## Unit 1

## Numbers

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## Objectives

By the end of this unit, you should be able to:

- count, read and write numbers up to 1000 .
- count forward, count backward and skip count.
- compare and order numbers.
- read and write ordinal numbers.
- represent numbers using manipulatives.
- write numbers in expanded form and vice versa.
- perform simple mental arithmetic operations.


## Unit 1 Numbers

## Using Numbers


OR ORDER
$\begin{array}{ll}\mathrm{Rs} & 850.00\end{array}$
RUPEES Eight hundred and fifty only.
$\qquad$ $ـ$
ACCOUNT NUMBER 234567891235678901



## Counting

Read the numbers in the Hundred's Chart below.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

## Dot Game based on numbers.

Complete the figure below by joining dot to dot. Start at number 1 and continue with 2, 3 ... in order till 42.


## Unit 1 Numbers

## 1. Complete the following.

(a) 100, 101, 102, $\qquad$ , $\qquad$ , $\qquad$ , 106, $\qquad$ , $\qquad$ , $\qquad$ 110
(b) 230, 231, 232, $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , 240
(c) 340, 341, $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ 350
(d) 460, $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ ,470
(e) 520, $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , 525 , $\qquad$ , , $\qquad$ , $\qquad$ , $\qquad$
(f) 670, $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , 678, $\qquad$ , $\qquad$
(g) 780, $\qquad$ , , $\qquad$
$\qquad$ , _ , $\qquad$ , $\qquad$ , $\qquad$ , 789 , $\qquad$
(h) 810, $\qquad$ , 813, $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$
(i) 930, $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , 940
(j) 990, $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , 1000

## Number Line

Numbers can be represented on a number line.


## Counting

2. Write the missing numbers on the number lines below.


## Unit 1 Numbers

## Number Names

Read the following numbers and their corresponding number names.

| 1 | One | 11 | Eleven | 10 | Ten | 100 | One hundred |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Two | 12 | Twelve | 20 | Twenty | 200 | Two hundred |
| 3 | Three | 13 | Thirteen | 30 | Thirty | 300 | Three hundred |
| 4 | Four | 14 | Fourteen | 40 | Forty | 400 | Four hundred |
| 5 | Five | 15 | Fifteen | 50 | Fifty | 500 | Five hundred |
| 6 | Six | 16 | Sixteen | 60 | Sixty | 600 | Six hundred |
| 7 | Seven | 17 | Seventeen | 70 | Seventy | 700 | Seven hundred |
| 8 | Eight | 18 | Eighteen | 80 | Eighty | 800 | Eight hundred |
| 9 | Nine | 19 | Nineteen | 90 | Ninety | 900 | Nine hundred |
| 10 | Ten | 20 | Twenty | 100 | One hundred | 1000 | One Thousand |

## Writing in Words



Two hundred and fifty three


Five hundred and forty three

3. Write in words.
(a) 25 : twenty five
(b) 45 : $\qquad$
(c) 59 : $\qquad$
(d) 75 : $\qquad$
(e) 114 : $\qquad$

## Counting

(f) 201 : $\qquad$
(g) 311 : $\qquad$
(h) 413 : $\qquad$
(i) 530 : $\qquad$
(j) 612 : $\qquad$
(k) 715 : $\qquad$
(I) 818 : $\qquad$

## 4. Write in figures.

(a) Two hundred and seventeen : $\underline{217}$
(b) One hundred and seven : $\qquad$
(c) Four hundred and forty four: $\qquad$
(d) Three hundred and thirteen : $\qquad$
(e) Six hundred and thirty : $\qquad$
(f) Nine hundred and seventy eight: $\qquad$

## Unit 1 Numbers

5. Fill in the given cheques. An example, cheque (a), has been done for you.
(a)

(b)

| UNIVERSAL BANK | DATE |  |
| :--- | :---: | :---: |
| PAY Mrs |  |  |
|  | RUPEES |  |
|  | OR ORDER | Rs |
| ACCOUNT NUMBER 23456789012345678 |  |  |

(c)

| UNIVERSAL BANK | DATE |  |
| :---: | :---: | :---: |
| PAY Mr |  |  |
|  |  |  |
| RUPEES | OR ORDER | Rs |
|  |  |  |
| ACCOUNT NUMBER 34567890123456789 |  |  |

(d)

| UNIVERSAL BANK | DATE |  |
| :---: | :---: | :---: |
| PAY Mrs |  |  |
|  | OR ORDER | Rs |
| RUPEES | 678.00 |  |
| ACCOUNT NUMBER 4567 890 1234567890 |  |  |

(e)

| UNIVERSAL BANK | DATE |
| :--- | :--- |
| PAY Mr |  |
| RUPEES | OR ORDER |
|  | R s |
| ACCOUNT NUMBER 56789012345678910 | 99.00 |

## Counting

## Before, after, in between


$\ldots, 20,21,22,23,24$ are before 25 .
$26,27,28,29,30, \ldots$ are after 25.
$23,24,25,26,27$ are in between 22 and 28.

1. Which whole number comes immediately after the given numbers.
(a) 425, $\qquad$
(e) 299 $\qquad$
(b) 537, $\qquad$ (f) 899 $\qquad$
(c) 649, $\qquad$
(g) 699, $\qquad$
(d) 259, $\qquad$
(h) 999, $\qquad$
2. How many 9's are there between 1 and 100.
3. The numbers $\mathbf{5 0 1}$ to $\mathbf{6 0 0}$ are listed below.

| $\mathbf{5 0 1}$ | $\mathbf{5 0 2}$ | $\mathbf{5 0 3}$ | $\mathbf{5 0 4}$ | $\mathbf{5 0 5}$ | $\mathbf{5 0 6}$ | $\mathbf{5 0 7}$ | $\mathbf{5 0 8}$ | $\mathbf{5 0 9}$ | $\mathbf{5 1 0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 1 1}$ | $\mathbf{5 1 2}$ | $\mathbf{5 1 3}$ | $\mathbf{5 1 4}$ | $\mathbf{5 1 5}$ | $\mathbf{5 1 6}$ | $\mathbf{5 1 7}$ | $\mathbf{5 1 8}$ | $\mathbf{5 1 9}$ | $\mathbf{5 2 0}$ |
| $\mathbf{5 2 1}$ | $\mathbf{5 2 2}$ | $\mathbf{5 2 3}$ | $\mathbf{5 2 4}$ | $\mathbf{5 2 5}$ | $\mathbf{5 2 6}$ | $\mathbf{5 2 7}$ | $\mathbf{5 2 8}$ | $\mathbf{5 2 9}$ | $\mathbf{5 3 0}$ |
| $\mathbf{5 3 1}$ | $\mathbf{5 3 2}$ | $\mathbf{5 3 3}$ | $\mathbf{5 3 4}$ | $\mathbf{5 3 5}$ | $\mathbf{5 3 6}$ | $\mathbf{5 3 7}$ | $\mathbf{5 3 8}$ | $\mathbf{5 3 9}$ | $\mathbf{5 4 0}$ |
| $\mathbf{5 4 1}$ | $\mathbf{5 4 2}$ | $\mathbf{5 4 3}$ | $\mathbf{5 4 4}$ | $\mathbf{5 4 5}$ | $\mathbf{5 4 6}$ | $\mathbf{5 4 7}$ |  | $\mathbf{5 4 9}$ | $\mathbf{5 5 0}$ |
| $\mathbf{5 5 1}$ | $\mathbf{5 5 2}$ | $\mathbf{5 5 3}$ | $\mathbf{5 5 4}$ | $\mathbf{5 5 5}$ | $\mathbf{5 5 6}$ | $\mathbf{5 5 7}$ | $\mathbf{5 5 8}$ | $\mathbf{5 5 9}$ | $\mathbf{5 6 0}$ |
| $\mathbf{5 6 1}$ | $\mathbf{5 6 2}$ | $\mathbf{5 6 3}$ |  | $\mathbf{5 6 5}$ | $\mathbf{5 6 6}$ | $\mathbf{5 6 7}$ | $\mathbf{5 6 8}$ | $\mathbf{5 6 9}$ | $\mathbf{5 7 0}$ |
| $\mathbf{5 7 1}$ | $\mathbf{5 7 2}$ | $\mathbf{5 7 3}$ | $\mathbf{5 7 4}$ | $\mathbf{5 7 5}$ | $\mathbf{5 7 6}$ | $\mathbf{5 7 7}$ | $\mathbf{5 7 8}$ | $\mathbf{5 7 9}$ | $\mathbf{5 8 0}$ |
| $\mathbf{5 8 1}$ | $\mathbf{5 8 2}$ | $\mathbf{5 8 3}$ | $\mathbf{5 8 4}$ | $\mathbf{5 8 5}$ | $\mathbf{5 8 6}$ | $\mathbf{5 8 7}$ | $\mathbf{5 8 8}$ | $\mathbf{5 8 9}$ | $\mathbf{5 9 0}$ |
| $\mathbf{5 9 1}$ | $\mathbf{5 9 2}$ | $\mathbf{5 9 3}$ | $\mathbf{5 9 4}$ | $\mathbf{5 9 5}$ | $\mathbf{5 9 6}$ | $\mathbf{5 9 7}$ |  | $\mathbf{5 9 9}$ | $\mathbf{6 0 0}$ |
| (a) | Which whole number is hidden by the | $?$ |  |  |  |  |  |  |  |
| (b) | Which whole number comes after the | $?$ |  |  |  |  |  |  |  |

## Unit 1 Numbers

(c) Which whole number is before the
? $\qquad$
(d) Which whole numbers are between 558 and 563 ? $\qquad$
(e) Start at $\square$ , count and write four numbers forward, $\qquad$ , $\qquad$ , $\qquad$
(f) Start at $\square$ , count and write four numbers backward, $\qquad$ , $\qquad$ , $\qquad$ ,
(g) Start at , count and write two numbers forward, $\qquad$ , $\qquad$
(h) Begin at count and write three numbers backward, $\qquad$ , $\qquad$ ,

## Skip Counting

I count in fives.
 $0,5,10,15,20 \ldots$
4. Count in fives and write the missing numbers.
(a)
 10, 15, 20, $\qquad$ , $\qquad$
(b)


35, 40, $\qquad$ , $\qquad$ , $\qquad$
(c)


70, 75, $\qquad$ , $\qquad$ , $\qquad$
5. The numbers $\mathbf{1 - 1 0 0}$ are listed below.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

(a) Start at 2 and count in twos.
(b) Circle every number that you counted and describe the pattern.
6. The numbers 401-500 are listed below.

| 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 |
| 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 |
| 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 |
| 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 |
| 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 |
| 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 |
| 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 |
| 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 |
| 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 |

(a) Start at 401 and count in threes.
(b) Circle every number that you counted and describe the pattern.

## Unit 1 Numbers



Ordinal Numbers
The picture shows pupils lining up to buy tickets at the theatre. Each pupil has a position.


First/Last


## Unit 1 Numbers

| Read and remember. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1^{\text {st }}$ | First | $11^{\text {th }}$ | Eleventh | $30^{\text {th }}$ | Thirtieth |
| $2^{\text {nd }}$ | Second | $12^{\text {th }}$ | Twelfth | $40^{\text {th }}$ | Fortieth |
| $3^{\text {rd }}$ | Third | $13^{\text {th }}$ | Thirteenth | $50^{\text {th }}$ | Fiftieth |
| $4^{\text {th }}$ | Fourth | $14^{\text {th }}$ | Fourteenth | $60^{\text {th }}$ | Sixtieth |
| $5^{\text {th }}$ | Fifth | $15^{\text {th }}$ | Fifteenth | $70^{\text {th }}$ | Seventieth |
| $6^{\text {th }}$ | Sixth | $16^{\text {th }}$ | Sixteenth | $80^{\text {th }}$ | Eightieth |
| $7^{\text {th }}$ | Seventh | $17^{\text {th }}$ | Seventeenth | $90^{\text {th }}$ | Ninetieth |
| $8^{\text {th }}$ | Eighth | $18^{\text {th }}$ | Eighteenth | 100 | Hundredth |
| $9^{\text {th }}$ | Ninth | $19^{\text {th }}$ | Nineteenth |  |  |
| $10^{\text {th }}$ | Tenth | $20^{\text {th }}$ | Twentieth |  |  |

Ordinal Numbers

Reading a calendar.

|  | January |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sun Mon Tue Wed Thu Fri $\mathrm{Sat}^{\text {a }}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 1 | 2 |  | 3 |
|  |  | 5 | 6 | 7 | 7 | 8 | 9 |  | 10 |
| Ex) |  | 12 | 13 | 14 | 14 | 15 | 16 |  | 17 |
| $\cdots$ |  | 19 | 20 | 2 | 212 | 22 | 23 |  | 24 |
|  | 25 | 26 | 27 | 28 |  |  |  |  |  |

1. Complete the calendar by writing the missing ordinal numbers.

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & 1 \\ & \left(1^{\text {st }}\right) \end{aligned}$ | $\begin{aligned} & 2 \\ & \left(2^{\text {nd }}\right) \end{aligned}$ | $\begin{aligned} & 3 \\ & \left(3^{\mathrm{rd}}\right) \end{aligned}$ |
| $\begin{aligned} & 4 \\ & \left(\_\_\right) \end{aligned}$ | $\begin{aligned} & 5 \\ & \left(\_\_\right) \end{aligned}$ | $\begin{aligned} & 6 \\ & \left(\_\right. \text {) } \end{aligned}$ | $\begin{aligned} & 7 \\ & \left(\_\_\right) \end{aligned}$ | $\begin{aligned} & 8 \\ & \left(\_\_\right) \end{aligned}$ | $\begin{aligned} & 9 \\ & (\ldots) \end{aligned}$ | $\begin{gathered} 10 \\ \left(\_\_\right) \end{gathered}$ |
| $\begin{aligned} & 11 \\ & \left(\_\_\right) \end{aligned}$ | $\begin{aligned} & 12 \\ & \left(\_\_\right) \end{aligned}$ | $\left.\begin{array}{l} 13 \\ (\ldots \end{array}\right)$ | $\left.\begin{array}{c} 14 \\ (\ldots \end{array}\right)$ | $\left.\begin{array}{l} 15 \\ (\ldots \end{array}\right)$ | $\begin{gathered} 16 \\ \left(\_\_\right) \end{gathered}$ | $\begin{gathered} 17 \\ (ـ \quad ـ) \end{gathered}$ |
| $\binom{18}{\left(\_\right.}$ | $\left(\begin{array}{l} 19 \\ \left(\_\right) \end{array}\right.$ | $\stackrel{20}{(\ldots)}$ | $\stackrel{21}{\left(\_\right)}$ | $\stackrel{22}{(\ldots)}$ | $\stackrel{23}{\left(\_\right)}$ | $\stackrel{24}{(ـ})$ |
| $\begin{aligned} & 25 \\ & \left(\_\right. \text {) } \end{aligned}$ | $\begin{aligned} & 26 \\ & (\ldots) \end{aligned}$ | $\begin{gathered} 27 \\ \left(\_\_\right) \end{gathered}$ | $\left.\begin{array}{c} 28 \\ (\ldots \end{array}\right)$ | $\begin{gathered} 29 \\ (\ldots) \end{gathered}$ | $\begin{gathered} 30 \\ \left(\_\_\right) \end{gathered}$ | $\begin{gathered} 31 \\ \left(\_\_\right) \end{gathered}$ |

## Unit 1 Numbers

2. Complete.

| $1^{\text {st }}$ | First | $11^{\text {th }}$ |  |
| :---: | :---: | :---: | :---: |
| $2^{\text {nd }}$ | Second | $12^{\text {th }}$ | Twelfth |
| $3^{\text {rd }}$ | Third | $13^{\text {th }}$ |  |
| $4^{\text {th }}$ | Fourth | $14^{\text {th }}$ |  |
| $5^{\text {th }}$ | Fifth | $15^{\text {th }}$ |  |
| $6^{\text {th }}$ |  | $16^{\text {th }}$ |  |
| $7^{\text {th }}$ |  | $17^{\text {th }}$ |  |
| $8^{\text {th }}$ |  | $18^{\text {th }}$ |  |
| $9^{\text {th }}$ |  | $19^{\text {th }}$ |  |
| $10^{\text {th }}$ | - | $20^{\text {th }}$ | Twentieth |

3. Write the missing ordinal numbers.

| $40^{\text {th }}$ | $41^{\text {st }}$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | $47^{\text {th }}$ |  |  |
| $50^{\text {th }}$ |  |  |  |  |

4. Starting from the top,
(a) circle the $3^{\text {rd }}$ button red.
(b) tick the $8^{\text {th }}$ button.
(c) cross the $5^{\text {th }}$ button.


## Ordinal Numbers

5. Starting from bottom,
(a) write your name in the first rectangle.
(b) draw a flower in the sixth rectangle.
(c) colour the seventh rectangle.

6. Starting from the left,

| 1. | tick $(\sqrt{ })$ the sixth $\left(6^{\text {th }}\right)$ ball |  |
| :--- | :--- | :--- |
| 2. | tick $(\sqrt{ })$ the third $\left(3^{\text {rd }}\right)$ square |  |
| 3. | cross $(x)$ the fourth <br> and tenth triangles |  |
| ring the seventh $\left(7^{\text {th }}\right)$ pencil |  |  |
| 5. | circle the second $\left(2^{\text {nd }}\right)$ <br> and eighth $\left(8^{\text {th }}\right)$ flowers |  |

7. Starting from the right,

(a) colour the T-Shirt of the fifth boy red.
(b) draw a hat on the head of the first boy.
(c) tick the sixth boy.
(d) cross the last boy.

## Unit 1 Numbers

8. Fill in the blanks with: second, first, last, eleventh
(a) " $A$ " is the $\qquad$ letter of the alphabet.
(b) Tuesday is the $\qquad$ day of the school week.
(c) December is the $\qquad$ month of the year.
(d) November is the $\qquad$ month of the year.
9. 



## Starting from the right,

(a) Name the boy standing in the third position. $\qquad$
(b) What is the position of Suzan? $\qquad$
(c) Who is standing in between the $4^{\text {th }}$ and $6^{\text {th }}$ pupils? $\qquad$
(d) What is the rank of the last pupil? $\qquad$
10. The results of a 200-meter race is shown in the table below. Write the rank of each runner in the table.

| Kevin | 24 seconds |  |
| :--- | :--- | :--- |
| Nawaz | 21 seconds |  |
| Rajen | 23 seconds |  |
| Kiran | 20 seconds |  |
| Raj | 25 seconds |  |

## Ordinal Numbers

11. Look at the calendar below and answer the questions that follow:


December
Sun Mon Tue Wed Thu Fri $\mathrm{S}_{\text {at }}$
123
$\begin{array}{lllllll}4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
$\begin{array}{lllllll}11 & 12 & 13 & 14 & 15 & 16 & 17\end{array}$
$\begin{array}{lllllll}18 & 19 & 20 & 21 & 22 & 24\end{array}$
$25 \quad 262728293031$
(a) What day is five days after the $3^{\text {rd }}$ ?
(b) What date is ten days after the $5^{\text {th }}$ ?
$\qquad$
(c) If you start on Tuesday and count on seven days, what is the day?
(d) If you start on Friday $2^{\text {nd }}$ December and count back four days, what is the day?
(e) If you start on the $23^{\text {rd }}$ and count back fifteen days, what is the date?
$\qquad$
(f) What day and date is eight days before the $25^{\text {th }}$ ?
(g) What day and date is seven days after the $12^{\text {th? }}$ ?

## Unit 1 Numbers

## Place Value

Numbers can be expressed in terms of units, tens and hundreds.
Two illustrative examples are given below.
(a) Rs 523


Rs 500


Rs 20


Rs 3

Rs 523


We can write

$$
523=\quad(5 \times 100) \quad+(2 \times 10)+(3 \times 1)
$$

(b) We can interpret 352 in the same way.
Rs 352


$$
352=(3 \times 100) \quad+\quad(5 \times 10) \quad+\quad(2 \times 1)
$$

## Place Value

1. Complete the following.
(a) Rs 225

$225=$ $\qquad$ x $\qquad$ ) + $\qquad$ x $\qquad$ ) + ( $\qquad$ x $\qquad$ )
(b) Rs 555

$555=$ $\qquad$ $x$ $\qquad$ ) $+($ $\qquad$ x $\qquad$ ) + $\qquad$ x $\qquad$ )
(c) Rs 154

$154=($ $\qquad$ x $\qquad$ ) $+($ $\qquad$ $x$ $\qquad$ ) + $\qquad$ x $\qquad$

## Unit 1 Numbers

## Place Value

Numbers can also be represented using base 10 blocks.


1 hundred


1 ten


1 unit

## Example 1:

| 143 | $=$ | 100 | + | 40 | + | 3 |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $=$ | $(1 \times 100)$ | + | $(4 \times 10)$ | + | $(3 \times 1)$ |




## Example 2:

$213=$
200
$+\quad 10$
$+(1 \times 10)+(3 \times 1)$

$213=(2 \times 100)+(1 \times 10)+(3 \times 1)$

expanded notation

## Place Value

2. Using squared paper, make cut-outs of hundreds, tens and units. Use the cut-outs to represent the following:
(a) $235=$
(b) $333=$
(c) $104=$
3. Write in expanded notation.
(a) $214=$
(b) $453=$ $\qquad$
(c) $907=$

## Unit 1 Numbers

## Abacus

We can also represent numbers on an abacus.
In 325, $\mathbf{3}$ has the value of $\mathbf{3}$ hundreds;
$\mathbf{2}$ has the value of $\mathbf{2}$ tens; and $\mathbf{5}$ has the value of $\mathbf{5}$ units.

325 is represented on a picture abacus as shown below.


Key
U : Units
T : Tens
H : Hundreds
4. Write in figures.
(a)

(b)

(c)

5. Draw picture abacuses to represent
(a) 524
(b) 340
(c) 904
(d) 476

## Comparison of Numbers

## Comparing Numbers

Observe the sequence of numbers on your ruler.


Observe that
2 is smaller than
5.
$2<5$

Similarly,
13 is smaller than 17.
$13<17$

Observe that
Similarly,
9 is greater than 6.
$9>\quad 6$
6
15 is greater than
13
$15>$
13

## Smaller than / Bigger than



2 is on the left of 4
2 is smaller than 4 . We write $2<4$

6 is on the right of 4 .
6 is bigger than 4. We write 6 4

## Unit 1 Numbers

## Comparing Numbers

To compare two numbers we first consider the digit on the left of each number.

Example: Compare the numbers 53 and 35 . Which number is bigger?
Which number is smaller?

5 in 53 is 5 tens.
3 in 35 is 3 tens.
5 tens is more than 3 tens

Hence 53 is greater than 35 or $53>35$

And 35 is smaller than 53 or $35<53$

1. Compare the numbers. Write the correct symbol $<,>_{\text {, }}=$.
(a) 15 $\qquad$ 16
(b) 22 $\qquad$ 11
(c) 18 $\qquad$ 8
(d) 71 $\qquad$ 17
2. Compare the numbers. Write the correct symbol $<,>,=$.
(a) 25 $\qquad$ 40
(b) 54 $\qquad$ 81
(c) 86 $\qquad$ 68
(d) 270 $\qquad$ 270
(e) 672 $\qquad$ 267
(f) 549 $\qquad$ 945
(g) 525 $\qquad$ 525
(h) 903 $\qquad$ 309

## Ordering Numbers

## Ascending and Descending order



The numbers $1,2,3,4,5,6,7,8$ are in ascending order.


The numbers $8,7,6,5,4,3,2,1$ are in descending order.
3. Write the following numbers in ascending order (i.e., starting from the smallest to the largest)
(a) $63,19,37,98$
(b) $654,587,869,292$
4. Write the following numbers in descending order (i.e., starting from the largest to the smallest)
(a) $327,932,428,609$
(b) 109, 756, 329, 671

## Unit 1 Numbers

## Place Value Dice Game

## Activity 1: Constructing the smallest number.



The objective of this game is to determine the smallest number possible when 3 dice are rolled.

Materials required: 3 dice, place value recording sheet (see Table 1 below)

## Number of players: 4

## Procedure:

1. This game requires 4 players, $\mathbf{A}, \mathbf{B}, \mathbf{C}$ and $\mathbf{D}$. The responsibility of player $\mathbf{A}$ is to roll the dice, verify the players' answers and record the scores of the players $\mathbf{B}$, $\mathbf{C}$ and $\mathbf{D}$ in the score sheet below. A correct answer obtains a score of 10 marks. An incorrect answer gets zero mark.

|  | Game 1 | Game 2 | Game 3 | Game 4 | Game 5 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Player B |  |  |  |  |  |  |
| Player C |  |  |  |  |  |  |
| Player D |  |  |  |  |  |  |

Table 1. Score Sheet (for player A)
2. A place value recording sheet (Table 2) is given to each of the players B, C and $\mathbf{D}$.

## Place Value

|  | Hundreds | Tens | Units |
| :---: | :---: | :---: | :---: |
| Game 1 |  |  |  |
| Game 2 |  |  |  |
| Game 3 |  |  |  |
| Game 4 |  |  |  |
| Game 5 |  |  |  |

Table 2. Place value recording sheet.
3. Player $\mathbf{A}$ rolls the 3 dice together.
4. Player B, C and $\mathbf{D}$ construct the smallest 3-digit number from the dice and record it in their respective sheets.
5. Player A rolls the 3 dice 4 more times. Each time the students have to construct and record the smallest number in their place value recording sheet.
6. The player with the highest score is the winner.

Activity 2: The game can be modified to find the greatest 3-digit number.

## Unit 1 Numbers

## Mental Arithmetic

A ten frame is a grid consisting of ten partitions, as shown below.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

We can represent number four as follows:


4 is double 2


4 is 1 less than 5 4 is half of 8

In the same way, we can represent five as follows:


5 is half of 10


5 is one more than 4 5 is double 2 and 1

Consider the representations of eight:


8 is 5 and 3 more
8 is $5+3$
8 is $6+2$
8 is 2 less than 10


8 is double 4 8 is 4 groups of 2

## Mental Arithmetic

1. Represent the numbers $\mathbf{6}$ and $\mathbf{7}$ in different ways on a ten-frame.

Number 6


Number 7


## Know your number facts

Knowing doubles allows you to perform arithmetic operations faster.

| $1+1=2$ | $6+6=12$ |
| :--- | :--- |
| $2+2=4$ | $7+7=14$ |
| $3+3=6$ | $8+8=16$ |
| $4+4=8$ | $9+9=18$ |
| $5+5=10$ |  |

## Unit 1 Numbers

## Know your number facts

Similarly, you should know pair of numbers which add up to 5 .

## Sum of 5

$1+4=5$
$2+3=5$
$3+2=5$
$4+1=5$
Pairs of numbers which add up to 10 are also useful.
Sum of 10

| $1+9=10$ | $6+4=10$ |
| :--- | :--- |
| $2+8=10$ | $7+3=10$ |
| $3+7=10$ | $8+2=10$ |
| $4+6=10$ | $9+1=10$ |
| $5+5=10$ |  |

## Two-stage addition

We can add two numbers using the doubles.
Example 1: $5+6=5+5+1$

$$
=\quad 10+1=11
$$

Example 2: $7+8=7+7+1$
$=14+1$
2. Workout the following addition in two stages.
(a) $6+7$
(b) $8+9$
(c) $5+7$

## Mental Arithmetic

## More 'friendly' pairs

$11+9=20$
$12+8=20$
$13+7=20$
$14+6=20$
$15+5=20$
$16+4=20$
$17+3=20$
$18+2=20$

$19+1=20$$|$| $41+9=40+10=50$ |
| :--- |
| $42+8=40+10=50$ |
| $43+7=40+10=50$ |
| $44+6=40+10=50$ |
| $45+5=40+10=50$ |
| $46+4=40+10=50$ |
| $47+3=40+10=50$ |
| $48+2=40+10=50$ |
| $49+1=40+10=50$ |

## Two-stage addition

We can add two numbers using the 'friendly' pairs.

$$
\begin{aligned}
15+8 & =15+5+3 \\
& =20+3=23 \\
16+14 & =16+4+10 \\
& =20+10=30 \\
13+47 & =10+3+47 \\
& =10+50=60
\end{aligned}
$$

3. Workout by two stage addition.
(a) $23+17$
(b) $69+21$
(c) $82+18$

## Unit 1 Numbers

## Subtraction by splitting

Often, we can perform subtraction by splitting the number being subtracted.

Example 1 Consider 12 - 5
We split 5 such that it contains the number 2 .
$5=2+3$
First we subtract 2. Then we subtract 3
$12-2=10$
$10-3=7$
Thus, $12-5=7$.

Example 2 43-7
We split 7 such that it contains the number 3 .
$7=3+4$
First we subtract 3 . Then we subtract 4 .
$43-3=40$
$40-4=36$
Thus, $43-7=36$.
4. Workout the subtraction by spliting.
(a) 22-6
(c) 43-7
(b) $51-8$
(d) $51-9$

## Mental Arithmetic

## Subtraction involving 9

To subtract 9 from a number, we first subtract 10 , then we add 1 .

Example 1 21 - 9
9 is one less than 10
We subtract 10 and then add 1 .
$21-10=11$
$11+1=12$
Thus, $21-9=12$.

Example 2 47 - 9
We subtract 10 and then add 1 .
$47-10=37$
$37+1=38$
Thus, $47-9=38$.

## 5. Workout

(a) $38-9$
(b) $54-9$
(c) $65-9$

## Unit 1 Numbers

## Continuous Assessment

## 1. Write in words

(a) 10 :
(b) 12 : $\qquad$
(c) 113 : $\qquad$
(d) 445 : $\qquad$
(e) 536 : $\qquad$
(f) 750 : $\qquad$
2. Write in figures.
(a) Eleven : $\qquad$
(b) One hundred and twenty three : $\qquad$
(c) Nine hundred and three : $\qquad$
(d) Eight hundred and fifty six : $\qquad$
(e) Seven hundred and seventy seven : $\qquad$
3. Complete.
(a) 2, 4, $\qquad$
$\qquad$ 10.
(b) 3,6, $\qquad$ , $\qquad$ 18.
(c) $\qquad$ 10, $\qquad$ , $\qquad$ 25, $\qquad$ 35.
(d) $23,20,17$, $\qquad$ —— $\qquad$ .

## Continuous Assessment

4. Write in ascending order.
(a) $7,5,1,8,4$
$\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ ,
(b) $43,1,23,79,25$
$\qquad$
, $\qquad$ , $\qquad$ , $\qquad$
$\qquad$
(c) $213,123,312,132,231,313$
$\qquad$
, $\qquad$ , $\qquad$ , $\qquad$ , $\quad$, $\qquad$
5. Write in descending order.
(a) $13,18,15,11,19$
$\qquad$ , $\qquad$ , $\qquad$
(b) 176, 213, 150, 500, 335
$\qquad$ , ——, $\qquad$ , $\qquad$ , $\qquad$
(c) $567,765,657,756,576$
$\qquad$ , $\qquad$ , $\qquad$ ,
6. (a) Circle the sixth ball, starting from the left.


(b) Tick $(\sqrt{ })$ on the $3^{\text {rd }}$ square, starting from the right.

(c) Cross ( $x$ ) the fifth and tenth triangles, starting from the left.

(d) Circle the ninth flower, starting from the right.



## Unit 1 Numbers

7. Write the symbol $>,<$, or $=$ in the boxes below.
(a) 5
 10
(b) 7
 7
(c) 18


8
(d) 421


241
(e) 403
43
8. Write True or False.
(a) $124 \quad<312$
(b) $53 \quad=35$
(c) $12 \gg 5$
(d) $17 \quad=17$
(e) $921 \quad<219$
9. Write down the value of
(a) 2 in 298 . $\qquad$
(b) 9 in 539 . $\qquad$
(c) 7 in 709 . $\qquad$
(d) 6 in 460 . $\qquad$
(e) 2 in 526 . $\qquad$

## Continuous Assessment

10. Complete the number line.

11. Complete the sequence.
(a) $2,5,8,11$, $\qquad$ , $\qquad$ , ,
(b) $27,23,19,15$, $\qquad$ — $\qquad$ ,
12. The marks obtained by 6 students in a test are shown below. Fill the table.

| Student | Marks | Rank | Student |
| :---: | :---: | :---: | :---: |
| Ken | 9 | $1^{\text {st }}$ |  |
| Jeff | 17 | $2^{\text {nd }}$ |  |
| Anil | 25 | $3^{\text {rd }}$ |  |
| Shanti | 48 | $4^{\text {th }}$ |  |
| Ali | 39 | $5^{\text {th }}$ |  |
| Coomaren | 30 | $6^{\text {th }}$ |  |

## Unit 1 Numbers

## Profiling

| Numbers |  | Good | Satisfactory |  |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Read numbers |  |  |  |
| 2. | Write numbers |  |  |  |
| 3. | Write in words |  |  |  |
| 4. | Count forward |  |  |  |
| 5. | Count backward |  |  |  |
| 6. | Skip counting |  |  |  |
| 7. | Compare numbers |  |  |  |
| 8. | Arrange numbers in ascending or descending order |  |  |  |
| 9. | Read and write ordinal numbers |  |  |  |
| 10. | Expand numbers/Place Value |  |  |  |
| 11. | Perform simple arithmetic operations mentally |  |  |  |

$\qquad$
Signature of parent : $\qquad$

