STD-II

MATHS

NOTES

(2023-2024)

TERM-I

Numerals :501 – 550

501		511		521		531		541
502		512		522		532		542
503		513		523		533		543
504		514		524		534		544
505		515		525		535		545
506		516		526		536		546
507		517		527		537		547
508		518		528		538		548
509		519		529		539		549
510		520		530		540		550

Write number names for the following numerals:

501 – Five hundred one

502 - Five hundred two

503 – Five hundred three

504 – Five hundred four

505 – Five hundred five

506 – Five hundred six

507 – Five hundred seven

508 – Five hundred eight

509 – Five hundred nine

510 – Five hundred ten

Numerals : 551 – 600

551		**561**		**571**		**581**		**591**
552		**562**		**572**		**582**		**592**
553		**563**		**573**		**583**		**593**
554		**564**		**574**		**584**		**594**
555		**565**		**575**		**585**		**595**
556		**566**		**576**		**586**		**596**
557		**567**		**577**		**587**		**597**
558		**568**		**578**		**588**		**598**
559		**569**		**579**		**589**		**599**
560		**570**		**580**		**590**		**600**

Write number names for the following numerals:

511 – Five hundred eleven

512 – Five hundred twelve

513 – Five hundred thirteen

514 – Five hundred fourteen

515 – Five hundred fifteen

516 – Five hundred sixteen

517 – Five hundred seventeen

518 – Five hundred eighteen

519 – Five hundred nineteen

520 - Five hundred twenty

Write number names for the following numerals :

521 – Five hundred twenty one

522 – Five hundred twenty two

523 – Five hundred twenty three

524 – Five hundred twenty four

525 – Five hundred twenty five

526 – Five hundred twenty six

527 – Five hundred twenty seven

528 –Five hundred twenty eight

529 – Five hundred twenty nine

530 – Five hundred thirty

531 - Five hundred thirty one

532 - Five hundred thirty two

533 - Five hundred thirty three

534 - Five hundred thirty four

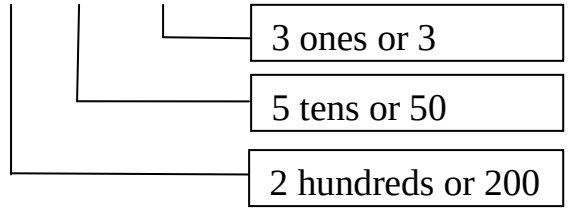
535 - Five hundred thirty five

Ch – 1: Numbers up to 200

I.Write the place value of the digits:

H T O

2 5 3



II. Write the numbers in expanded form:

a) 168 = 1 Hundred + 6 Tens + 8 Ones = 100 + 60 + 8

b) 149 = 1 Hundred + 4 Tens + 9 Ones = 100 + 40 + 9

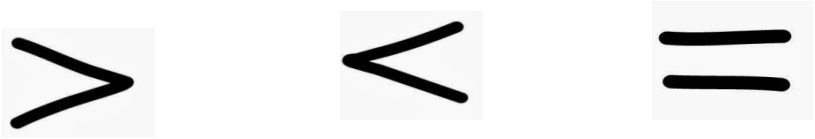
III. Write the number that comes after, before and between:

a) **180** , 181 b) 139 , **140**

c) 156, **157** ,158 d) 129, **130** ,131

Note : Comparing Numbers

We use the following sign to compare numbers.



IV. Compare(< , > , =) :

a) 62 [<] 95 b) 45 [>] 20 + 10

c) 26 [<] 178 d) 192 [=] 192

V. Arrange the following in increasing order:

a) 178, 192 , 45, 96

45 , 96 , 178 , 192

VI. Arrange the following in decreasing order:

a) 123, 158 12, 78

158, 123, 78, 12

VII. Decide whether the given numbers are odd or even:

a) 6 - **even**

b) 9 - **odd**

c) 42 - **even**

d) 73 – **odd**

Ch – 2:Addition

I.Notes:

- When we put things together we ‘add’ them.
  - The answer is called the ‘sum’

$$\begin{array}{rr} & 5 \\ + & 2 \\ \hline \text{Sum} \longrightarrow & 7 \\ \hline \end{array}$$

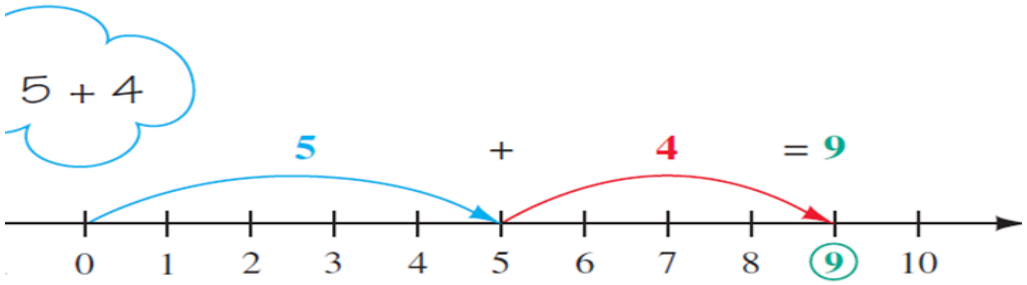
- When 1 is added to a number we get the next number as the answer.

  Example: 20 + 1 = 21
  1 + 4 = 5

- When zero is added to a number we get the same number as the answer.

  Example : 23 + 0 = 23
  0 + 9 = 9

II.Add with the help of the number line :



III. Add the following numbers (without regrouping):

a)13+2+24

	T	0
	1	3
		2
+	2	4
	3	**9**

5

b) 65 + 23

	T	0
	6	5
+	2	3
	8	**8**

IV. <u>Add the following numbers (with regrouping):</u>

a) 5 + 3 + 6

	T	0
	(1)	
		5
+		3
		6
	1	**4**

b) 23 + 17

	T	0
	(1)	
	2	3
+	1	7
	4	**0**

V. <u>Word problem</u> :

a) There are 25 roosters and 31 puppies in a farm. How many roosters and puppies are there in all?

Ans : Number of roosters =

Number of puppies = +

Total =

T	**O**
2	**5**
3	**1**
5	**6**

b) There are 11 mango trees and 19 banyan trees in an orchard. How many trees are there in the orchard?

Ans : Number of mango trees =

Number of banyan trees = +

Total trees =

T	**O**	
(**1**)		
1	1	**10**
1	9	
3	0	

Numerals (601-650)

601		**611**		**621**		**631**		**641**
602		**612**		**622**		**632**		**642**
603		**613**		**623**		**633**		**643**
604		**614**		**624**		**634**		**644**
605		**615**		**625**		**635**		**645**
606		**616**		**626**		**636**		**646**
607		**617**		**627**		**637**		**647**
608		**618**		**628**		**638**		**648**
609		**619**		**629**		**639**		**649**
610		**620**		**630**		**640**		**650**

Ch – 3 Subtraction

I. Notes:

a) When we subtract, we " take away" or " minus" to find out how much is left.

The answer in subtraction is called " difference".

b) Subtraction of zero:

When "0" is subtracted from a number , we get the same number as the answer.

Example: 15 - 0 = 15

c) Subtraction of one:

When "1" is subtracted from a number, we get the number before it as the answer.

Example: 55 - 1 = 54

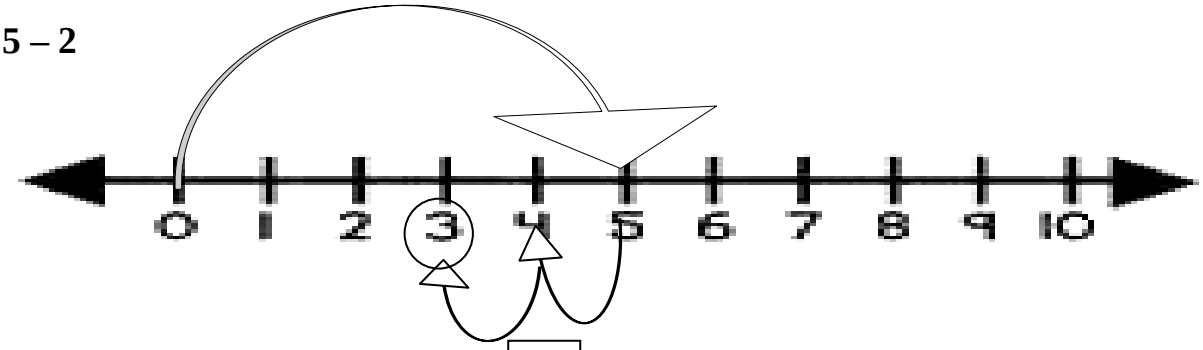
d) Subtraction of the same number:

When we subtract a number by itself , we get zero as the answer.

Example: 12 - 12 = 0

II. Subtraction using number line:

a) 5 – 2



5 - 2 = 3

III. Subtract without regrouping :

a) Subtract 4 from 59

	T	0
	5	9
-		4
	5	**5**

b) Subtract 68 from 99

	T	0
	9	9
-	6	8
	3	**1**

IV. Subtract with regrouping

a) Subtract 38 from 46

	T	0
	3 ~~4~~	~~6~~ 16
-	3	8
	0	**8**

b) Subtract 86 from 92

	T	0
	8 ~~9~~	~~2~~ 12
-	8	6
	0	**6**

V. Connecting subtraction with addition:

a $4 + \underline{8} = 12$

$12 - 4 = \underline{8}$

b $7 + \underline{12} = 19$

$19 - 7 = \underline{12}$

c $14 + \underline{6} = 20$

$20 - 14 = \underline{6}$

d $9 + \underline{9} = 18$

$18 - 9 = \underline{9}$

VI. <u>Word problem:</u>

1) 25 birds are sitting on a tree. Out of which 12 birds flew away. How many birds are left on the tree?

Ans:

Number of birds =

Number of birds flew away = -

Number of birds left =

T	O
2	5
1	2
1	**3**

2) There are 65 trees in an orchard. Of which 37 are mango trees. How many apple trees are there?

Ans:

Total number of trees =

Number of mango trees = -

Number of apple trees =

T	O
5	15
~~6~~	~~5~~
3	7
2	**8**

<u>Write number names for the following numerals :</u>

535 – Five hundred thirty five

536 – Five hundred thirty six

537 – Five hundred thirty seven

538 – Five hundred thirty eight

539 – Five hundred thirty nine

540 – Five hundred forty

541 – Five hundred forty one

542 – Five hundred forty two

543 – Five hundred forty three

544 - Five hundred forty four

545– Five hundred forty five

546 – Five hundred forty six

547 – Five hundred forty seven

548 – Five hundred forty eight

549 – Five hundred forty nine

550 – Five hundred fifty

CH: 4 –Numbers upto 1000

I. Write the place value of the digits:

H	T	O
7	**4**	**2**

- 2 → 2 ones or 2
- 4 → 4 tens or 40
- 7 → 7 hundreds or 700

II. Write the numbers in expanded form:

a) 563 = 5 Hundred + 6 Tens + 3 Ones = 500 + 60 + 3

b) 892 = 8 Hundred + 9 Tens + 2 Ones = 800 + 90 + 2

III. Write the number that comes after, before and between:

a) **640** , 641 b) 389 , **390**

c) 543, **544** , 545 d) 894, **895** , 896

IV. Compare(< , > , =) :

a) 560 [<] 740 b) 924 [>] 912

V. Fill in the blanks:

a) 600 more than 10 is **610**

b)745 less than 10 is **735**

c) 800 more than 100 is **900**

d) 582 less than 100 is **482**

Numerals (651-700)

651		**661**		**671**		**681**		**691**
652		**662**		**672**		**682**		**692**
653		**663**		**673**		**683**		**693**
654		**664**		**674**		**684**		**694**
655		**665**		**675**		**685**		**695**
656		**666**		**676**		**686**		**696**
657		**667**		**677**		**687**		**697**
658		**668**		**678**		**688**		**698**
659		**669**		**679**		**689**		**699**
660		**670**		**680**		**690**		**700**

Write number names for the following numerals :

551 – Five hundred fifty one

552- Five hundred fifty two

553-Five hundred fifty three

554 –Five hundred fifty four

555-Five hundred fifty five

556-Five hundred fifty six

557-Five hundred fifty seven

558 –Five hundred fifty eight

559- Five hundred fifty nine

560 –Five hundred sixty

561 –Five hundred sixty one

562 –Five hundred sixty two

563 –Five hundred sixty three

564 –Five hundred sixty four

565 -Five hundred sixty five

566 – Five hundred sixty six

567 – Five hundred sixty seven

568 –Five hundred sixty eight

569 –Five hundred sixty nine

570 –Five hundred seventy.

CH: 5 – More Addition

I. Addition using regrouping twice:

a) 78+59

	H	T	O
	(1)	(1)	
		7	8
+		5	9
	1	**3**	**7**

b) 95+77

	H	T	O
	(1)	(1)	
		9	5
+		7	7
	1	**7**	**2**

c) 387+164

	H	T	O
	(1)	(1)	
	3	8	7
+	1	6	4
	5	**5**	**1**

d) 78+59

	H	T	O
	(1)	(1)	
	6	8	9
+	2	7	6
	9	**6**	**5**

II. Word problem:

1. In a school, 557 boys and 426 girls participated in the sports day function. Find the total number of students participated?

Ans:

Number of boys = 557

Number of girls = 426

Total number of students participated =

		T	O
		(1)	
	5	5	7
+	4	2	6
	9	**8**	**3**

CH: 6 – Subtraction of bigger number

I. Write in the correct place and solve:

a) 548 - 4

	H	T	O
	5	4	8
-	↓	↓	4
	5	**4**	**4**

b) 658 - 46

	H	T	O
	6	7	8
-	↓	4	6
	6	**3**	**2**

c) 856 - 625

	H	T	O
	8	5	6
-	6	2	5
	2	**3**	**1**

d) 743 - 536

	H	T	O
		3	13
	7	~~4~~	~~3~~
-	5	3	6
	2	**0**	**7**

II. Word problem:

a) Krishna has 68 pista shells. He used 39 of them to decorate his drawing. How many shells are left with him?

Total number of pista shells =

Number of shells used =

Number of shells left =

	T	O
	5	18
	~~6~~	~~8~~
-	3	9
	2	**9**

Numerals (701-750)

701	**711**	**721**	**731**	**741**
702	**712**	**722**	**732**	**742**
703	**713**	**723**	**733**	**743**
704	**714**	**724**	**734**	**744**
705	**715**	**725**	**735**	**745**
706	**716**	**726**	**736**	**746**
707	**717**	**727**	**737**	**747**
708	**718**	**728**	**738**	**748**
709	**719**	**729**	**739**	**749**
710	**720**	**730**	**740**	**750**

TERM-II

Numerals :751 to 800

751	**761**	**771**	**781**	**791**
752	**762**	**772**	**782**	**792**
753	**763**	**773**	**783**	**793**
754	**764**	**774**	**784**	**794**
755	**765**	**775**	**785**	**795**
756	**766**	**776**	**786**	**796**
757	**767**	**777**	**787**	**797**
758	**768**	**778**	**788**	**798**
759	**769**	**779**	**789**	**799**
760	**770**	**780**	**790**	**800**

Write number names for the following numerals:

592 – Five hundred ninety two

608 – Six hundred eight

615 – Six hundred fifteen

624 – Six hundred twenty four

637 – Six hundred thirty seven

649 – Six hundred forty nine

CH 10:Measurements

Measurement of length

Notes:

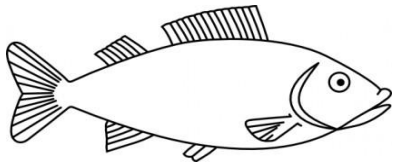
* We use standard units for length called centimetres(cm) and metres(m).

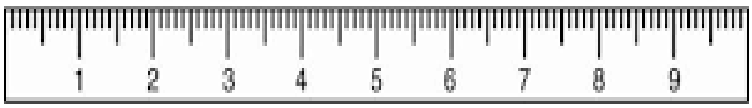
* A centimetre(cm) is used to measure shorter length.

* A metre(m) is used to measure longer length.

* 100 cm = 1m

I. Use a ruler to measure the length of the given object:





The length of the fish is 5cm**.**

II. Fill in the blanks:

a) The teacher's table is about 3m long.

b) My table is about 2m long.

Measurement of Mass (weight)

Notes:

* We use grams (g) and kilograms (kg) to weigh things.

* A gram (g) is used to weigh light objects.

* A kilogram (kg) is used to weigh heavy objects.

* 1000 g = 1 kg

I. Decide whether the objects are weigh in 'g' or 'kg':

a) A sheet of paper – g

b) A slab of chocolate – g

c) A car – kg

d) A table – kg

Measurement of capacity

Notes:

* To measure the quantity of liquid we use millilitres (ml) and litres (l).

* Millilitre (ml) is used to measure small quantities of liquid.

* Litres (l) is used to measure larger quantities of liquid.

* 1000 ml = 1 l

I. What would you use to measure these?(ml or l)

a) A bottle of water - [l]

b) A glass of milkshake - [ml]

c) A jar of ghee - [l]

CH 11:Time

Notes:

*There are 12 numbers on the face of a clock.

*There are 2 hands on a clock.

*The short hand is the hour hand.

*The long hand is the minute hand.

I. Write the time in two ways.

a)

3:30

Half past three

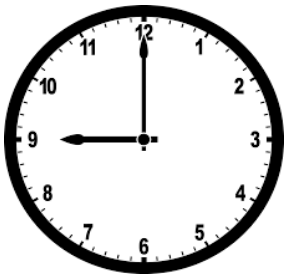
b)

10:00

10 o' clock

II. Read the time and draw the arms of the clock.

a) 9:00



b) 6:30

Notes:

1 day = 24 hours

1 week = 7 days

1 year = 12 months

1 year = 365 days

1 year = 52 weeks

1 leap year = 366 days

1 hour = 60 minutes

Days of the week

There are seven days in a week.

They are ,

1. Monday
2. Tuesday
3. Wednesday
4. Thurs day
5. Friday
6. Saturday
7. Sunday

Months of the year

There are 12 months in a year.

They are,

1. January
2. February
3. March
4. April
5. May
6. June
7. July
8. August
9. September
10. October
11. November
12. December

I. Fill in the blanks :

a) 4 months have 30 days.

b) February is the shortest month with 28 days.

c) 7 months have 31 days.

d) In a leap year, February has 29days.

e) The day that comes after Wednesday is Thursday.

f) The first day of the week is Monday.

The Calendar

II. Look at the calendar and answer the following:

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
						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					

a) On which day did the month begin?

Ans: Sunday

b) Which day is the last day of the month?

Ans: Tuesday

c) What day is the 15th of this month?

Ans: Sunday

d) When do we celebrate Christmas?

Ans: 25th December.

e) How many Sundays are there in December?

Ans: 5 Sundays

Numerals :801 to 850

801	**811**	**821**	**831**	**841**
802	**812**	**822**	**832**	**842**
803	**813**	**823**	**833**	**843**
804	**814**	**824**	**834**	**844**
805	**815**	**825**	**835**	**845**
806	**816**	**826**	**836**	**846**
807	**817**	**827**	**837**	**847**
808	**818**	**828**	**838**	**848**
809	**819**	**829**	**839**	**849**
810	**820**	**830**	**840**	**850**

Numerals : 851 - 900

851	**861**	**871**	**881**	**891**
852	**862**	**872**	**882**	**892**
853	**863**	**873**	**883**	**893**
854	**864**	**874**	**884**	**894**
855	**865**	**875**	**885**	**895**
856	**866**	**876**	**886**	**896**
857	**867**	**877**	**887**	**897**
858	**868**	**878**	**888**	**898**
859	**869**	**879**	**889**	**899**
860	**870**	**880**	**890**	**900**

Write number names for the following numerals :

665 – Six hundred sixty five

678 – Six hundred seventy eight

689 – Six hundred eighty nine

699 – Six hundred ninety nine

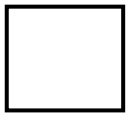
700 – Seven hundred

CH - 9: Shapes and Patterns

A) Basic shapes:

Square

A square has 4 sides and 4 corners . All 4sides are equal.

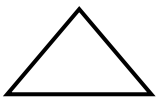


Rectangle

A rectangle has 4 sides and 4 corners. The opposite sides of a rectangle are equal in length.

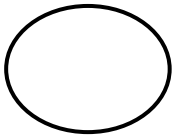
Triangle

A triangle has 3 sides and 3 corners. Its sides may or may not be of same length.

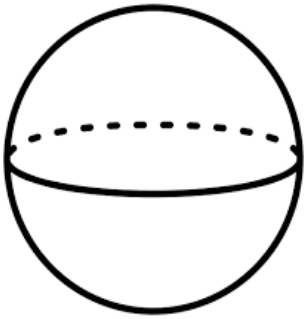
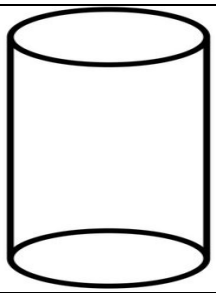
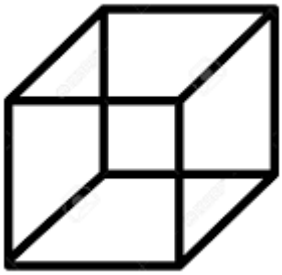
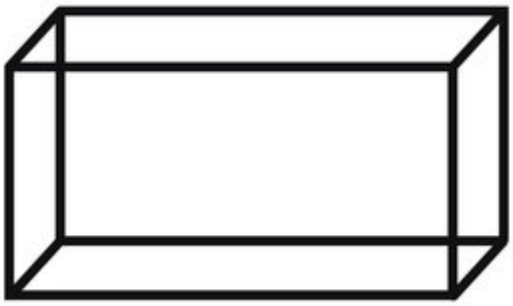
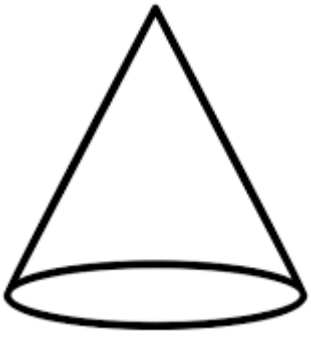


Circle

A circle has no sides and no corners.



B) Solid shapes:

	**Sphere**
	**Cylinder**
	**Cube**
	**Cuboid**
	**Cone**

C) Roll and Slide:

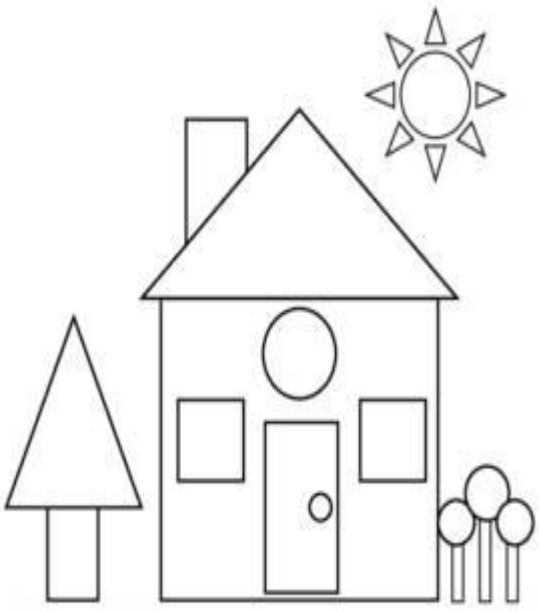
Shapes that have flat surfaces can slide.

Shapes that have curved surfaces can roll.

I. Tick the objects that roll or slide or both:

Object	Roll	Slide	Both
Dice 		✓	
 **Pencil box**		✓	
Coin 			✓
Ball 	✓		
Drum 			✓
Cone 			✓

II. Draw a house and count the number of shapes:



Number of :

squares – 2

rectangles – 7

circles – 6

triangles - 10

Straight lines and curved lines

Squares, Rectangles and Triangles are made of straight lines.

Circles are made of curved line.

Straight line

Curved line

Standing , sleeping and slanting lines

A straight line can be a standing line , sleeping line or a slanting line .

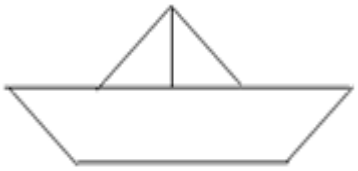
Standing line

Sleeping line

Slanting line

Problem:

Count the number of sleeping lines ,slanting lines and standing lines in the given figure.



Number of sleeping lines - 2

Number of slanting lines - 4

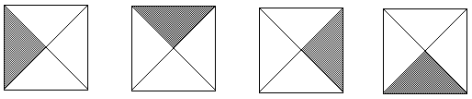
Number of standing lines - 1

Patterns

Things that are arranged following a rule or rules.

I. Patterns in shapes:

a) 

b) 

c) 

II. Pattern in words:

1. RED BLUE GREEN RED BLUE GREEN

2. YELLOW BLUE RED YELLOW BLUE RED

III. Patterns in numbers :

a) 2 , 4 , 6 , 8 , 10 , 12

b) 24 , 27 , 30 , 33 , 36 , 39

c) 11 , 13 , 15 , 17 , 19

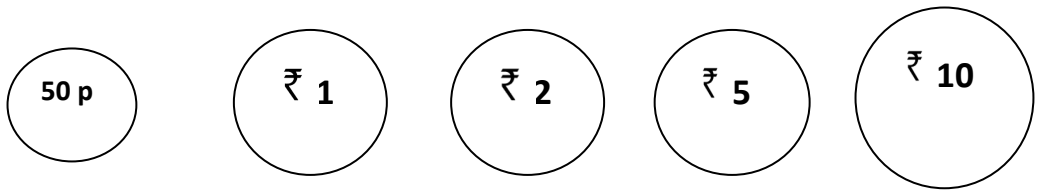
CH - 12: Money

I. Notes:

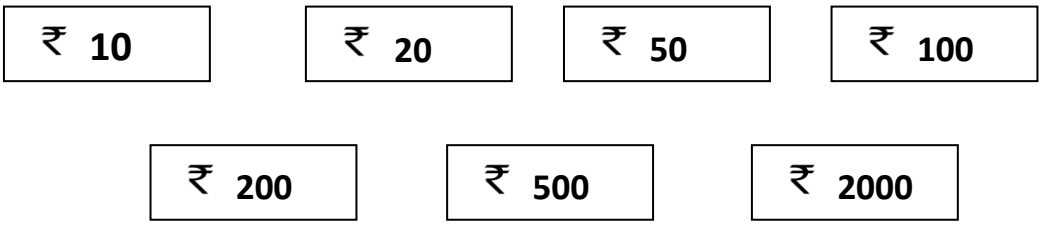
The symbol of Rupees - ₹

100 paise = ₹ 1

Currency - Coins

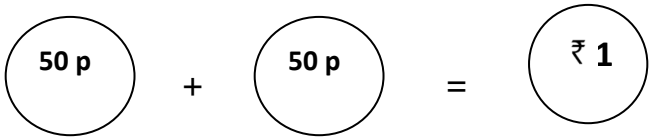


Currency - Notes

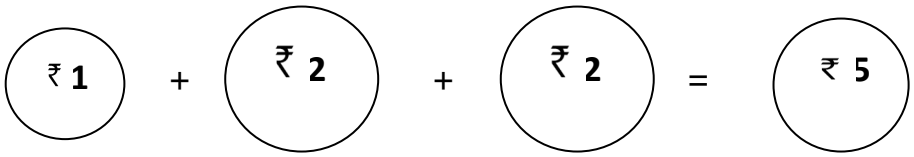


II. Money Exchange:

a) A one rupee coin can be exchanged with two 50 paise coins



b) A five rupee coin can be exchanged with one ₹ 1 coin and two ₹ 2 coins.



III.Adding money

a)

₹	T	O
	1	
	4	5
+	3	5
₹	8	0

b)

₹	T	O
	4	0
+	2	5
₹	6	5

IV. Subtracting money:

a)

₹	T	O
	3	15
	~~4~~	~~5~~
-	2	9
₹	1	6

b)

₹	T	O
	6	8
-	2	5
₹	4	3

V. Word problem :

a) Sunita has ₹ 10. Her mother gave her ₹ 50 as pocket money. How much does she have totally?

Ans:

		₹ T	O
Amount with Sunita	=	1	0
Amount her mother gave	= +	5	0
Total amount	=	6	0

Numerals : 901 to 950

901	**911**	**921**	**931**	**941**
902	**912**	**922**	**932**	**942**
903	**913**	**923**	**933**	**943**
904	**914**	**924**	**934**	**944**
905	**915**	**925**	**935**	**945**
906	**916**	**926**	**936**	**946**
907	**917**	**927**	**937**	**947**
908	**918**	**928**	**938**	**948**
909	**919**	**929**	**939**	**949**
910	**920**	**930**	**940**	**950**

Numerals : 951 to 1000

951	**961**	**971**	**981**	**991**
952	**962**	**972**	**982**	**992**
953	**963**	**973**	**983**	**993**
954	**964**	**974**	**984**	**994**
955	**965**	**975**	**985**	**995**
956	**966**	**976**	**986**	**996**
957	**967**	**977**	**987**	**997**
958	**968**	**978**	**988**	**998**
959	**969**	**979**	**989**	**999**
960	**970**	**980**	**990**	**1000**

Write number names for the following numerals :

749 – Seven hundred forty nine

795 – Seven hundred ninety five

855 – Eight hundred fifty five

890 – Eight hundred ninety

900 – Nine hundred

905 – Nine hundred five

915 – Nine hundred fifteen

924 – Nine hundred twenty four

940 – Nine hundred forty

943 – Nine hundred forty three

960 – Nine hundred sixty

968 – Nine hundred sixty eight

972 – Nine hundred seventy two

985 – Nine hundred eighty five

996 – Nine hundred ninety six

999 – Nine hundred ninety nine

1000- One thousand

CH - 13: Data

Problem :

The following information shows the list of animals in a zoo . Answer the following using the given information:

ANIMALS	NUMBER
ZEBRA	10
LION	2
TIGER	3
DEER	6
RABBIT	8
MONKEY	6
TOTAL	**35**

Answer the following :

a) Which animal is more in number ?

Ans: Zebra .

b) Name the animals that are same in number ?

Ans: Deer and Monkey

c) Which animal is least in number ?

Ans: Lion .

d) How many animals are there in all ?

Ans: 35.

Multiplication tables

0 – table
0 X 0 = 0
0 X 1 = 0
0 X 2 = 0
0 X 3 = 0
0 X 4 = 0
0 X 5 = 0
0 X 6 = 0
0 X 7 = 0
0 X 8 = 0
0 X 9 = 0
0 X 10 = 0
0 X 11 = 0
0 X 12 = 0

1 – table
1 X 0 = 0
1 X 1 = 1
1 X 2 = 2
1 X 3 = 3
1 X 4 = 4
1 X 5 = 5
1 X 6 = 6
1 X 7 = 7
1 X 8 = 8
1 X 9 = 9
1 X 10 = 10
1 X 11 = 11
1 X 12 = 12

2 – table
2 X 0 = 0
2 X 1 = 2
2 X 2 = 4
2 X 3 = 6
2 X 4 = 8
2 X 5 = 10
2 X 6 = 12
2 X 7 = 14
2 X 8 = 16
2 X 9 = 18
2 X 10 = 20
2 X 11 = 22
2 X 12 = 24

3 – table
3 X 0 = 0
3 X 1 = 3
3 X 2 = 6
3 X 3 = 9
3 X 4 = 12
3 X 5 = 15
3 X 6 = 18
3 X 7 = 21
3 X 8 = 24
3 X 9 = 27
3 X 10 = 30
3 X 11 = 33
3 X 12 = 36

4 – table
4 X 0 = 0
4 X 1 = 4
4 X 2 = 8
4 X 3 = 12
4 X 4 = 16
4 X 5 = 20
4 X 6 = 24
4 X 7 = 28
4 X 8 = 32
4 X 9 = 36
4 X 10 = 40
4 X 11 = 44
4 X 12 = 48

5 – table
5 X 0 = 0
5 X 1 = 5
5 X 2 = 10
5 X 3 = 15
5 X 4 = 20
5 X 5 = 25
5 X 6 = 30
5 X 7 = 35
5 X 8 = 40
5 X 9 = 45
5 X 10 = 50
5 X 11 = 55
5 X 12 = 60

6 – table
6 X 0 = 0
6 X 1 = 6
6 X 2 = 12
6 X 3 = 18
6 X 4 = 24
6 X 5 = 30
6 X 6 = 36
6 X 7 = 42
6 X 8 = 48
6 X 9 = 54
6 X 10 = 60
6 X 11 = 66
6 X 12 = 72

10 – table
10 X 0 = 0
10 X 1 = 10
10 X 2 = 20
10 X 3 = 30
10 X 4 = 40
10 X 5 = 50
10 X 6 = 60
10 X 7 = 70
10 X 8 = 80
10 X 9 = 90
10 X 10 = 100
10 X 11 = 110
10 X 12 = 120

Ch 7: Multiplication

I. Find the product of the following:

a)

T	O
	3
	2
	6

X

2 – table

2 X 0 = 0
2 X 1 = 2
2 X 2 = 4
2 X 3 = 6

b)

T	O
1	
	7
	2
1	4

X

2 – table

2 X 0 = 0
2 X 1 = 2
2 X 2 = 4
2 X 3 = 6
2 X 4 = 8
2 X 5 = 10
2 X 6 = 12
2 X 7 = 14

c)

T	O
3	
	6
	5
3	0

X

5 – table

5 X 0 = 0
5 X 1 = 5
5 X 2 = 10
5 X 3 = 15
5 X 4 = 20
5 X 5 = 25
5 X 6 = 30

d)

	T	O
	2	0
X		3
	6	0

3 – table

3 X 0 = 0
3 X 1 = 3
3 X 2 = 6

e)

	T	O
	1	2
X		4
	4	8

4 – table

4 X 0 = 0
4 X 1 = 4
4 X 2 = 8

****