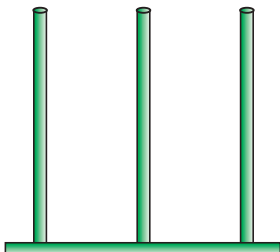
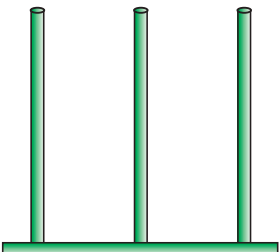
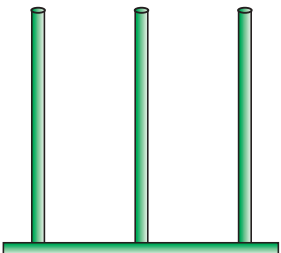
1. House numbers of some children are given here. Write the number names of their house numbers in the space provided. The first one is done for you.

Child Name	House Number	Number Name
(a) Rohit	246	Two hundred forty six
(b) Nitya		
(c) Deepak		
(d) Neha		
(e) Vicky		
(f) Sonal		

2. Write the house numbers of the following children and arrange them in the ascending order.

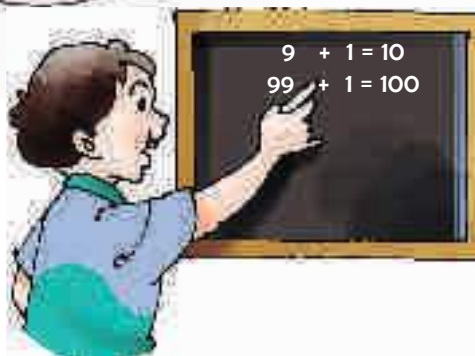
Child Name:	Rohit	Sonal	Nitya	Deepak	Neha
House No.:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ascending order:	<input type="text"/>				

3. Arrange the house numbers of the following children on the given abacus.

Names:	Rohit	Vicky	Deepak
			
House No.:	<input type="text"/>	<input type="text"/>	<input type="text"/>

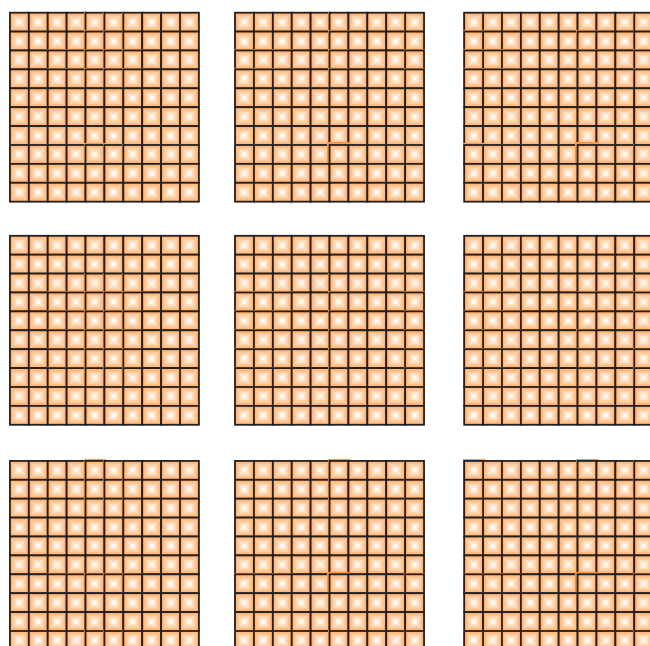
4. What is one more than the house number of Rohit?
5. What is one less than the house number of Deepak?
6. How much more is the house number of Vicky than Deepak?
7. Find the sum of the house numbers of Sonal and Nitya.
8. Write the name of the child whose house number is—
- (a) the smallest.
- (b) the greatest.
- (c) greater than 500 but less than 800.
- (d) between 350 and 450.

## ONE THOUSAND

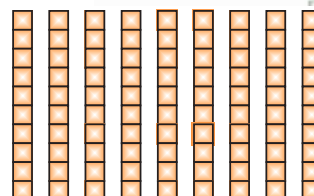


Now let us see what is 1 more than 999?

If we have **999** blocks....



900



90



9

and we add 1 more block , we get **1000** blocks.

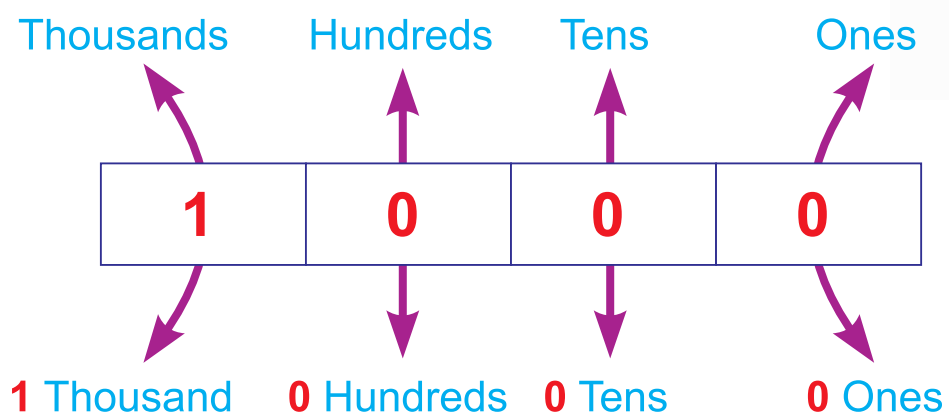
$$999 + 1 = 1000$$

We read 1000 as One Thousand

Count the number of digits in 1000.

The places of the 4 digits in **1000** are—

1000 has 4 digits.



**Remember**

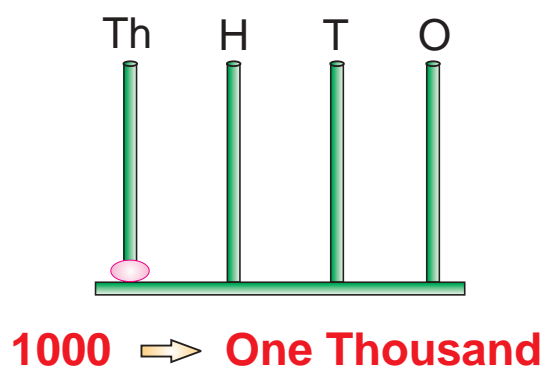
10 ones = 1 ten

10 tens = 1 hundred

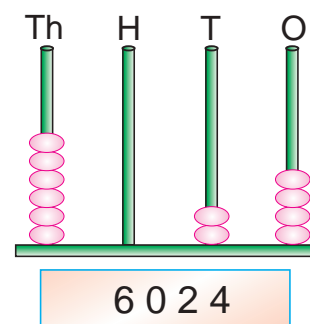
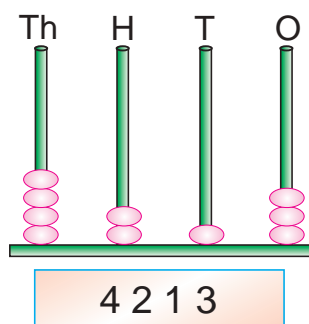
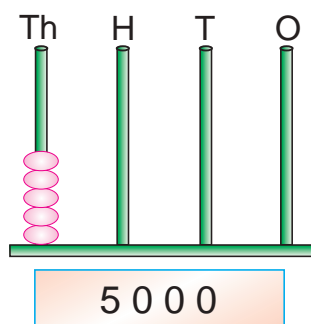
10 hundreds = 1 thousand

Ten hundreds      One thousand

On the abacus, 1000 is shown like this—

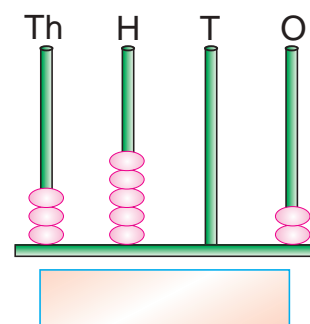
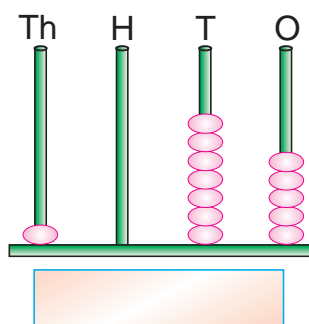
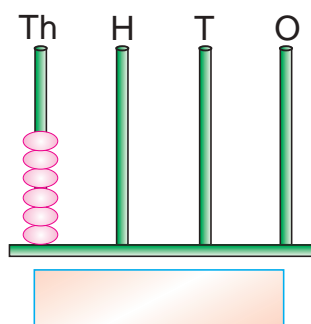
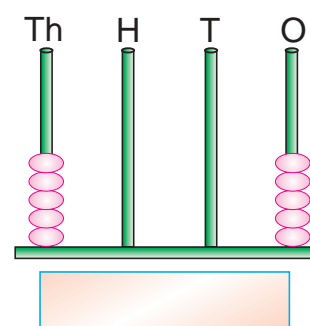
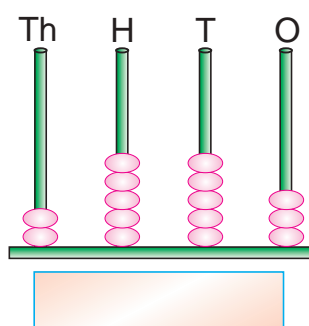
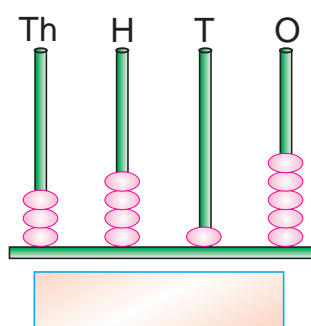


See the representation of some 4-digit numbers on the abacus.

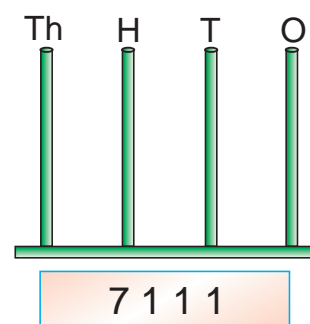
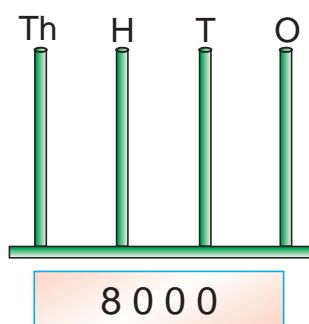
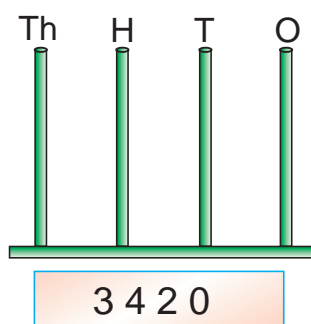


## Worksheet 1

1. What number does the abacus show?

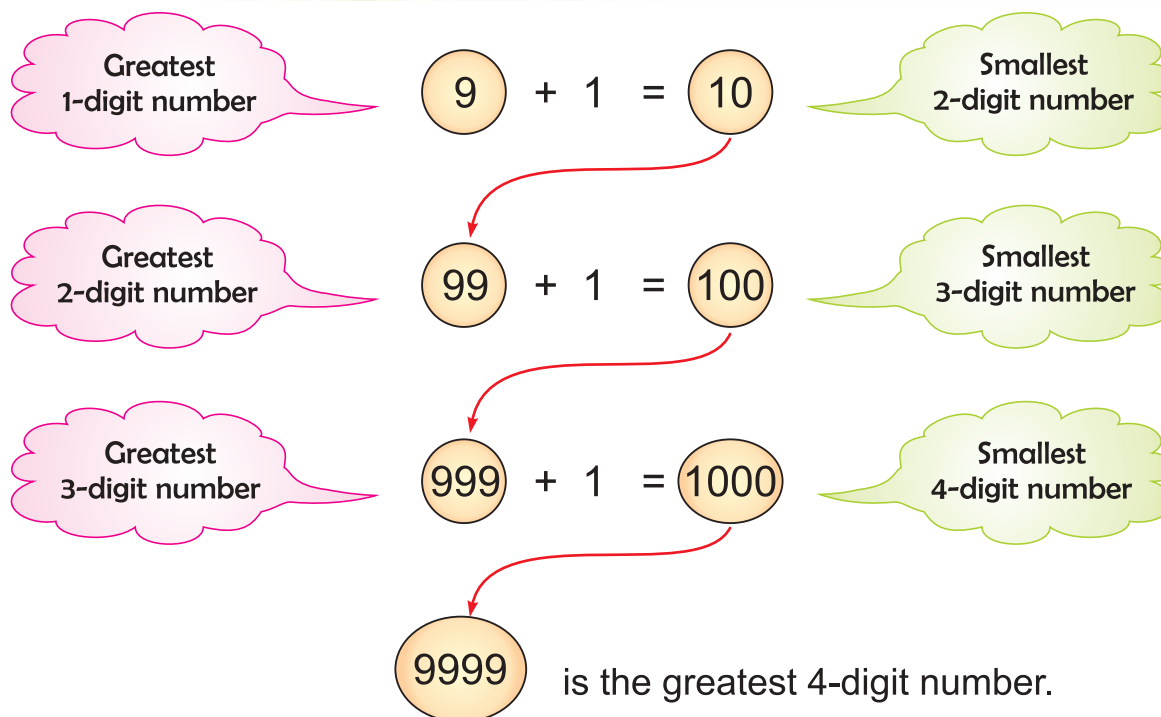
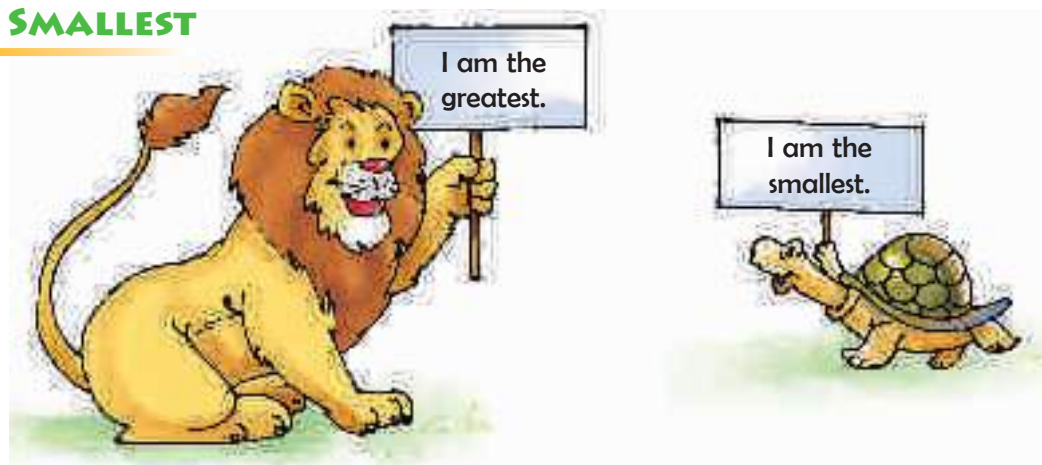


2. Represent the following numbers on the abacus.





## GREATEST AND SMALLEST



Thus, the greatest 4-digit number is \_\_\_\_\_

## Worksheet 2

1. Fill in the blanks by picking up the correct number from the following box.

9      999      1000      9999      100      10

(a) The smallest 3-digit number is

(b) The smallest 2-digit number is



- (c) The greatest 3-digit number is
- (d) The greatest 4-digit number is
- (e) The smallest 4-digit number is
- (f) The greatest 1-digit number is

## 2. Which one is greater?

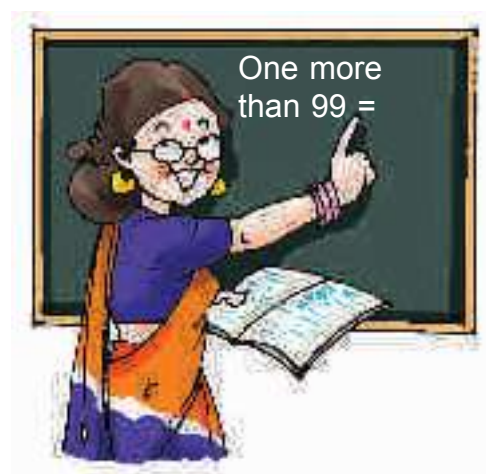
- (a) Greatest 3-digit number or Greatest 4-digit number.
- (b) Smallest 4-digit number or Greatest 3-digit number.

## 3. What is one more than the—

- (a) greatest 2-digit number?
- (b) greatest 3-digit number?

## 4. What is one less than the—

- (a) smallest 4-digit number?
- (b) smallest 2-digit number?



Now let us read numbers beyond 1000.

**I Write**

**Numbers**

1 0 0 0

4 0 0 0

6 5 0 0

7 2 1 6

9 9 9 9

**I Read**

**Number Names**

One thousand

Four thousand

Six thousand five hundred

Seven thousand two hundred sixteen

Nine thousand nine hundred ninety nine



## Worksheet 3

### 1. Read loudly the following numbers.

- |          |          |          |          |
|----------|----------|----------|----------|
| (a) 2000 | (b) 4321 | (c) 7701 | (d) 2508 |
| (e) 8006 | (f) 9998 | (g) 7256 | (h) 6066 |

### 2. Write the number names for the following:

- |          |          |          |          |
|----------|----------|----------|----------|
| (a) 7000 | (b) 7312 | (c) 6806 | (d) 4509 |
| (e) 9009 | (f) 9993 | (g) 4356 | (h) 2020 |

### 3. Write the numerals for the following:

- |  |                               |
|--|-------------------------------|
| (a) Four thousand five hundred nine    | (b) Three thousand six        |
| (c) Five thousand nine hundred fifty   | (d) Four thousand eighty nine |
| (e) Four thousand eight hundred five   | (f) Two thousand twenty       |
| (g) Six thousand six hundred sixty six | (h) Nine thousand nine        |

## PLACE VALUE

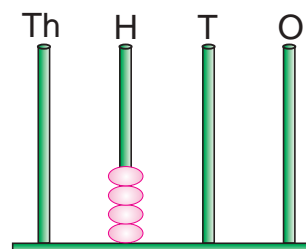
Look at this 4-digit number.

TH	H	T	O
3	4	9	6

One of the digits has been encircled.

	TH	H	T	O
The value of 4 in	3	4	9	6

On the abacus, the value of 4 is shown as



	TH	H	T	O	
Similarly, the value of 4 in	4	2	9	6	is four thousand or 4000.

**Remember**

The value of a digit in a number depends on its place in that number. It is called its **Place Value**.

**Worksheet 4**

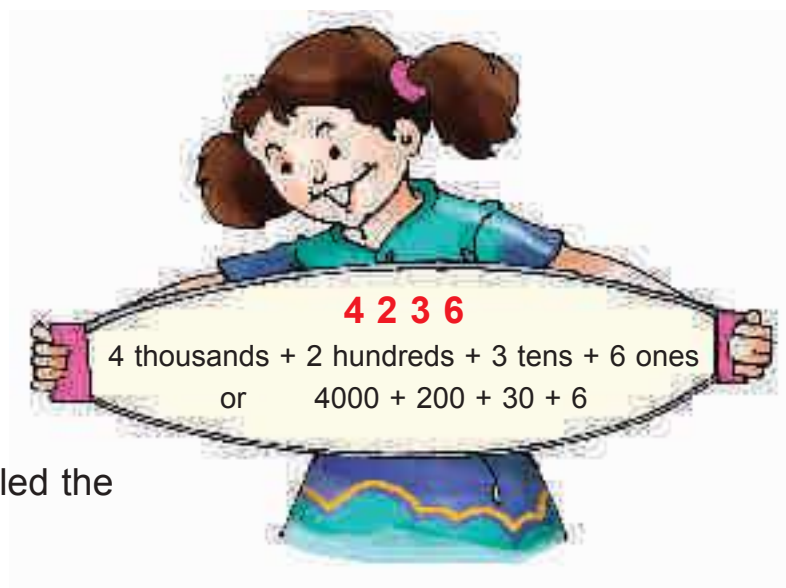
1. Draw the abacus in your notebook and show the value of the encircled digit. Also write the value.

(a) 5 8 **2** 4(b) 9 0 8 **4**(c) **7** 2 5 3(d) 6 6 **4** 2(e) 1 **3** 2 4(f) 6 8 **0** 8

2. Write the value of the encircled digit in the given numbers.

(a) **7** 7 9 6(b) 3 4 **8** 0(c) 1 **8** 9 6(d) 8 9 4 **3**(e) 2 1 6 **0**(f) 2 **5** 0 3**EXPANDED FORM**

See how Neha writes the number giving the details of the place value as well.



This form of writing a number is called the **Expanded Form**.

The expanded form of a number can be written in two ways:

$$9021 = 9 \text{ thousands} + 0 \text{ hundreds} + 2 \text{ tens} + 1 \text{ ones}$$

or

$$9000 + 0 + 20 + 1$$

## Worksheet 5

1. Write the following numbers in expanded form in two ways.

(a) 3462

(b) 4621

(c) 8001

(d) 673

(e) 9018

(f) 3303

(g) 1463

(h) 999

2. Write the numeral for each of the following. The first one is done for you.

$$(a) \quad 7000 + 300 + 20 + 1 =$$

7321

$$(b) \quad 6000 + 0 + 40 + 8 =$$

$$(c) \quad 5000 + 800 + 0 + 9 =$$

$$(d) \quad 4000 + 200 + 10 + 0 =$$

$$(e) \quad 9000 + 900 + 90 + 9 =$$

$$(f) \quad 2000 + 0 + 0 + 2 =$$

$$(g) \quad 1000 + 0 + 30 + 0 =$$

$$(h) \quad 3000 + 500 + 30 + 7 =$$

$$(i) \quad 8000 + 100 + 10 + 1 =$$

$$(j) \quad 4000 + 0 + 0 + 0 =$$

## SUCCESSOR AND PREDECESSOR



In numbers, the—

**PREDECESSOR is 1 less**

and

**SUCCESSOR is 1 more**

The number that comes just before a particular number is called its **predecessor**.

For example:

**999** is the **predecessor** of **1000**

The number that comes just after a particular number is called its **successor**.

For example:

**398** is the **successor** of **397**

### Worksheet 6

1. Write the predecessor of—

(a) 492

491

(b) 6924

(c) 1001

(d) 5050

(e) 810

(f) 3188

2. Write the successor of—

(a) 596

597

(b) 999

(c) 2099

(d) 7008

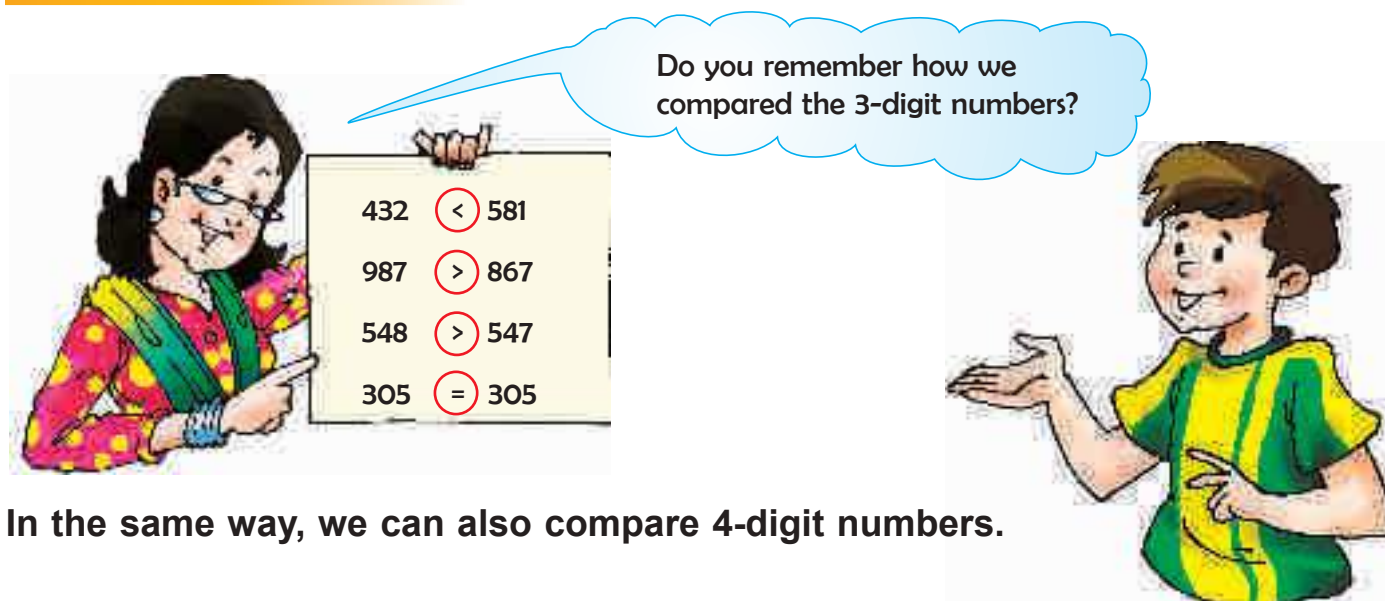
(e) 4129

(f) 4837

3. Write the successor of the largest 3-digit number.

4. Write the predecessor of the smallest 4-digit number.

## ORDERING OF NUMBERS



In the same way, we can also compare 4-digit numbers.

**Remember**

First we compare the total number of digits.  
 Then, we compare the digits in thousands place.  
 Next, we compare the digits in the hundreds place, and  
 Lastly, we compare the digits in the tens and ones places respectively.

Let us compare some numbers.

1. 4 7 8 < 4 0 7 8 (4078 has **more** digits.)
2. 5 3 2 6 > 4 8 9 3 (We compare the digits in **thousands** place.)
3. 9 8 2 1 > 9 6 3 1 (We compare the digits in **hundreds** place.)
4. 8 0 3 4 < 8 0 7 8 (We compare the digits in **tens** place.)
5. 2 1 1 8 = 2 1 1 8 (We compare the digits in **ones** place.)

## Worksheet 7

1. Compare using '>' '<' or '='. The first one is done for you.

(a) 1274  7394

(b) 999  9099

(c) 8307  8305

(d) 6225  6552

(e) 4884  4848

(f) 6182  3162

(g) 1389  1938

(h) 2020  2002

2. Encircle the greatest number in each group.

(a) 111, 1010, 1110, 110, 100

(b) 231, 5162, 3253, 324, 953

(c) 312, 736, 1092, 6581, 3985

(d) 318, 3190, 314, 299, 1001

3. Encircle the smallest number in each group.

(a) 6130, 1036, 2036, 3206, 1603

(b) 1300, 1313, 1303, 1033, 1133

(c) 6438, 6348, 6384, 6483, 6843

(d) 2313, 213, 3213, 1230, 3123

4. Rewrite the following in ascending order.

(a) 3238, 3823, 822, 9232, 8823

(b) 5295, 295, 529, 955, 2559

(c) 258, 3249, 582, 2493, 9423

(d) 3279, 729, 4279, 9232, 9327

5. Rewrite the following in descending order.

(a) 3529, 6259, 2539, 9230, 1001

(b) 4269, 4296, 4292, 4297, 4262

(c) 7304, 7043, 7340, 7403, 2437

(d) 5927, 6927, 1929, 7100, 6928



## Value Based Question

Manu was watching a News Channel. He became sad on seeing the images of floods and landslide in Uttarakhand. Manu and his friends wanted to help the people of Uttarakhand. They discussed with their parents and collected ₹ 5450 from their colony and ₹ 5540 from school with the help of teachers. The money collected was sent to the concerned authority.



1. Whose collection was more—Colony or School?
2. What are the things that we can donate besides money for the flood affected people?
3. Mention any two situations where you have contributed to help the needy.
4. Suggest any two situations other than flood where we can donate something.

## Brain Teasers

1. Tick (✓) the correct answer.

(a) The numeral for nine thousand ninety is—

(i) 9900




(ii) 9090

(iii) 9009

(iv) 0909

- (b) There are \_\_\_\_\_ tens in one hundred.
- (i) 0                      (ii) 1                      (iii) 100                      (iv) 10
- (c) The numeral for  $5000 + 20 + 4$  is—
- (i) 5204                      (ii) 5024                      (iii) 524                      (iv) 542
- (d) If the places of the digits 8 and 6 are interchanged in the numeral 8176, then the new numeral is—
- (i) 1786                      (ii) 6178                      (iii) 7168                      (iv) 7861
- (e) Which place should we compare to determine the greater of the given numbers—7295 and 7259?
- (i) ones                      (ii) hundreds                      (iii) tens                      (iv) thousands

**2. Find these numbers in the given chart. Colour them using pencil colours or crayons.**

 Blue	 Red	 Yellow
One thousand one hundred	$8000 + 700 + 60 + 5$	Eight thousand eight
Nine thousand nineteen	Predecessor of 8740	$1000 + 200 + 90 + 6$
$4000 + 300 + 20 + 1$	Two thousand eight	Five thousand three hundred
$7000 + 200 + 9$	$6000 + 6$	$3000 + 20 + 8$
Successor of 3049	Three thousand sixteen	Successor of 999

### CHART

1100	1296	2008	1000	7209
8765	3050	3028	9019	5300
8008	4321	6006	3016	8739

3. Encircle the numbers in which place value of 8 is 80.

358

2681

183

86

843

8326

486

8

4. Write the smallest 4-digit number using the digits 4, 1, 8 and 0 only once.

5. Write the greatest 3-digit number using the digits 9, 0 and 3 only once.

6. Complete the pattern.

(a) 1005, 1015, 1025, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

(b) 2222, 3333, 4444, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

7. Fill in the blanks.

(a) The expanded form of 3783 is

(b) The greatest 4-digit number is

(c) Place value of 6 in 5628 is

(d) The predecessor of smallest 3-digit number has  digits.

## Unit – 2

## ADDITION

Let us have some fun with addition.

1. Collection of stamps of Rohan, Mohit, Renu and Neha are given below:

			
Mohit	Rohan	Renu	Neha
159	282	295	800

Now answer these questions.

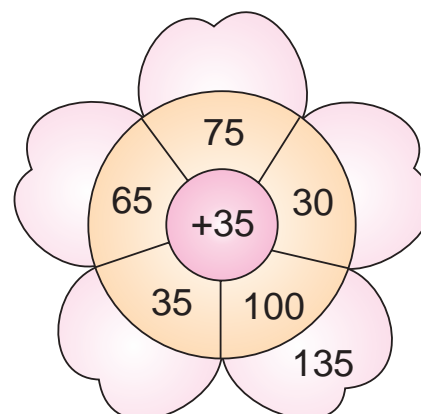
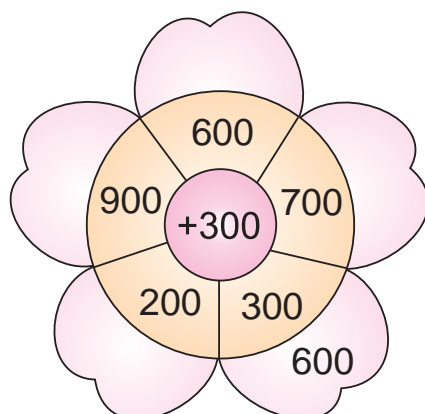
- (a) Who has maximum number of stamps? \_\_\_\_\_
- (b) What is the total collection of stamps of Rohan and Renu? \_\_\_\_\_
- (c) How many stamps were collected by Neha and Mohit together? \_\_\_\_\_
- (d) If I give Rohan 18 stamps more, how many stamps will he be having now? \_\_\_\_\_
2. A train was carrying 615 people. At a station 26 more people got into the train. Find the total number of people in the train now.

Number of people in the train = \_\_\_\_\_

Number of people who got in at the next station = \_\_\_\_\_

Total number of people in the train = \_\_\_\_\_

3. Write the numbers on each petal. One has been filled for you.



## ADDITION (4-DIGIT NUMBERS)



	TH	H	T	O
	4	2	1	5
+	1	6	3	2
	5	8	4	7

### Remember

First add ones, next tens, then hundreds and lastly thousands.

## Worksheet 1

Add.

1.    TH   H   T   O

	5	2	1	4
+	3	7	4	1

2.    TH   H   T   O

	7	5	3	6
+	2	3	6	1

3.    TH   H   T   O

	4	6	3	6
+	5	2	6	2

4.    TH   H   T   O

	2	6	4	7
+	6	3	1	2

5.    TH   H   T   O

	5	2	2	4
+	2	2	1	3

6.    TH   H   T   O

	3	2	6	1
+	4	3	2	5

7.    TH   H   T   O

	2	4	3	5
+	5	1	4	2

8.    TH   H   T   O

	6	5	2	8
+		4	7	1

9.    TH   H   T   O

	2	3	2	4
+	1	5	4	2

## ADDITION (WITH REGROUPING)



Can you add  
**1462** and **1824**?

Yes, we can...



TH	H	T	O
1	4	6	2
+	1	8	2
<hr/>			
		8	6

First, we add **ones** and **tens**.

TH	H	T	O
1			
1	4	6	2
+	1	8	2
<hr/>			
3	2	8	6

Then, we add hundreds  
 $4 + 8 = 12$  hundreds  
 12 hundreds = 1 thousand  
 + 2 hundreds  
 Carry 1 to thousands place  
 and add thousands.

Similarly, we can add 7284 and 1926 as well.

TH	H	T	O
1	1	1	
7	2	8	4
+	1	9	2
<hr/>			
9	2	1	0

I have done it.



## Worksheet 2

### 1. Add the following:

(a) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 2 \quad 6 \quad 5 \quad 2 \\ + 3 \quad 8 \quad 4 \quad 6 \\ \hline \end{array}$$

(b) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 1 \quad 7 \quad 6 \quad 3 \\ + 5 \quad 7 \quad 3 \quad 4 \\ \hline \end{array}$$

(c) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 4 \quad 8 \quad 7 \quad 3 \\ + 3 \quad 9 \quad 1 \quad 6 \\ \hline \end{array}$$

(d) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 2 \quad 5 \quad 6 \quad 3 \\ + 5 \quad 6 \quad 2 \quad 4 \\ \hline \end{array}$$

(e) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 3 \quad 6 \quad 5 \quad 3 \\ + 2 \quad 6 \quad 2 \quad 4 \\ \hline \end{array}$$

(f) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 7 \quad 6 \quad 5 \quad 8 \\ + 1 \quad 8 \quad 9 \quad 1 \\ \hline \end{array}$$

(g) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 5 \quad 5 \quad 6 \quad 6 \\ + 2 \quad 5 \quad 6 \quad 5 \\ \hline \end{array}$$

(h) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 2 \quad 6 \quad 7 \quad 8 \\ + 3 \quad 6 \quad 5 \quad 4 \\ \hline \end{array}$$

(i) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 4 \quad 9 \quad 9 \quad 5 \\ + 2 \quad 1 \quad 1 \quad 5 \\ \hline \end{array}$$

(j) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 5 \quad 5 \quad 8 \quad 6 \\ + 1 \quad 5 \quad 6 \quad 8 \\ \hline \end{array}$$

(k) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 1 \quad 9 \quad 9 \quad 9 \\ + 1 \quad 1 \quad 1 \quad 1 \\ \hline \end{array}$$

(l) 

TH	H	T	O
<div></div>			

$$\begin{array}{r} 4 \quad 6 \quad 7 \quad 7 \\ + 2 \quad 3 \quad 4 \quad 3 \\ \hline \end{array}$$

### 2. Arrange in columns and add the following:

(a) 3875, 4824

(b) 7655, 1155

(c) 5557, 2565

(d) 5746, 1228

(e) 2557, 2314

(f) 6769, 3211



## PROPERTIES OF ADDITION

$12 + 18 = 30$

$18 + 12 = 30$

$12 + 18 = 18 + 12$

The sum remains the same even if we **interchange the place** of the numbers to be added.

$13 + 0 = 13$

$158 + 0 = 158$

The sum of a **number** and **zero** is the number itself.



### Worksheet 3

Fill in the following blanks. First one is done for you.

1.  $12 + 19 = \boxed{19} + 12$

2.  $37 + 43 = 43 + \boxed{\phantom{00}}$

3.  $158 + \boxed{\phantom{00}} = 329 + 158$

4.  $436 + \boxed{\phantom{00}} = 523 + \boxed{\phantom{00}}$

5.  $\boxed{\phantom{00}} + 93 = 43 + \boxed{\phantom{00}}$

6.  $79 + 0 = \boxed{\phantom{00}}$

7.  $125 + \boxed{\phantom{00}} = 125$

8.  $\boxed{\phantom{00}} + 0 = 36$

9.  $\boxed{\phantom{00}} + 0 = 0$

10.  $171 + \boxed{\phantom{00}} = 171$



## ADDING THREE NUMBERS



### Remember

First, arrange the numbers in ones, tens, hundreds and thousands columns, and then add.

	TH	H	T	O
				1
		3	2	2
+	1	2	8	4
			4	1
	1	6	4	7

Wow!  
together we have  
1647 stickers.



Let us now add 413, 7821 and 51.

We first arrange the  
numbers in columns.

Now we add

	TH	H	T	O
				1
		4	1	3
	7	8	2	1
+			5	1
	8	2	8	5

## Worksheet 4

### 1. Add the following:

(a)

	TH	H	T	O
	<div></div>			
	1	0	5	9
		4	6	3
+			2	9
<hr/>				
<hr/>				

(b)

	TH	H	T	O
	<div></div>			
		7	4	9
	4	4	7	3
+			8	6
<hr/>				
<hr/>				

(c)

	TH	H	T	O
	<div></div>			
		2	6	1
		1	6	2
+	2	2	1	2
<hr/>				
<hr/>				

(d)

	TH	H	T	O
	<div></div>			
	1	1	1	5
	5	1	1	1
+	1	1	5	1
<hr/>				
<hr/>				

(e)

	TH	H	T	O
	<div></div>			
	6	5	0	7
	1	9	3	6
+		2	8	1
<hr/>				
<hr/>				

(f)

	TH	H	T	O
	<div></div>			
	2	2	0	0
	2	7	2	1
+	1	4	8	9
<hr/>				
<hr/>				

(g)

	TH	H	T	O
	<div></div>			
	4	8	5	7
	2	0	5	5
+	1	8	4	6
<hr/>				
<hr/>				

(h)

	TH	H	T	O
	<div></div>			
	5	2	3	9
		7	0	2
+	1	4	0	1
<hr/>				
<hr/>				

(i)

	TH	H	T	O
	<div></div>			
	6	3	5	2
		8	0	3
+	2	3	5	3
<hr/>				
<hr/>				

### 2. Arrange in columns and add the following:

(a) 3462, 743, 2533

(d) 6705, 1369, 218

(b) 772, 3429, 1831

(e) 4400, 1272, 1489

(c) 6243, 1132, 89

(f) 6234, 841, 1021

## Word Problems

### Example 1:

Raman sold 1022 pink kites, 989 red kites and 85 white kites in one day. Find the total number of kites sold.

### Solution:

We will add all the kites of three colours to get the total number of kites sold.

$$\begin{array}{rcl}
 \text{Number of pink kites sold} & = & 1022 \\
 \text{Number of red kites sold} & = & 989 \\
 \text{Number of white kites sold} & = & + \quad 85 \\
 \hline
 \text{Total number of kites sold} & = & \underline{2096}
 \end{array}$$

**Raman sold 2096 kites in total.**

### Example 2:

Mr. Kapur bought a washing machine for ₹ 9000 and a chair for ₹ 950. How much money did he spend in all?

### Solution:

We will add the money spent on the washing machine and chair to get the total money spent.

$$\begin{array}{rcl}
 \text{Money spent on a washing machine} & = & ₹ \quad 9 \quad 0 \quad 0 \quad 0 \\
 \text{Money spent on a chair} & = & + ₹ \quad \quad 9 \quad 5 \quad 0 \\
 \hline
 \text{Total money spent} & = & \underline{₹ \quad 9 \quad 9 \quad 5 \quad 0}
 \end{array}$$

**Mr. Kapur spent ₹ 9950 in all.**

## Worksheet 5

1. There are 2000 boys and 2520 girls in a school. How many students are there in all?

2. A school planted 1999 trees in one year and 2770 trees in the next year. How many trees were planted in two years?
3. There are 2958 men, 2596 women and 3102 children in a town. What is the total population of the town?
4. In a library, there are 2585 English story books, 5525 Hindi story books and 1235 Comics. How many books are there in all?

## Value Based Question

Vasanti didi comes to Rahul's house everyday to help his mother in household work. Her six year old son Naval got admission in Class-I. In order to help her, Rahul's grandmother gave her ₹ 1500 for purchasing books. His parents gave ₹ 3460 for buying school uniform and school bag. Rahul and his sister also contributed ₹ 170 from their piggy bank, and bought a pencil box for Naval. Now Naval had everything required to study in the school.



1. How much money did Rahul's parents and grandmother give to Vasanti?
2. How much money did Rahul's family give to help Vasanti?
3. Suggest any two ways in which you can help someone like Naval.