

# 6

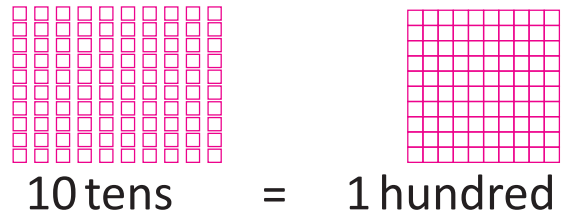
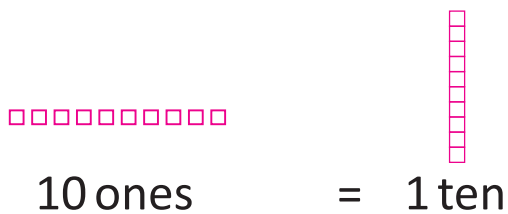
# Numbers up to 1000



## Numbers Beyond 100

### Hundreds, tens and ones

We know that 10 ones = 1 ten. Similarly, 10 tens = 1 hundred.



### Fill in the blanks boxes.

1 hundred = 10 tens	H	T	O	
	1	0	0	
2 hundreds = 20 tens	H	T	O	
	2	0	0	
<input type="text"/> hundreds = <input type="text"/> tens	H	T	O	
	3	0	0	
<input type="text"/> hundreds = <input type="text"/> tens	H	T	O	
	4	0	0	
<input type="text"/> hundreds = <input type="text"/> tens	H	T	O	
	5	0	0	
<input type="text"/> hundreds = <input type="text"/> tens	H	T	O	
	6	0	0	
<input type="text"/> hundreds = <input type="text"/> tens	H	T	O	
	7	0	0	
<input type="text"/> hundreds = <input type="text"/> tens	H	T	O	
	8	0	0	
<input type="text"/> hundreds = <input type="text"/> tens	H	T	O	
	9	0	0	
<input type="text"/> hundreds = 1 thousand	TH	H	T	O
	1	0	0	0





# Writing Numbers Beyond 100



Hundreds   Tens   Ones

H   T   O


 $= 1 \text{ hundred} + 3 \text{ tens} + 5 \text{ ones} = \begin{array}{|c|c|c|} \hline 1 & 3 & 5 \\ \hline \end{array}$


 $= \square \text{ hundreds} + \square \text{ ten} + \square \text{ ones} = \begin{array}{|c|c|c|} \hline \square & \square & \square \\ \hline \end{array}$


 $= \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} = \begin{array}{|c|c|c|} \hline \square & \square & \square \\ \hline \end{array}$


 $= \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} = \begin{array}{|c|c|c|} \hline \square & \square & \square \\ \hline \end{array}$

Do you know that when we add 1 to 999 we get 1000?

TH	H	T	O
1	1	1	0
	9	9	9
			1
1	0	0	0



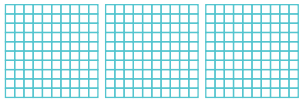
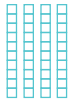
## Exercise 6.1

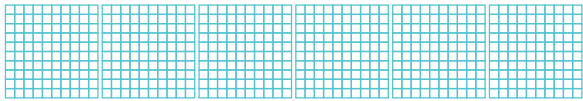


A. Write the number of hundred, tens and ones in the following.

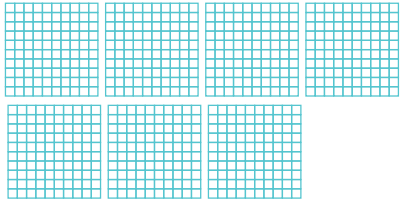

1.  ..... hundreds  
  ..... tens  
  ..... ones = .....





2.  ..... hundreds       ..... tens      ..... one = .....

3.  ..... hundreds       ..... tens       ..... ones = .....

4.  ..... hundreds      ..... ten       ..... ones = .....

**B. Write the missing numbers.**

- 584, ....., ....., ....., ....., ....., 590
- 740, ....., ....., ....., 744, ....., ....., 747
- 459, ....., ....., ....., ....., 464, ....., .....
- 938, ....., ....., ....., ....., ....., ....., 945

**C. Complete the number grids by filling in the missing numbers. As you write the number, say them aloud.**

1. 501 – 600

501									
511									
521									
531									
541									
551									
561									
571									
581									
591									600



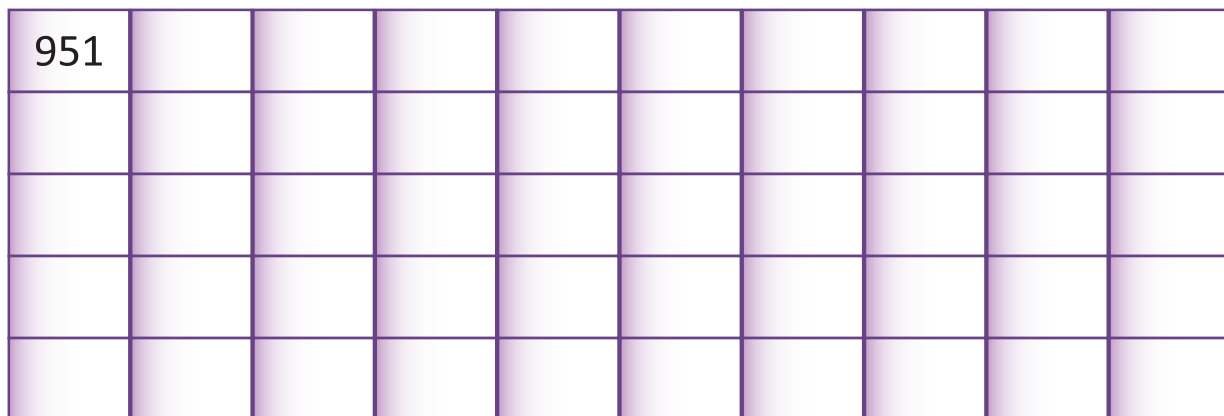
2.  $772 - 781$



3.  $875 - 884$



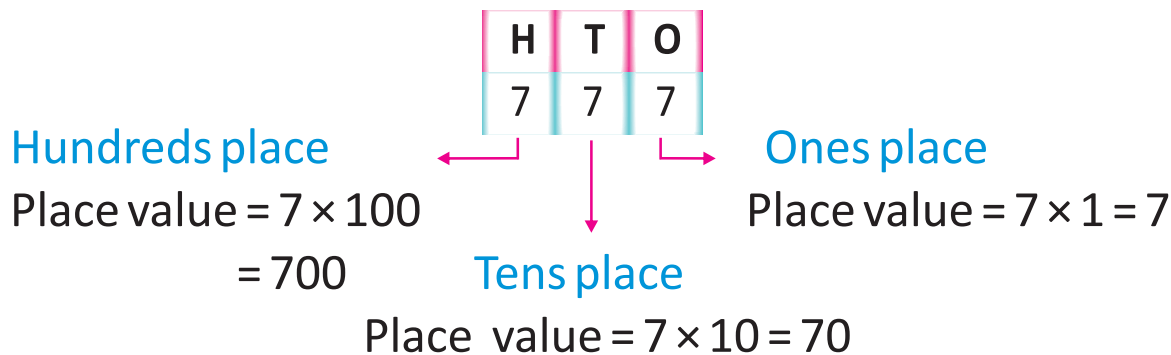
4.  $951 - 1000$



## Place value

Look at the number 777. Here, the digit 7 is the same in all the places. Does each digit have the same place value? **No.**

Number, such as 777 has three digits. Each digit has a definite **place value**. The extreme right digit is at the ones place, the second digit from the right is at the tens place, and the digit at the extreme left is at the hundreds place.







## Facts to Know

- ❖ The face value of a digit in a number is the digit itself.

Let us look at another number, and find the place values of the digits.

H	T	O
8	4	9

→ 9 As 9 is at the once place, its value is 9.

→ 40 As 4 is at tens place, its value is 40.

→ 800 As 8 is at the hundreds place, its value is 800.



## Expanded Form of Numbers

The expanded form of a number is given by the sum of the place values of its digits, in the hundreds, tens and ones places. Consider the number 752. Arrange the digits in a place value chart as shown here:

From the table,

H	T	O
7	5	2

value of 2 is  $2 \times 1 = 2$ ,

value of 5 is  $5 \times 10 = 50$  and

value of 7 is  $7 \times 100 = 700$ .

Expanded form of  $752 = 700 + 50 + 2$

Let us consider a few more examples.

$$826 = 800 + 20 + 6$$

$$949 = 900 + 40 + 9$$

$$608 = 600 + 8$$

$$840 = 800 + 40$$



## Standard Form of Numbers

The short form of a number is given by combining the face value of each digit at the correct places.





**Example I :**  $800 + 60 + 3 = 863$

The place value is 8 hundreds, so it is placed at the hundreds place.

H T O  
8 \_ \_

The place value is 6 tens, so it is placed at the tens place.

8 6 \_

The place value is 3 ones, so it is placed at the ones place.

8 6 3

Similarly,

$800 + 80 + 6 = 886$

$400 + 3 = 403$

$400 + 40$



### Exercise 6.2

**A. Write the place value of the circled digit in each of the following.**

- 1. 9 6 8 .....
- 2. 4 9 6 .....
- 3. 6 9 7 .....
- 4. 7 5 7 .....
- 5. 6 8 0 .....
- 6. 7 9 3 .....

**B. Write the place value of the given digits.**

- 1. 8 7 2 → .....
- 2. 6 4 8 → .....
- 3. 7 9 8 → .....
- 4. 4 4 4 → .....

**C. Write the expanded form of each of the following.**

- 1.  $648 =$  .....
- 2.  $280 =$  .....
- 3.  $369 =$  .....
- 4.  $506 =$  .....



### D. Write the short form of each of the following.

1.  $900 + 80 + 6 = \dots\dots\dots$       2.  $500 + 40 + 7 = \dots\dots\dots$   
 3.  $600 + 50 + \dots = \dots\dots\dots$       4.  $700 + 9 = \dots\dots\dots$



## Numbers and Numerals

To write 3-digit numbers, first write the number name of the digit at the hundreds place, and then the last two digits together. Watch carefully and learn to write the numbers and their number names.

1. Two hundred sixty eight 268      2. Nine hundred six      906  
 3. Eight hundred forty four 844      4. Five hundred fifty five      555



## Before, After and Between

We have already learnt the concept of **before**, **after** and **between** in the previous classes. Here, we shall revise what comes before and after any number.

**For Example :** Let us consider number 899.  
 Number **before** 899,  $899 - 1 = 898$ .  
 It is called the **predecessor** of 899.  
 Number **after** 899,  $899 + 1 = 900$ .  
 It is called the **successor** of 899.  
 899 is the number **between** 898 and 900.

Numbers		
Before (Predecessor)	Between	After (Successor)
898	899	900





## Exercise 6.3



A. Complete the following table.

Number	Number name	Number	Number name
1. 892		2. 909	
3.	Three hundred seventy	4. 760	
5.	Four hundred sixty three	6.	Five hundred nine

B. Write the number that comes **between** the two numbers in each of the following.

1. 882  884      2. 669  671      3. 539  541  
 4. 986  988      5. 598  600      6. 887  889

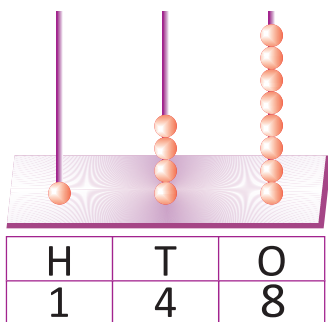
C. Find the **predecessor** and **successor** of the following numbers.

Predecessor	Number	Successor	Predecessor	Number	Successor
1. 729	730	731	4.	989	
2.	208		5.	881	
3.	900		6.	699	

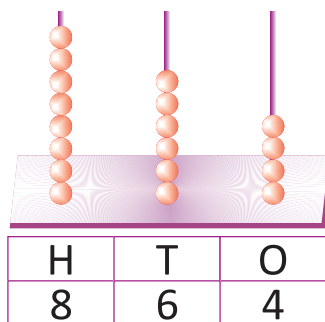


## Numbers on the Abacus

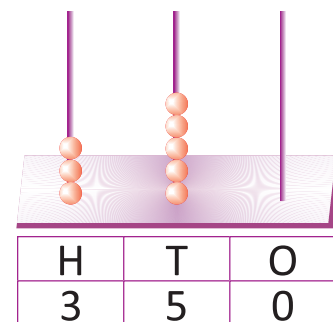
An **abacus** is a **counting** tool. We can read the numbers shown on an abacus. The abacus given below have three rods. The following numbers are shown by the beads on the abacus.



One hundred forty eight

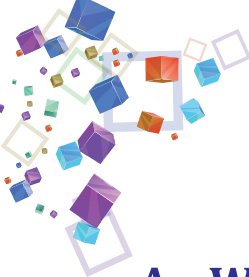


Eight hundred Sixty four



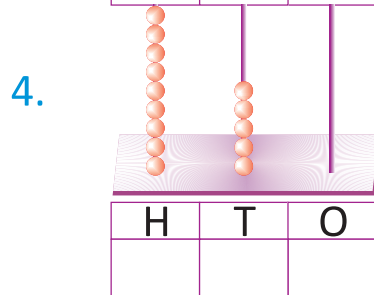
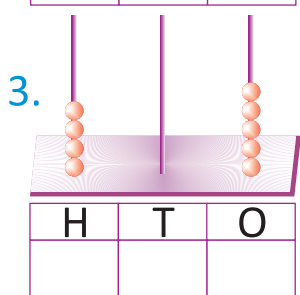
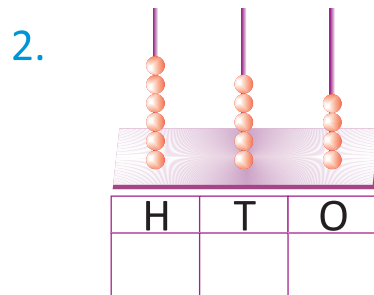
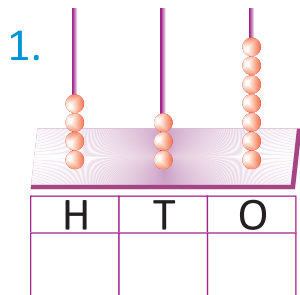
Three hundred fifty



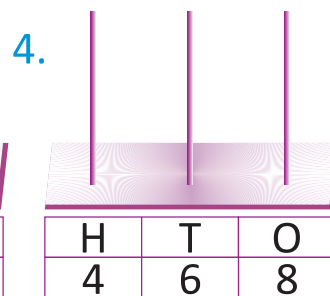
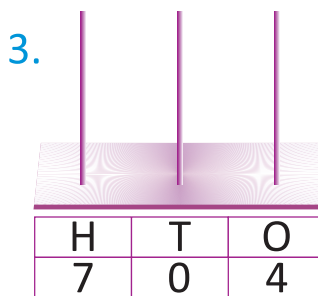
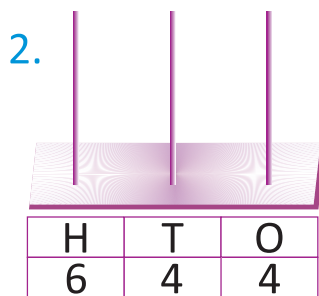
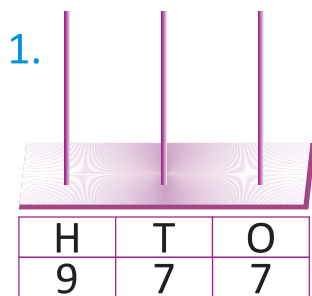


## Exercise 6.4

A. Write the numbers shown by the beads on the abacus.



B. Draw the correct number of beads on the abacus.



## Comparing Numbers

### Different Number of Digits

Vaibhav and Sonu were collecting tickets at the school fete.

Vaibhav collected 84 and Sonu collected 476.

Who collected more?

Compare 84 and 476.

H	T	O
	8	4

H	T	O
4	7	6

The number with three digits will be greater than the number with two digits. So, 476 is greater than 84.

Sonu collected more tickets than Vaibhav.





## Same Number of Digits

1. When hundredth digits are different.

H	T	O
5	2	4

524

Compare 524 and 428. Which is smaller?  
Compare the digits in the hundreds place.

4 is smaller than 5.

So, 428 is smaller than 524.

H	T	O
4	2	8

428

2. When hundredth digit are same.

Compare 689 and 627. Which is greater?  
If the digits in the hundreds place are the same, compare the digits in the tens place.  
8 is greater than 2.

So, 689 is greater than 627.

H	T	O
6	8	9
6	2	7

3. When hundredth and tens digits are same.

Compare 892 and 899. Which is smaller?  
If the digits in the hundreds and the tens place are the same, compare the digits in the ones place.

2 is less than 9. So, 892 is less than 899.

H	T	O
8	9	2
8	9	9

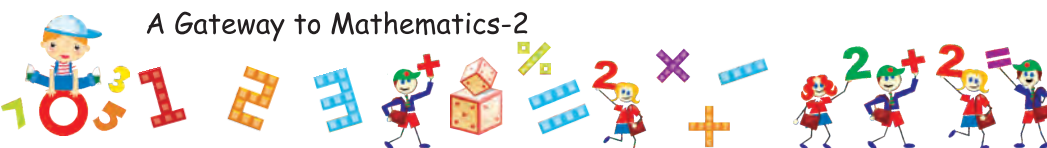


## Ascending And Descending Order

### Ascending Order

When numbers are arranged from the smallest to the biggest, they are in **increasing** or **ascending order**.

**For Example :** 266, 376, 380, 488, 928







## Descending Order

When numbers are arranged from the biggest to the smallest, they are in **decreasing** or **descending order**.

**For Example** : 868, 828, 728, 601, 488



### Exercise 6.5

#### A. Ring the greater number.

1. 226 248

2. 100 999

3. 448 443

4. 349 384

5. 680 681

6. 624 726

#### B. Ring the smaller number.

1. 349 428

2. 446 386

3. 522 824

4. 801 810

5. 668 686

6. 844 447

#### C. Circle the greatest number.

1. 892 276 866 942

2. 661 446 789 616

3. 434 804 708 699

4. 871 834 818 829

#### D. Circle the smallest number.

1. 894 884 842 822

2. 220 848 608 268

3. 662 942 954 959

4. 408 989 464 820

#### E. Arrange the following in descending order (greatest to smallest).

1. 824 646 788 642 ..... ..

2. 668 686 689 788 ..... ..

3. 480 448 484 594 ..... ..

4. 882 827 842 989 ..... ..





### F. Arrange the following in ascending order (smallest to greatest).

1. 398 424 498 444 ..... ..
2. 641 682 478 242 ..... ..
3. 748 784 780 628 ..... ..
4. 284 246 344 694 ..... ..

### Points to Remember



- ❖ 999 is the greatest 3-digit number.
- ❖ Ten hundreds make one thousand.
- ❖ 1000 is the smallest 4-digit number.
- ❖ The place value of a digit depends on its place in the number.
- ❖ Numbers can be written in short form or expanded form.
- ❖ To form the greatest number with the given digits, write the digits in descending order (greatest to smallest).
- ❖ To form the smallest number with the given digits, write the digits in ascending order (smallest to greatest).



## EXERCISE

### A. Multiple Choice Questions (MCQs)

Tick (✓) the correct option :

1. 1 thousand is equal to ..... .
 

(i) 1 hundred	<input type="checkbox"/>	(ii) 20 hundreds	<input type="checkbox"/>
(iii) 10 thousand	<input type="checkbox"/>	(iv) 10 hundreds	<input type="checkbox"/>
2. The place value of 5 in 658 is ..... .
 

(i) 500	<input type="checkbox"/>	(ii) 5	<input type="checkbox"/>	(iii) 50	<input type="checkbox"/>	(iv) 58	<input type="checkbox"/>
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3. The place value of 8 in 849 is .....

- (i) 800  (ii) 80  (iii) 100  (iv) 81

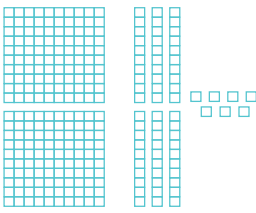
4.  $300 + 40 + 8$  is equal to .....

- (i) 340  (ii) 304  (iii) 308  (iv) 348

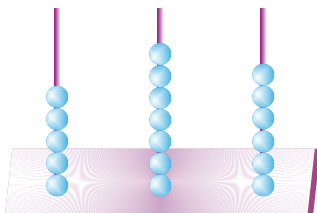
5.  $600 + 9$  is equal to .....

- (i) 690  (ii) 609  (iii) 606  (iv) 909

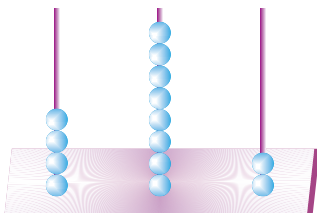
**B. Write the number for the following.**

1. 

H	T	O

2. 

H	T	O

3. 

H	T	O

**C. Write the numerals for each of the following.**

- Nine hundred forty eight = .....
- Two hundred eighteen = .....
- Nine hundred ninety nine = .....
- Eight hundred four = .....

**D. Write the number name for each of the following.**

- $686 =$  .....
- $720 =$  .....
- $982 =$  .....



**E. Write the expanded form for each of the following.**

1.  $762 = \dots\dots\dots$       2.  $240 = \dots\dots\dots$   
 3.  $653 = \dots\dots\dots$       4.  $408 = \dots\dots\dots$

**F. Write the short form for each of the following.**

1.  $200 + 60 + 8 = \dots\dots\dots$       2.  $800 + 80 = \dots\dots\dots$   
 3.  $700 + 5 = \dots\dots\dots$       4.  $400 + 40 + 2 = \dots\dots\dots$

**G. Write the following in ascending order.**


1. 724, 848, 626, 408 .....  
 2. 649, 628, 846, 842 .....  
 3. 880, 662, 820, 622 .....  
 4. 246, 498, 478, 780 .....

**H. Write the following in descending order.**

1. 424, 548, 748, 642 .....  
 2. 828, 649, 746, 868 .....  
 3. 320, 276, 567, 290 .....  
 4. 872, 468, 479, 880 .....



Fill in the blank boxes.

	+		700
-		-	
	+		300
200		200	





**Objective :** To understand the concept of place value up to 3-digit numbers.

**Materials Required :** Prepare many chits with digits from 0 to 9 written on them (only one digit to be written on each chit) and plastic bowls.

**Activities :**

- ❖ This activity will be done in groups of 3.
- ❖ Put chits in a plastic bowl.
- ❖ Each child from a group will take out a chit and open it.
- ❖ They will note down the three digits from 3 chits, picked up by a team. For example : 5, 2 and 6.
- ❖ They will then make all possible 3-digit numbers with these digits and write them down.

5      2      6

526,    562  
256,    265  
625,    652

- ❖ Then, they will put them in ascending and descending orders.

**For example :**

**Ascending order** : 256, 265, 526, 562, 625, 652

**Descending order** : 652, 625, 562, 526, 265, 256

- ❖ At least 10 such combinations will be picked up and the numbers formed will be arranged in both orders.
- ❖ All the results will be noted down in the notebook.

