

Numbers

OBJECTIVES

- 1. Understanding the importance of maths in activities in daily life.
- Understanding the terms increasing/decreasing, predecessor/ successor in daily life.
- Creating interest in maths among children with the help of maths activities.
- Creating ability to do activities of maths related to numbers upto 100 with different ways.
- 5. Mental and Intellectual development.
- 6. Preparing children to apply and understand maths in future.

Do you Remember

Write forward counting from 1 to 20

Write backward counting from 20 to 1

Today we will count the number of students in our class. You will tell me the number of students present in our class today.

Activity

How many students are present in our class today?

How many boys are present in the class? How many girls are present in the class? How many boys and girls in total are present in the class?



Activity

Counting with Steps



Let us count with steps upto 100



Note for Teachers

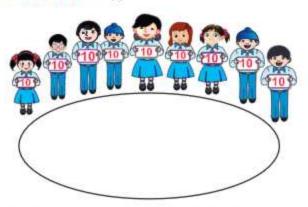
- 1. Teacher should take care that steps of student and number being announced, must be the same. He must also take care that heel of first foot must touch the toe of the other foot. This activity should be done for a couple of days. After this activity, train them to count other solid objects. "How many students are present in the class?", the teacher will ask the students everyday for the practice of counting.
- The teacher will show the students, the matchsticks, leaves and beads and will ask them to guess their number and then will tell them to count.

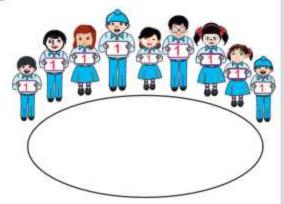


To understand Ones, Tens:- Play Way Method

Material: Nine cards of 1-1, Nine cards of 10-10

Procedure: (i) Draw two circles on the ground.



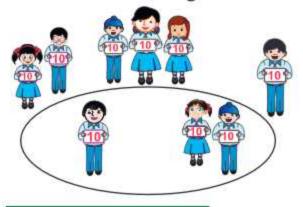


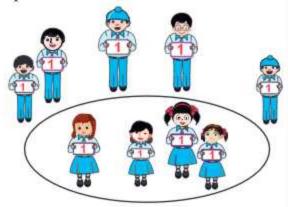
On the circle towards right hand, choose 9 students and make them stand outside this circle holding card of ones each. Around the circle of left hand, make 9 students stand, each holding card of Tens.

Teacher will announce any two digit number.

(ii) Students will jump into the circle by using cards of tens and ones.

For e.g. If teacher announces 34, four students holding ones cards and three students holding tens cards will jump into the circle.





Note for Teachers

Teacher will announce different numbers and the students will jump into the circle by using cards of tens and ones.



Objective: Knowledge of Ones-Tens

Material: 10 currency notes of ₹1 each.
10 currency notes of ₹10 each.

Method

- 1. Keep all the currency notes on the table.
- Ask the students to count currency notes of ₹ 1.
- Then ask the students to pick a single currency note of ₹10 instead of ten currency notes of ₹1.
- Now ask them to count currency notes of ₹10.
- Ask them to make different numbers using currency notes.

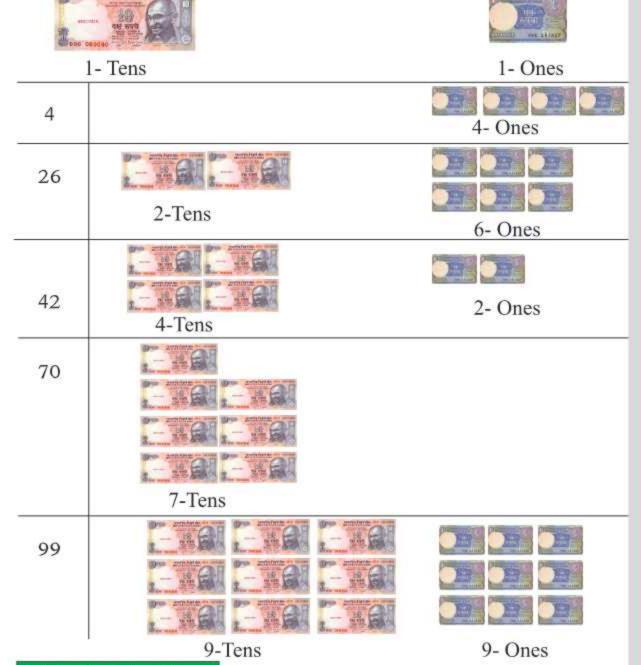
For example: Make number 28.



6. Now ask how many ones, tens will make 18?



To Understand Ones/Tens with the Help of Currency Notes



Note for Teachers

Teacher will tell the students to pick currency notes of ₹1 while counting upto 9. When they reach number 10, they will pick a currency note of ₹10 instead of ten note of ₹1.



Write the number as per the value of given currency notes.

(i) (ii) (iii) (iv) (v)

2. Depict the Given Numbers in Currency Notes

49 =

59 =

69 =

89 =

99 =

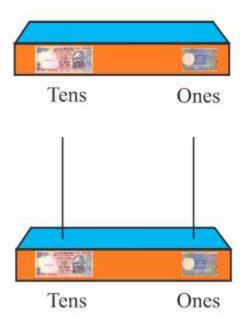
Practical Activty

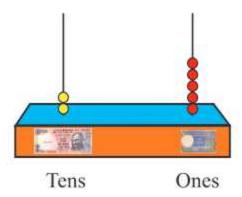
Objective: Explaining two digit numbers with the help of Abacus and writing.

Required Material: Clay, matchsticks, beads and currency notes.

Method:

- Ask the students to make clay base with the help of clay. Ask them to put a one rupee note on the base at the right side and a currency note of ₹ 10 on the left side.
- Ask the students to fix two matchsticks in the clay. (representing ones/tens)
- Teacher will ask the students any two digit number, for example 25.
- Now ask the students to put beads in abacus.



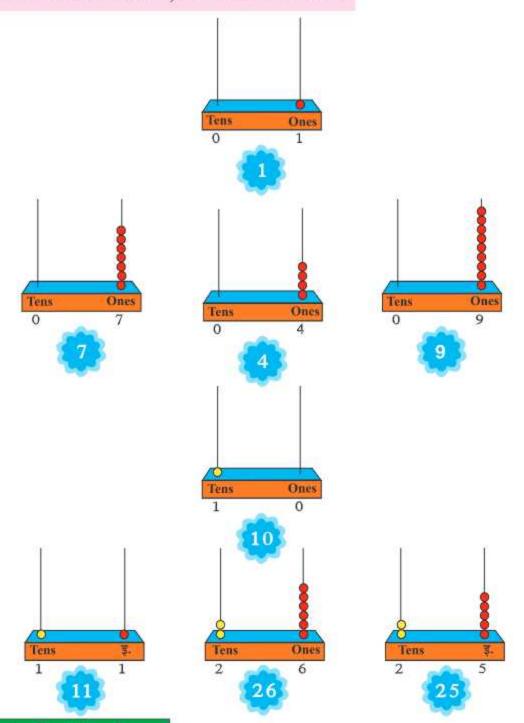


Note for Teachers

Teacher will tell the students that a stick of Abacus can hold only nine beads. In this way, the stick of ones can hold nine beads. Therefore, for ten beads of ones, one bead will be put in the tens stick.



To Understand Ones, Tens With Abacus

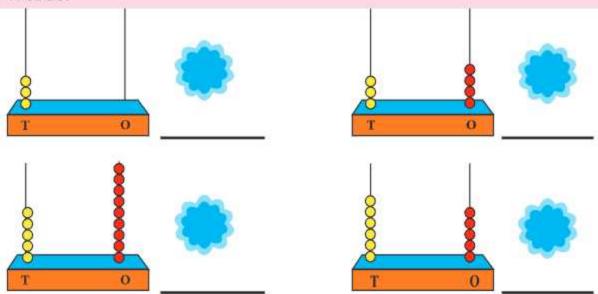


Note for Teachers

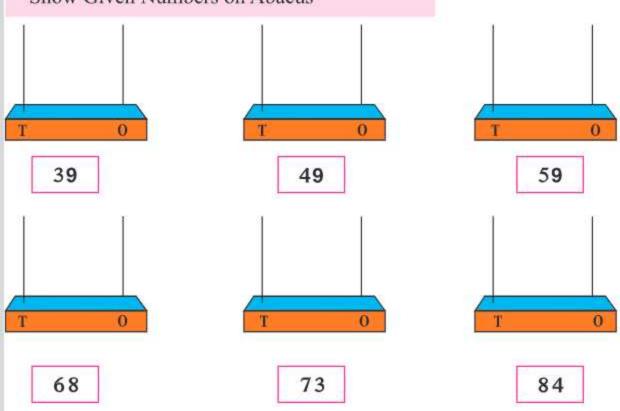
Teacher will tell the students about the short form 'O' to write ones and 'T' to write tens.



Count the Beads of Abacus and write the Number in Figures and Words.



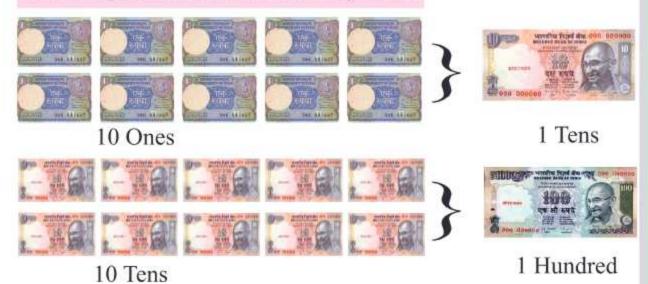
Show Given Numbers on Abacus



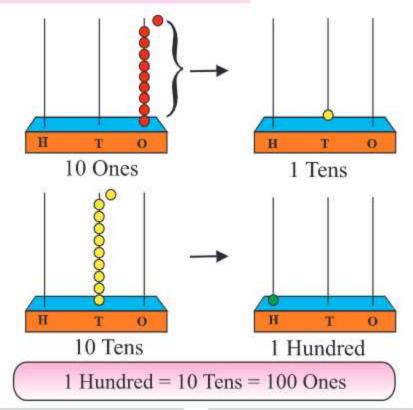


Let Us Make Hundred

Knowledge of Hundred with Currency Notes.



To Understand Hundred with Abacus





Break the Number into One and Tens

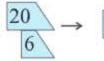




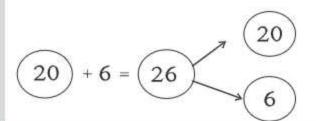








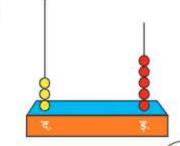


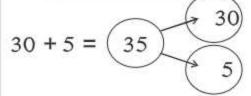


Tens	Ones			
2	6			

2 Tens 6 Ones

(b)



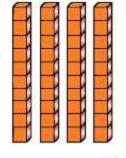


$30 \rightarrow$	35
5	

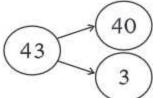
Tens	Ones		
3	5		

3 Tens 5 Ones

(c)







$$40 + 3 = 43$$

Tens	Ones		
4	3		

4 Tens 5 Ones



Split/Break the Number into Ones-Tens

(1)



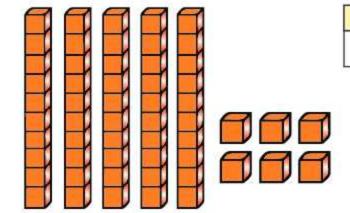




Tens	Ones

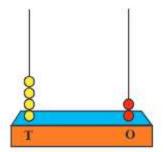
24 =.....Ones

(2)



Tens	Ones

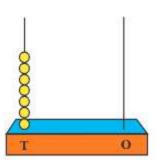
(3)



Count the Ones, Tens and Write the Number

(1) Tens Ones

(2)



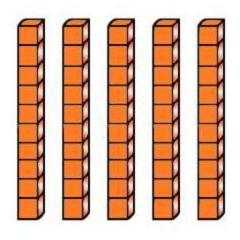
25

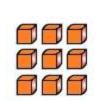
Tens

Ones

.....Ones =

(3)





Tens Ones

.......TensOnes =

Match the Birds with their Nests as Shown Below





Let's Play Clap, Snap

Objective: To understand/Ones-Tens

Method: (1) Teacher will tell the children



1 clap means 10 2 clap means 20 3 clap means 30

9 clap means 90

(1) 1 snap means 1 2 snap means 2 3 snap means 3

.....

......

9 snaps means 9



After telling about clap and snap, the teacher will speak the number for example-37 (Students will clap 3 times and snap 7 times)

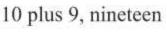
- * Speak the different numbers.
- * Clap=Tens, Snap=Ones
- * To write the number according to its place value in the place value chart on the blackboard.

Tens	Ones				
3	7				

Note for Teachers

Ask the children to listen to the number carefully.

Family of Nine





I know the grass is green.

20 plus 9, twenty nine







Learn it, you will really shine.

30 plus 9, thirty nine





Grapes grow on vine.

40 plus 9, forty nine

40



You are fine and I am fine

50 plus 9, fifty nine

50



Learn the way how to dine.

60 plus 9, sixty nine

60



People like the tree of pine.

70 plus 9, seventy nine

70



79

Exercise make us great and fine

80 plus 9, eighty nine

80



89

In the prayers stand in a line

90 plus 9, ninety nine

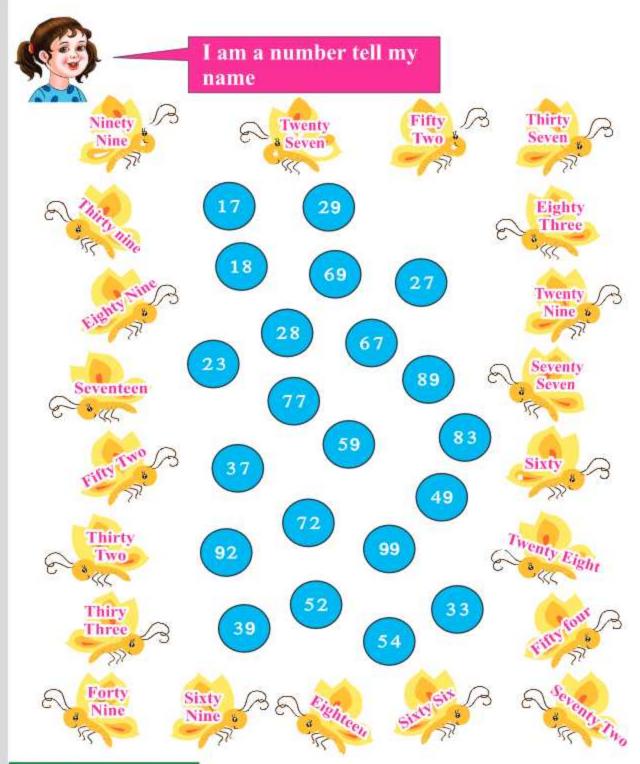
90



All the books belong to mine

Note for Teachers

Use Mann cards while rhyming.



Note for Teachers

Teacher would prepare two types of flash cards. They will write numbers on one set and numbers names on the other set. One student with numeral card well stand and ask "I am a number, tell my name." In this way student with number name card will also stand and show the card. This activity will continue with different numbers.



Before, After and In between



Stand up and say counting from 31 to 36.















Now Speak

Number just before 33 is

Number just After 33 is

Number between 33 and 35 is

Number just before 32 is

Number just before 36 is

Number just after 34 is

Number just after 32 is

Number between 31 and 33 is

32

34

34

31

35

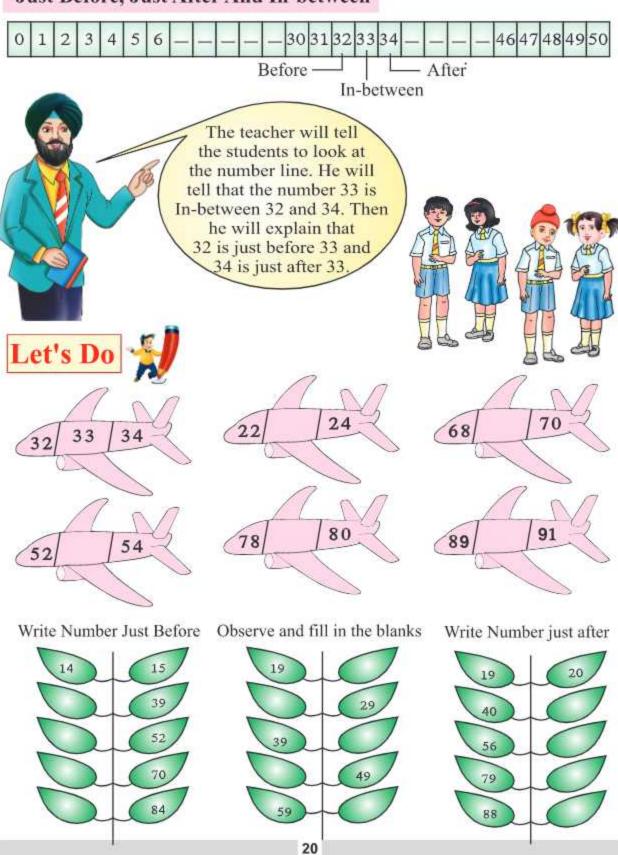
35

33

32

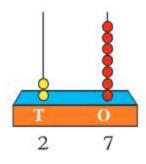
19

Just Before, Just After And In-between





Place value of Digits



2 Tens 7 Ones

To know the place value of digits which we are making heros. Just go to and choose that digit and conver right digits to zeros.

Tens	Ones	
2	7	
		$Ones = 7 \times 1 = 7$
		Tens = $2 \times 10 = 20$

Place value of 7 in 27 is 7. Place value of 2 in 27 is 20

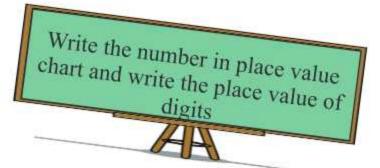
Activity

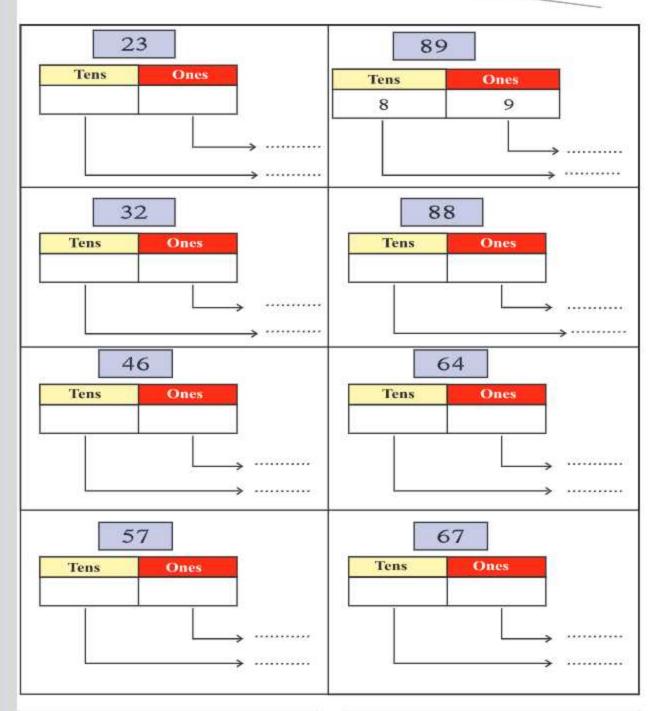
- Tell any number to the students. Ask them to pick up maan cards to form that number.
- Form numbers from the maan cards. Write the place value of its digits.

Note for Teachers

Using the Maan Cards, the teachers will explain the place value of '0' at unit/ones place.



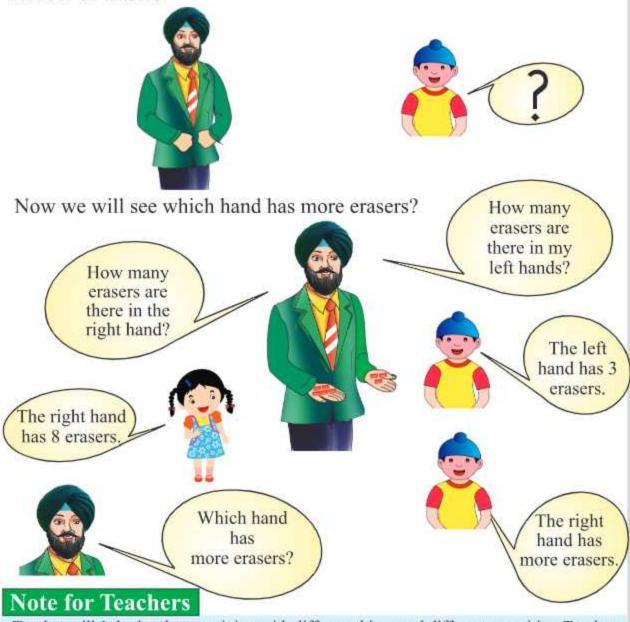




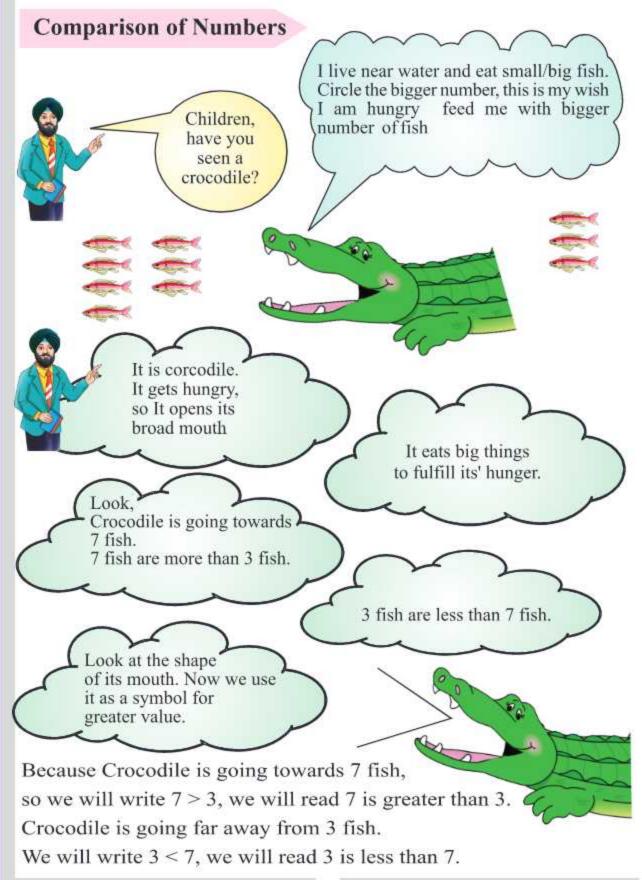


Comparison of Numbers

Teacher will ask students to make a guess about the number of erasers in his hand, by showing different number of erasers in his hands. The students should be able to tell the hand with greater number and lesser number of erasers.

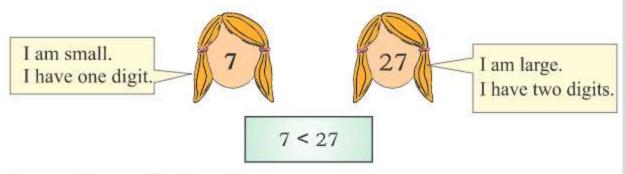


Teacher will 1 do the above activity with different things and different quantities. Teacher will tell the students the concept of greater number and smaller number by writing different numbers on the blackboard.





Now we Compare Two Digit Numbers



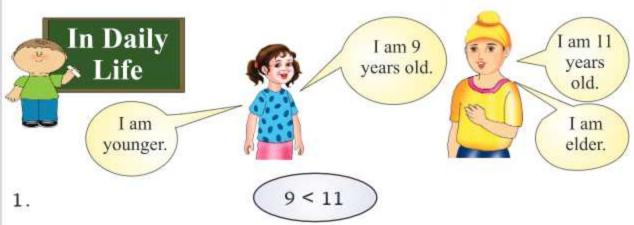
Hence 7 is smaller than 27

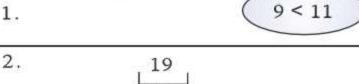
- Number having more digits is always greater than number having less digits.
- If the numbers to be compared have same number of digits, then compare the digits at tens place. The number having greater digit is greater.

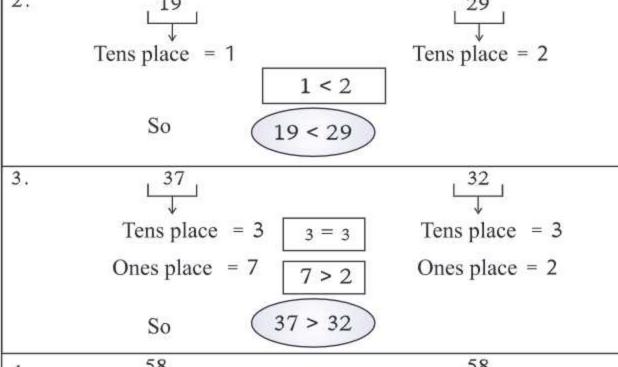
 If tens place is same, then compare digits at ones place. The number having greater digit is greater.

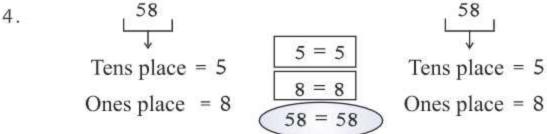
 If both the numbers have same digits at tens and one place, the numbers are equal.

$$22 = 22$$









A number having more digits is greater value.

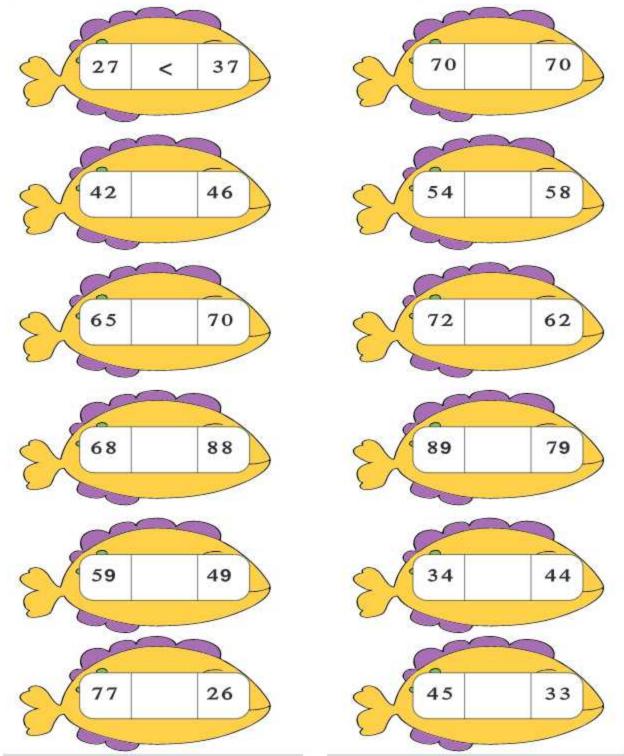
If digits are equal, then we compare the place value just compare from left to right.

The bigger first comes win without fight.

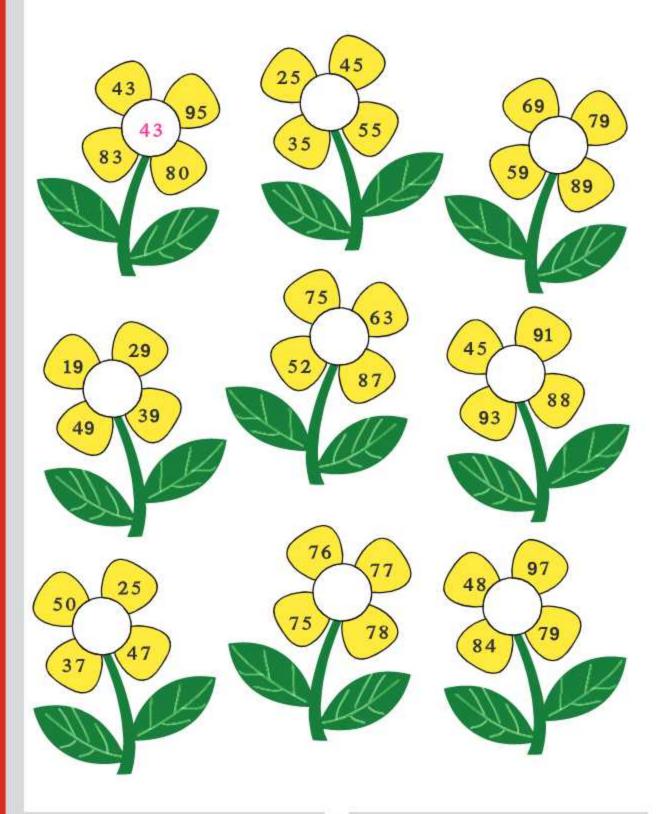




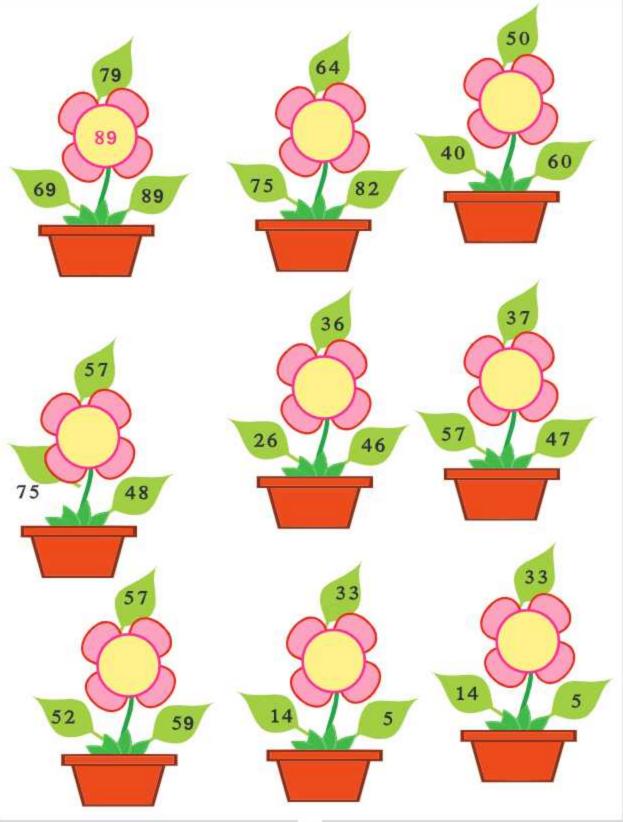
Fill in the blanks with >, < or = symbols



2. Write the smallest number in the centre of the flower

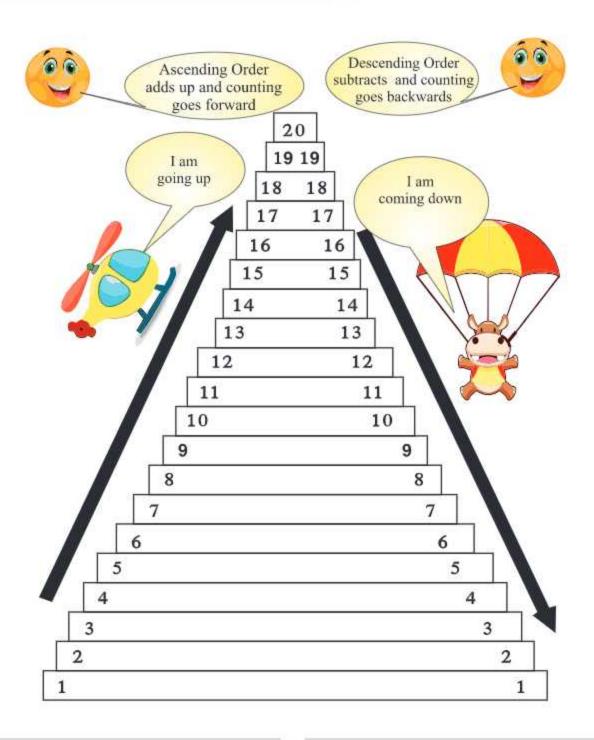


3. Write the greatest number in the centre of the flower.





Ascending Order-Descending Order

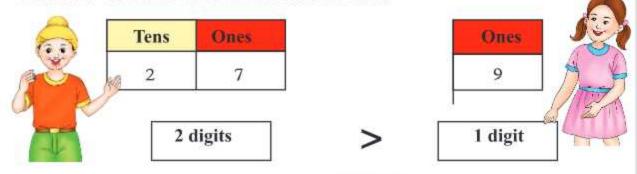




Ascending Order, Descending Order



Harjot and Tanisha are playing cricket. Let's see who wins? Harjot has scored 27 runs and Tanisha has scored 9 runs.



27 > 9

Since 27 is greater than 9. Harjot has won.



Aslam and Sirshti are playing cricket. Aslam has scored 23 runs and Srishti has scored 34 runs.

Since the number of digits in the scored runs is qual, now compare the tens place digit.

Tens	Ones	Tens	Ones
2	3	3	4
			150
	63	< 3 ←	

2 is smaller than 3 at tens place which means 3 is greater than 2 so 34 > 23 or 23 < 34

Now compare the runs of Harjot, Tanisha,

Aslam and Srishti

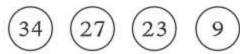
27, 9, 23, 34

To find the highest scored runs, write numbers in ascending order



When numbers are arranged from smaller number to greater number, it is called ascending order.

Now, look at these numbers



When numbers are arranged from greatrer number to smaller number, it is called desending order/



1. Write in ascending order

5, 96, 19, 89 _____ _____

2. Write in descending order

10, 73, 98, 27 98 73 27 10

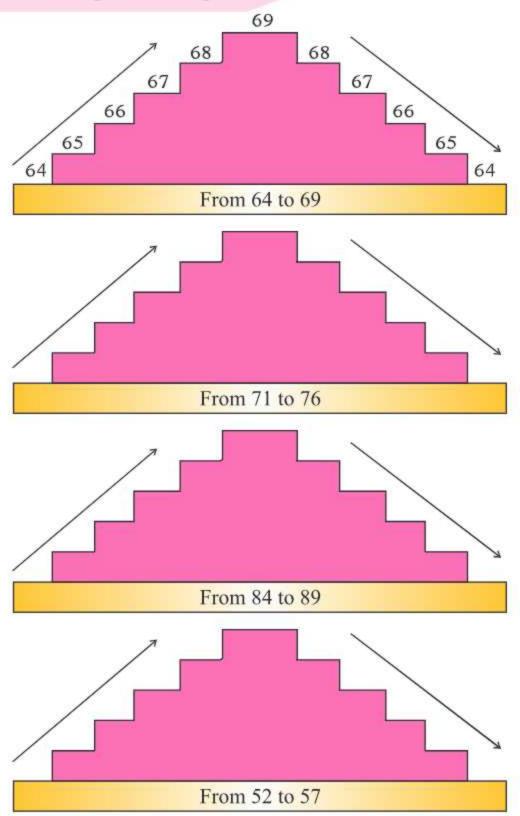
58, 43, 27, 10 _____ ____

95, 34, 81, 23

16, 79, 24, 75 _____ ___ ____

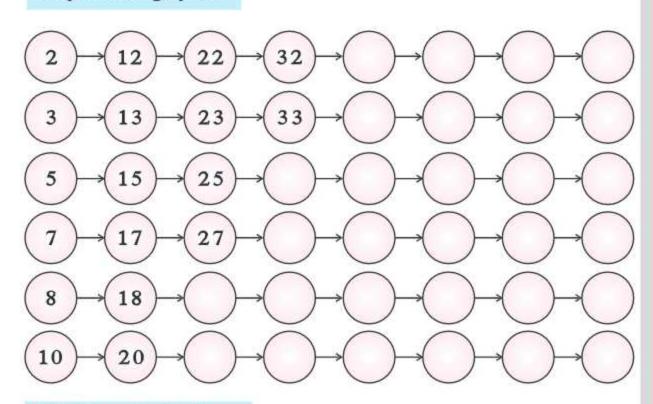
99, 79, 89, 29

Write Ascending/Descending Order

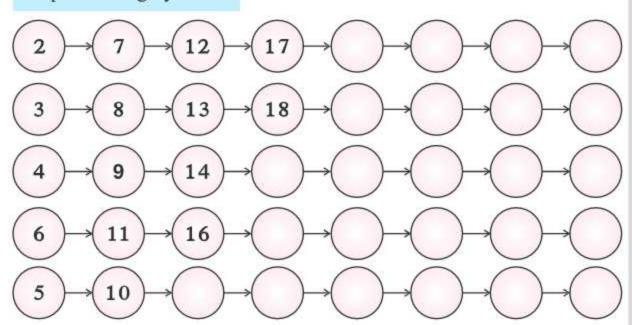


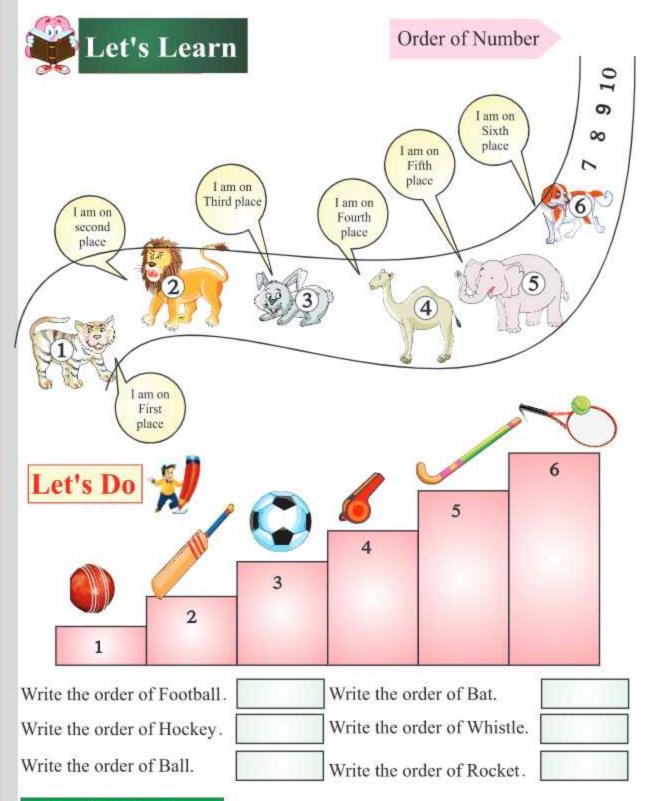
Counting by Different Methods

Skip Counting by tens



Skip Counting by fives



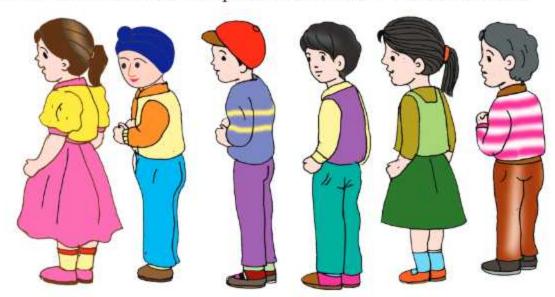


Note for Teachers

The teacher will make the students stand in a queue and ask each of them about his place. In this way, he will explain the concept of order of numbers.

Activity

Let the students stand in a queue and ask their number in order.



Practical Activty

To make two digit numbers with given two digits

Objective — To make the small and the large number by using flash cards of two digits.

Material — Two sets of flash cards from 0 to 9.

 0
 1
 2
 3
 4
 5
 6
 7
 8
 9

 0
 1
 2
 3
 4
 5
 6
 7
 8
 9

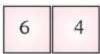
Method 1: Teacher will call a child and ask him to pick any two cards.

Like- 4 6

2. By using those cards the students to form a smaller number.



3. Similarly she/he will tell them to make greater number.



- Write these numbers on the blackboard and discuss about smaller and greater number.
- Teacher will now call three students and ask then to pick any 2 flash cards each.



- 6. She/he will tell them to make different numbers from flash cards.
- Then she/he will ask them about the smallest and the greater number out of them.



1. Write two digit numbers from given digits:

3,4	2,7	5,3
1,5	7,9	6, 9
7,8	6, 9	2,7

Counting from 101 to 200

In Fig.	In words	In Fig.	In words	In Fig.	In words	In Fig.	In words
101	One hundred one	128		154	One hundred fifty four	179	One hundred seventy
102	One hundred two		eight	155	One hundred fifty five		nine
103	One hundred three	129	One hundred twenty nine	156	One hundred fifty six		One hundred Eighty
104	One hundred four	130	One hundred thirty	157	One hundred fifty seven	181	One hundred Eighty one
105	One hundred five	131	One hundred thirty one	158	One hundred fifty eight	182	One hundred Eighty
106	One hundred six	132	One hundred thirty two		One hundred fifty nine		two
107	One hundred seven	133	One hundred thirty	1100000		183	One hundred Eighty three
108	One hundred eight		three		One hundred sixty	184	One hundred Eighty
109	One hundred nine	134	One hundred thirty four	100000	One hundred sixty one		four
110	One hundred ten	135	One hundred thirty five		One hundred sixty two	185	One hundred Eighty
111	One hundred eleven	e new	One hundred thirty six	163	One hundred sixty three		five
112	One hundred twelve	137		164	One hundred sixty four	27/00/00	One hundred Eighty six
113	One hundred thirteen	107	seven	100	One hundred sixty five	187	One hundred Eighty seven
114	One hundred fourteen	138	One hundred thirty	11/25/04	One hundred sixty six	188	One hundred Eighty
115	One hundred fifteen		eight		One hundred sixty		eight
116	One hundred sixteen	139	One hundred thirty nine		seven	189	One hundred Eighty nine
117	One hundred seventeen	140	One hundred forty	168	One hundred sixty eight	190	One hundred Ninety
110		141	One hundred forty one	169	One hundred sixty nine	191	One hundred Ninety
10000	One hundred eighteen	142	One hundred forty two	170	One hundred seventy		one
/AUX.02.03	One hundred nineteen One hundred twenty	143	One hundred forty three	171	One hundred seventy	192	One hundred Ninety two
121		144	One hundred forty four	100	one	193	One hundred Ninety
	one		One hundred forty five	172	One hundred seventy two		three
122	One hundred twenty two		One hundred forty six	173	One hundred seventy	194	One hundred Ninety four
123	One hundred twenty three	147	One hundred forty seven	174	One hundred seventy four	195	One hundred Ninety five
124	One hundred twenty four	148	One hundred forty eight	175	One hundred seventy	a como	One hundred Ninety six One hundred Ninety
125	One hundred twenty	149	One hundred forty nine	176	One hundred seventy		seven
	five	150	One hundred fifty	170	six	198	One hundred Ninety
126	One hundred twenty six	151	One hundred fifty one	177	One hundred seventy	199	One hundred Ninety
127	One hundred twenty	152	One hundred fifty two	170	Seven	133	nine
	seven	153	One hundred fifty three	1/8	One hundred seventy eight	200	Two hundred

Note for Teachers

Similarly The teacher will tell the students to write counting and the number names upto 999.

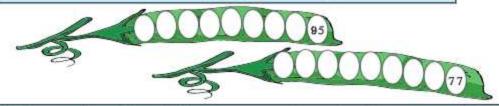


 In the given picture first given the number of stars and then write the actual number after counting them. Guess- Actual number of stars- Fill in the blanks 2. What comes just before? What comes In-between What Comes just after Fill in the blanks (>, <, =)4. 5. Match the number names with the numerals Eighty Seventy Seventy Three Four Nine Nine Ninety Seven Seventy Seventy Eighty Ninety Eighty Eight

6. Write the forward counting from the given number



7. Write backward counting from the given number

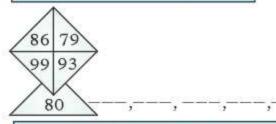


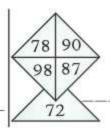
8. Write each of the following numbers in the expanded form

9. Form numbers for each of the following

$$70 + 5 = ($$

10. Write in ascending order





11. Write the following in figures

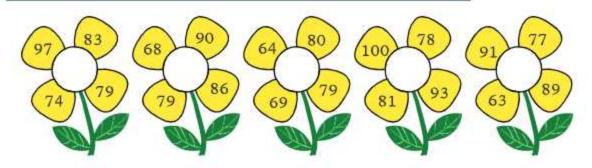
12. Encircle the greatest number

89	98	79	
90	97	63	

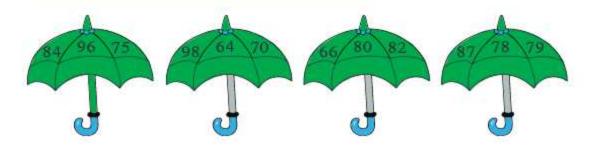
96	78	69
88	89	71

77	83	68
93	47	69

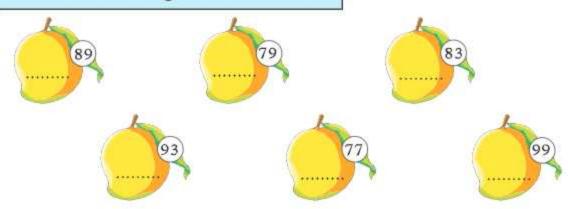
13. Write the greatest number in the centre of the flower.



14. Write the numbers in decreasing order



15. Write the following numbers in words



16. Write the place value of the encircled digit:
18 = The place value of 8 is
$\Im 4$ = The place value of 5 is
62 = The place value of 6 is
$7\overline{7}$ = The place value of 7 is
17. Skip counting by tens
$4 \longrightarrow 14 \longrightarrow 24 \longrightarrow 0 \longrightarrow 0 \longrightarrow 0$
7
18. Skip counting by fives
$3 \rightarrow 8 \rightarrow \bigcirc \rightarrow \bigcirc \rightarrow \bigcirc \rightarrow \bigcirc$
$6 \rightarrow 11 \rightarrow \bigcirc$
19. Write two digit number using given digits
(i) 2, 5 (ii) 3, 4 (iii) 3, 4
(iii) 7, 8 [iv) 1, 6 [iv]
(v) 5, 7 (vi) 2, 8 (vi) 2, 8
20. (i) How notes of ₹10 and ₹1 make the number 54?
(ii) How notes of ₹10 and ₹1 make the number 72 ?



Points to Remember

- * Smallest one digit number 1
- * Greatest one digit number 9
- Smallest two digit number 10
- * Greatest two digit number 99

