

Maths World

Class III



ਸਰਵ ਸਿੱਖਿਆ ਅਭਿਆਨ

ਪੜ੍ਹੋ ਸਾਰੇ ਵਧੋ ਸਾਰੇ

ਸਿੱਖਿਆ ਅਤੇ ਭਲਾਈ ਵਿਭਾਗ, ਪੰਜਾਬ ਦਾ ਸਾਂਝਾ ਉਪਰਾਲਾ



Punjab School Education Board

Sahibzada Ajit Singh Nagar

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ਪੜ੍ਹੋ ਸਾਰੇ ਵਧੋ ਸਾਰੇ

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Foreword

The Punjab School Education Board has been continuously engaged in developing syllabi, producing and renewing text books according to the changing educational needs at the state and national level.

This book has been developed in accordance to the guidelines of National Curriculum Framework (NCF) 2005 and PCF-2013, after careful deliberations in workshops involving experienced teachers and experts from the board and field as well. All efforts have been made to make this book interesting with the help of activities and coloured figures. This book has been prepared with the joint efforts of subject experts of Board, SCERT and experienced teachers/experts of mathematics. Board is thankful to all of them.

The authors have tried their best to ensure that the treatment, presentation and style of the book in hand are in accordance with the mental level of the students of class-III. The topics, contents and examples in the book have been framed in accordance with the situations existing in the young learner's environment. A number of activities have been suggested in every lesson. These may be modified, keeping in view the availability of local resources and real life situations of the learners.

I hope the students will find this book very useful and interesting. The Board will be grateful for suggestions from the field for further improvement of the book.

Chairman

Punjab School Education Board

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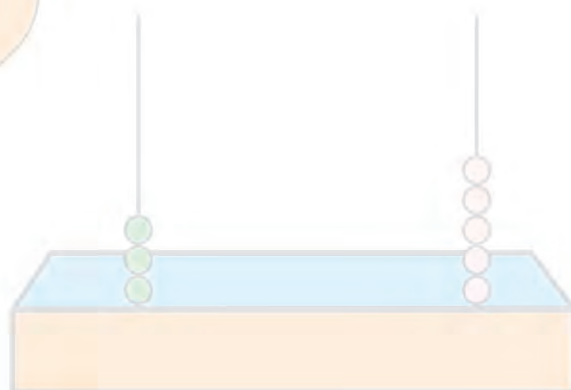
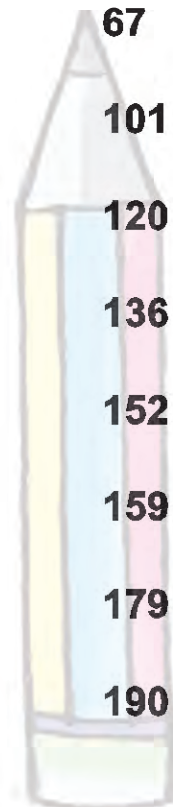
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Learning Outcomes

The learner

- Works with three digit numbers
 - reads and writes numbers up to 999 using place value
 - compares numbers up to 999 for their value based on their place value
 - solves simple daily life problems using addition and subtraction of three digit numbers with and without regrouping, sums not exceeding 999
 - constructs and uses the multiplication facts (tables) of 2,3,4,5 and 10 in daily life situations
 - analyses and applies an appropriate number operation in the situation / context
 - explains the meaning of division facts by equal grouping/sharing and finds it by repeated subtraction For example, $12 \div 3$ can be explained as number of groups of 3 to make 12 and finds it as 4 by repeatedly subtracting 3 from 12
- adds and subtracts small amounts of money with or without regrouping
- makes rate charts and simple bills
- acquires understanding about 2D shapes
 - identifies and makes 2D-shapes by paper folding, Paper cutting on the dot grid, using straight lines etc.
 - describes 2D shapes by the number of sides, corners and diagonals. For example, the shape of the book cover has 4 sides, 4 corners and two diagonals
 - fills a given region leaving no gaps using a tile of a given shape
- estimates and measures length and distance using standard units like centimetres or metres and identifies relationships
- weighs objects using standard units-grams and kilograms using simple balance
- compares the capacity of different containers in terms of non standard units.
- adds and subtracts measures involving grams & kilograms in life situations.
- identifies a particular day and date on a Calendar.
- reads the time correctly to the hour using a clock/ watch.
- extends patterns in simple shapes and numbers.
- records data using tally marks, represents pictorially and draws conclusions.
- collects data related to various daily life situations, represents it in tabular form and as bar graphs and interprets it.

Objectives

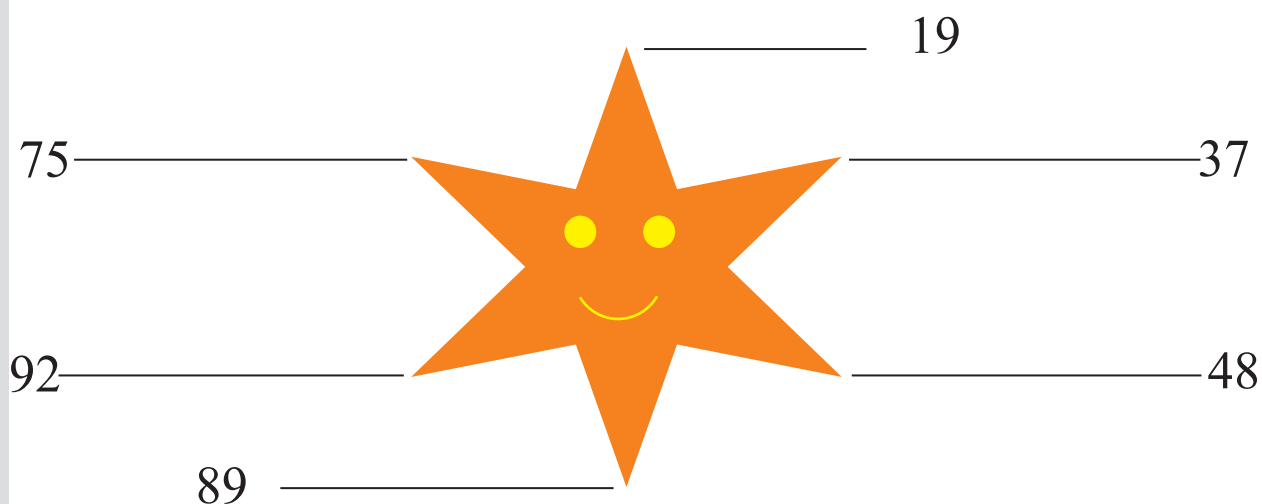
- To develop the understanding of ones, tens, hundreds, thousands with the help of currency notes, abacus and practical activities.
- To read and write three digit numbers, to write three digit numbers in words, understanding of predecessor, successor and in between.
- Understanding of place value, expanded form, comparison, ascending order and descending order.

Do you remember?

1. Complete the counting in blanks-

57			60	61				65
	67					72		
		77						83
				88				92

2. Write the given numbers in words-



3. Write in the expanded form-

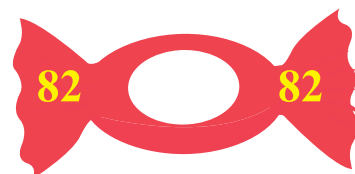
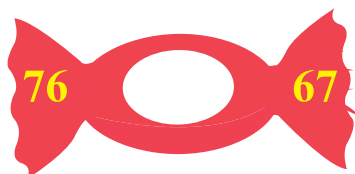
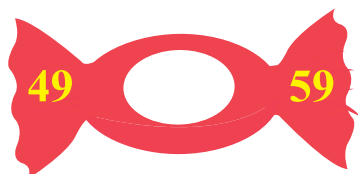
32	=		+	
89	=		+	

4. Write the place value of encircled digit-

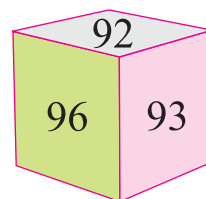
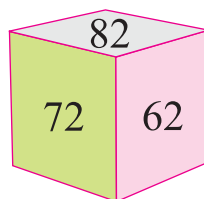
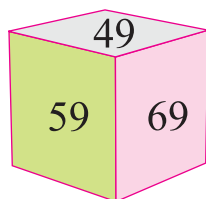
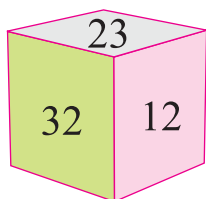
$\textcircled{5}6 =$

$9\textcircled{4} =$

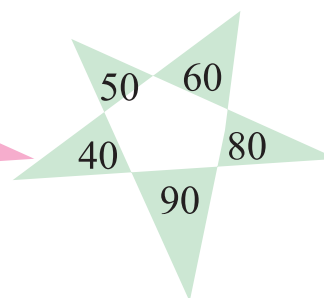
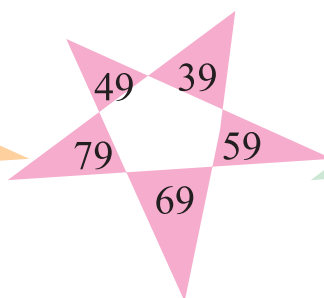
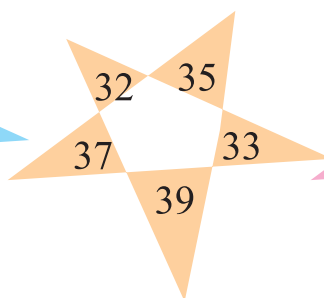
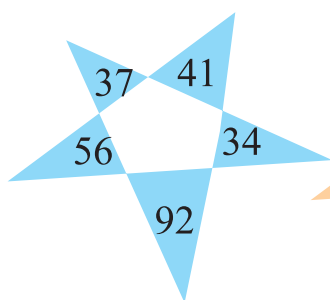
5. Put the sign of $>$, $<$ or $=$



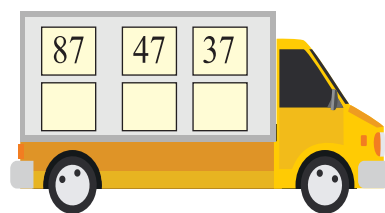
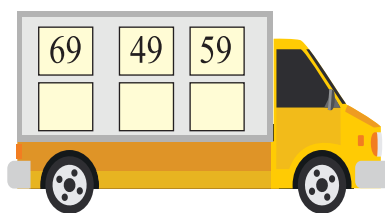
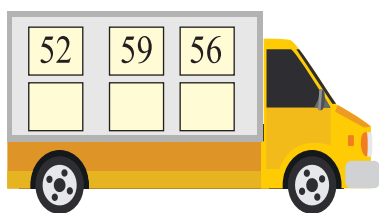
6. Encircle the smallest number-



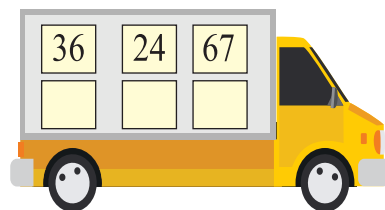
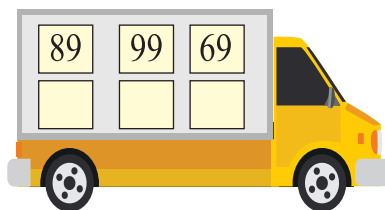
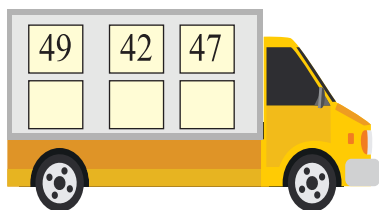
7. Write the greatest number in the star-



8. Write in ascending order-



9. Write in descending order-



10. Put the beads in abacus for given number-

Tens

Ones

30

Tens

Ones

49

Tens

Ones

72

Tens

Ones

96

11. Count the beads in abacus and write the number-

Tens

Ones

Tens

Ones

Tens

Ones

Tens

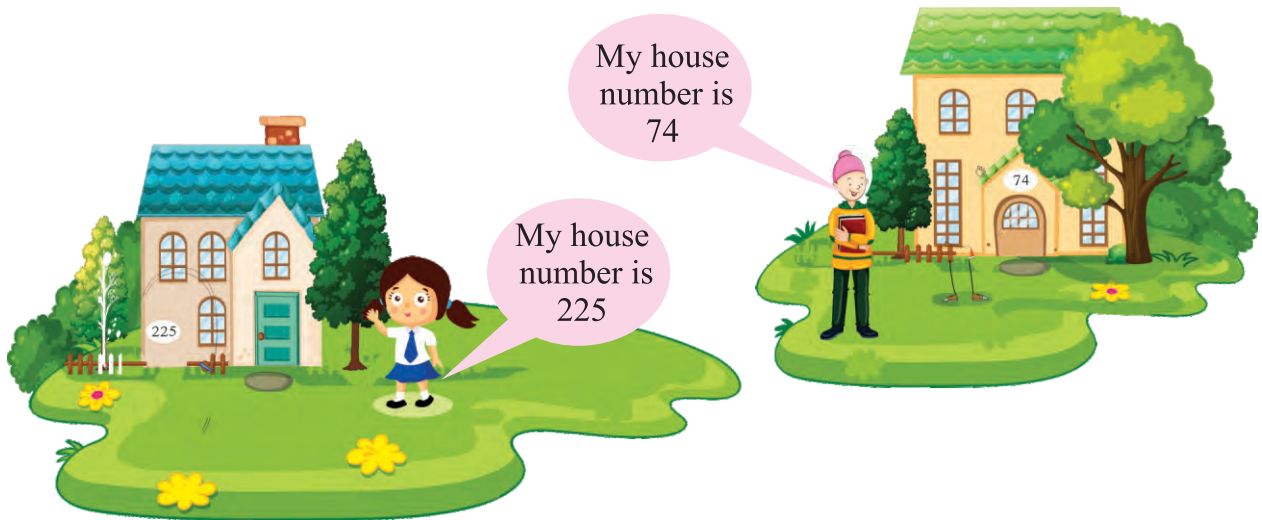
Ones

12. Fill same colour by matching the four columns-

17	3 Tens + 9 Ones	80	Twenty six
26	8 Tens	30 + 9	Seventeen
39	1 Ten + 7 Ones	90 + 1	Eighty
80	9 Tens + 1 Ones	20 + 6	Ninety one
91	2 Tens + 6 Ones	10 + 7	Thirty nine



Numbers have a major role in our life. We use numbers in our daily life.



Digits are
used to
write these
numbers.

Three digit number



We have studied two digit numbers in 2nd class.
As 99 is a two digit number.

If we add 1 more to number 99 then it will form three
digit number 100.



$$\boxed{99} + \boxed{1} = \boxed{100}$$

It means 99 is the largest two digit number.



Yes, 100 is the smallest three digit number.



It means, when we add 1 to the largest two digit number then we get
the smallest three digit number.



If we add 1 more item to the 100 items then

$$\boxed{100} + \boxed{1} = \boxed{?}$$



Today, we will count with currency notes.



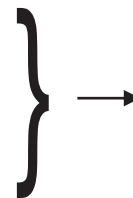


I have Rupees 99. If I add rupee one more then how many rupees do I have?

Rupees 100



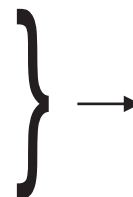
You may remember, that we took Rupees 10 note in place of 10 notes of rupee 1 in class second and now we will take a note of Rupees 100, in place of 10 notes of Rupees 10.



10 Ones

=

1 Ten



10 Tens

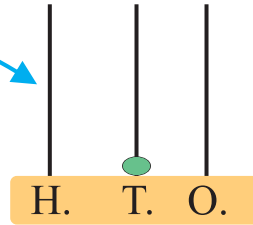
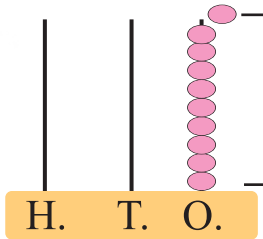
=

1 Hundred

1 Hundred = 10 Tens = 100 Ones

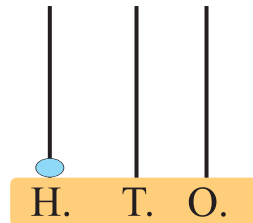
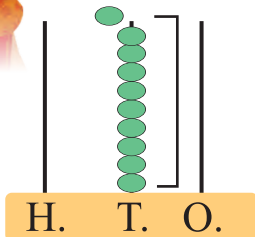
Let's count with abacus. Each stick of our abacus can contain only nine beads.

Since, we cannot put tenth bead in ones stick so put one bead in tens stick instead of putting ten beads in ones stick.



We will put one bead in ten's stick by removing all beads from one's stick..

We cannot put tenth bead in tens stick, so we put one bead in hundreds stick in place of ten beads

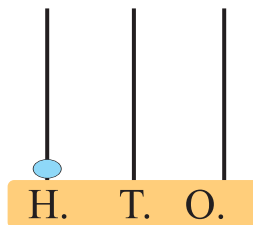


This is maan card of 100

1 Hundred = 100

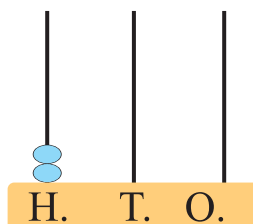


Today we count upto 1000 by using Rs. 100 notes, abacus and maan cards



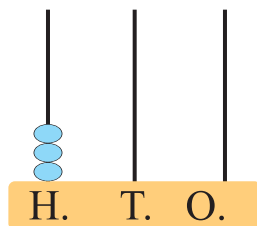
100

One hundred



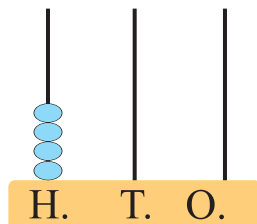
200

Two hundred



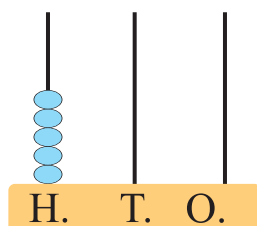
300

Three hundred



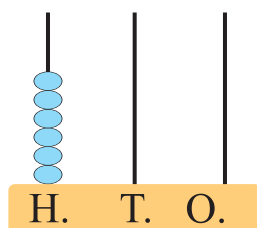
400

Four hundred



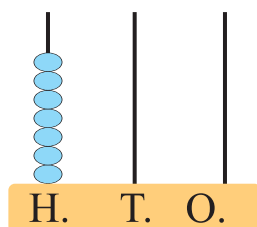
500

Five hundred



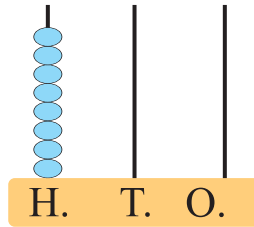
600

Six hundred

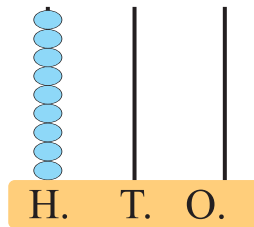


700

Seven hundred



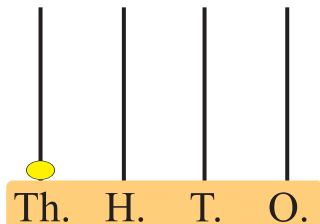
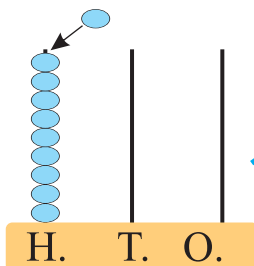
800 Eight hundred



900 Nine hundred



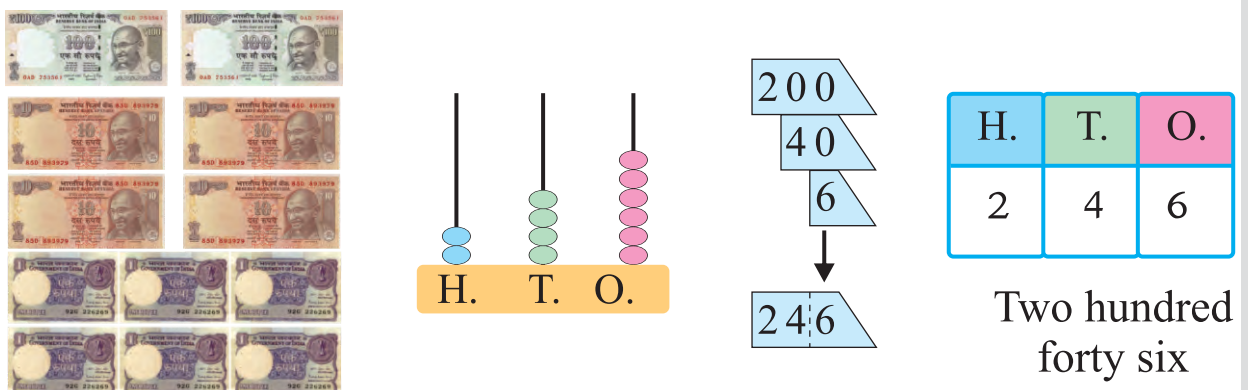
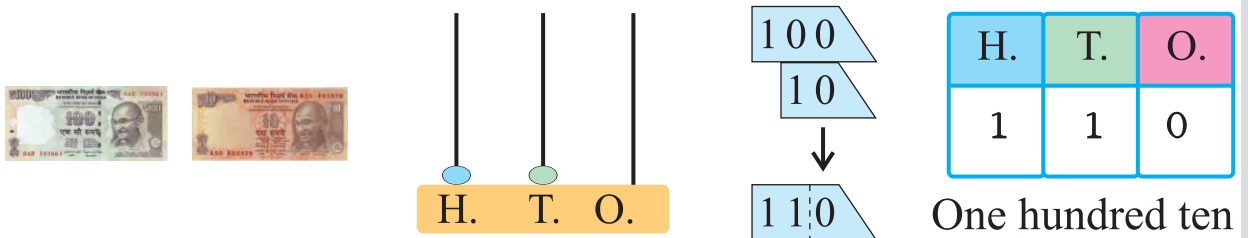
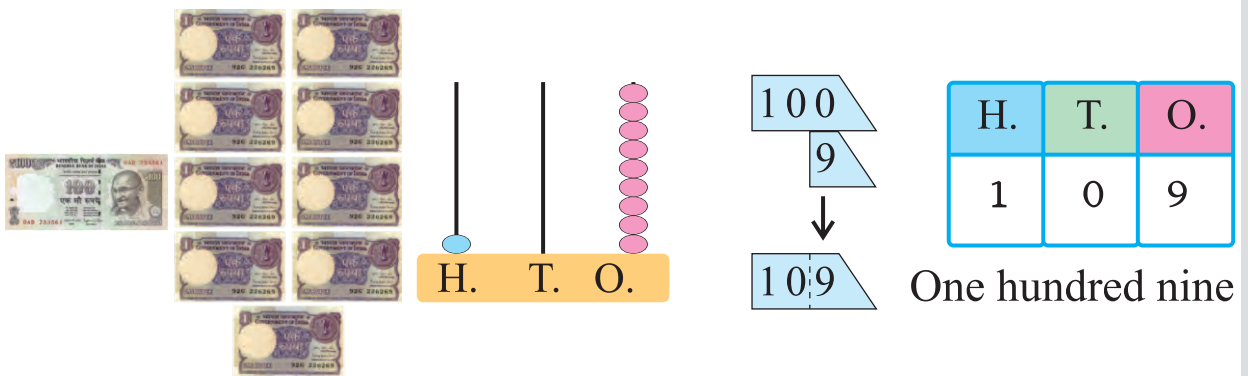
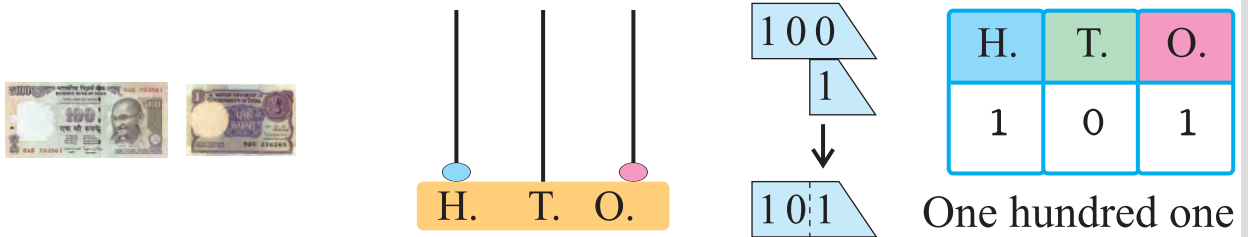
1000 Thousand

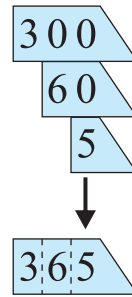
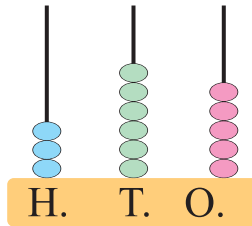


1 Thousand = 10 Hundred = 100 Tens = 1000 Ones

Counting from 101 to 1000

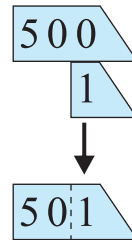
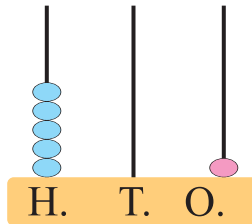
Let's do counting with currency notes, abacus and Maan Card.





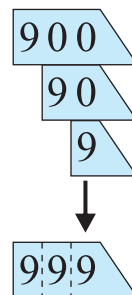
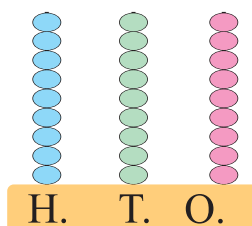
H.	T.	O.
3	6	5

Three hundred
sixty five



H.	T.	O.
5	0	1

Five hundred
one



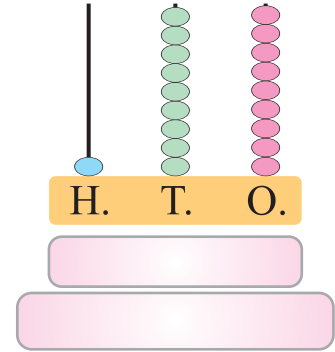
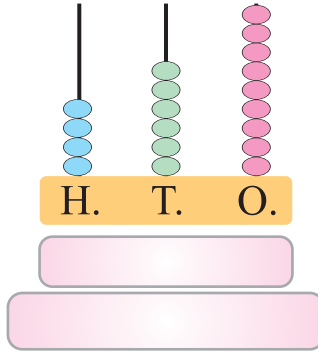
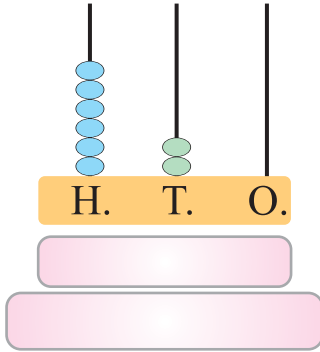
H.	T.	O.
9	9	9

Nine hundred
ninety nine

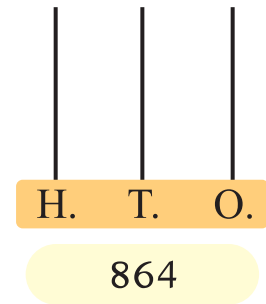
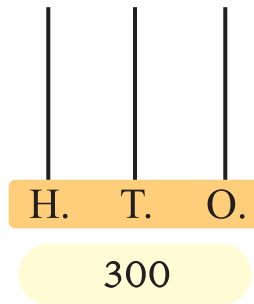
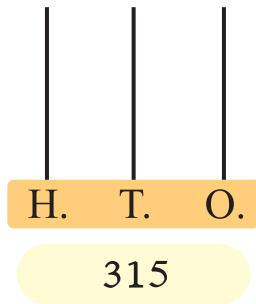


Let's do

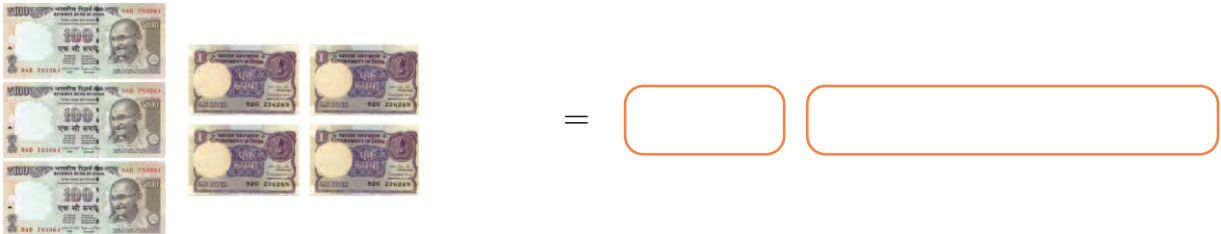
1. According to the beads on abacus, write the numbers in figures and words :-



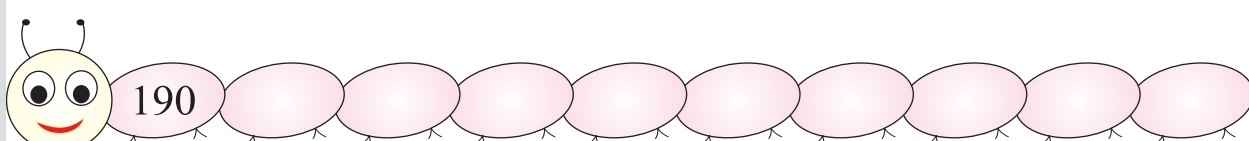
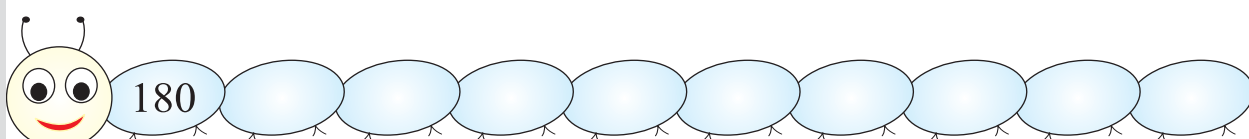
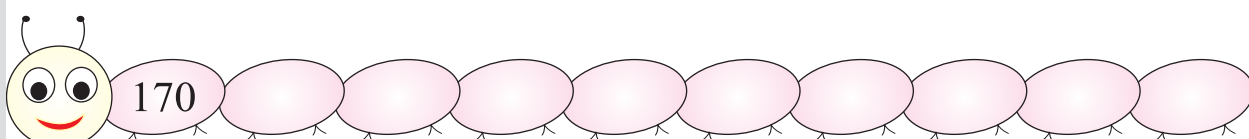
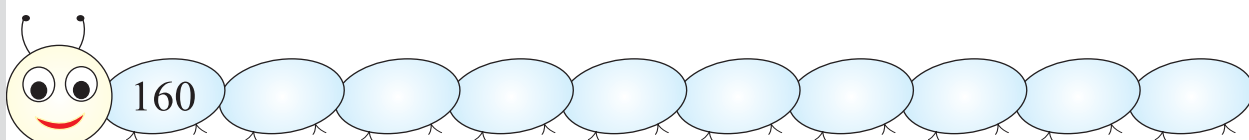
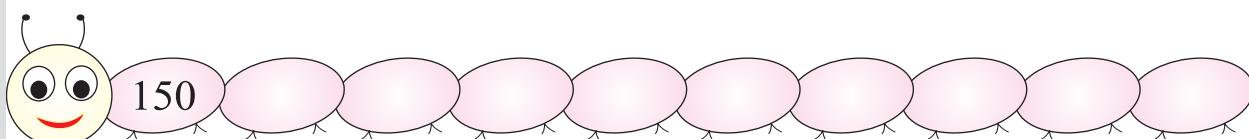
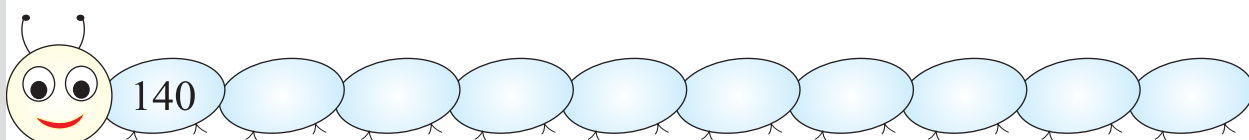
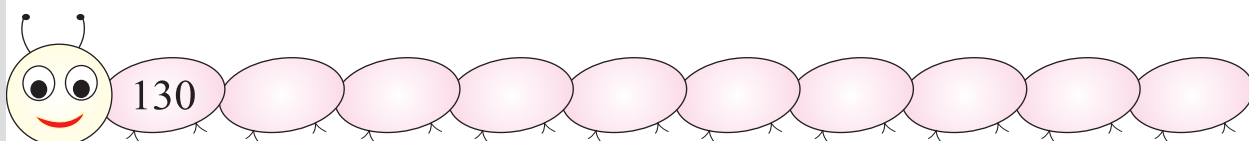
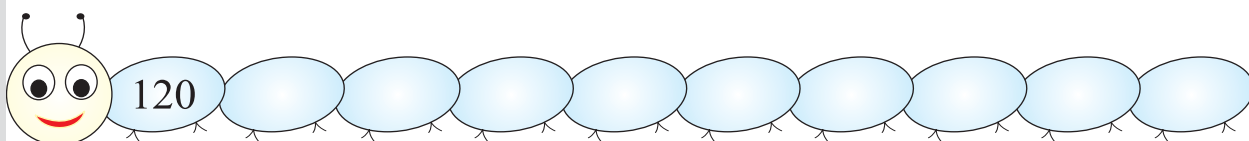
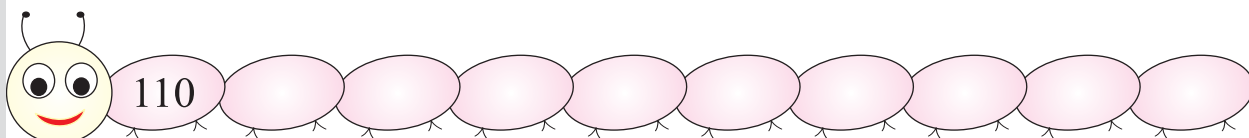
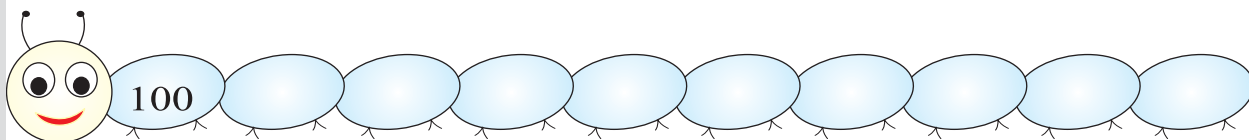
2. Put the beads in abacus according to the given number :-



3. Count the currency notes, write the number in figures and words :-



4. Write counting :-



Write counting from 200 to 299

200									
									299

Write counting from 300 to 399

300									
									399

Write counting from 400 to 499

400									
									499

Write counting from 500 to 599

500									
									599

Write counting from 600 to 699

600									
									699

Write counting from 700 to 799

700									
									799

Write counting from 800 to 899

800									
									899

Write counting from 900 to 999

900									
									999

5. Write backward counting :-

130
129

227

359

472

501

569

604

715

800

989

700

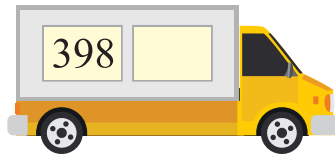
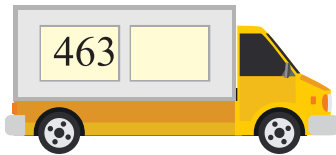
600

500

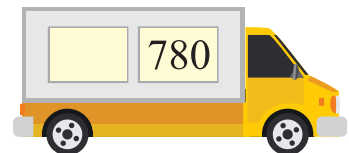
400

300

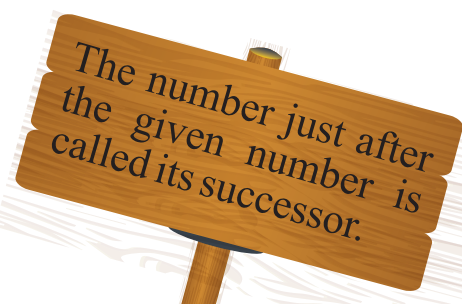
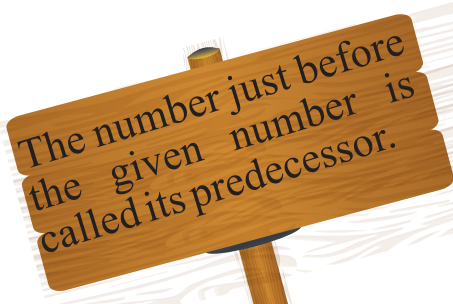
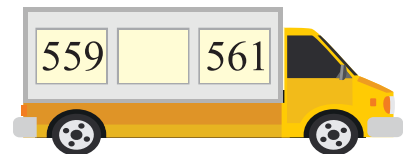
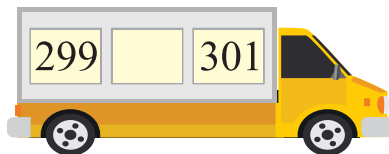
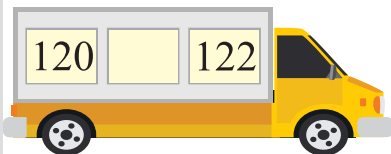
6. Write the number just after the given number :-



7. Write the number just before the given number :-



8. Write the number in between the given numbers :-

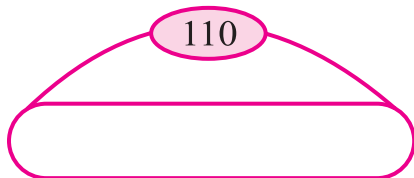
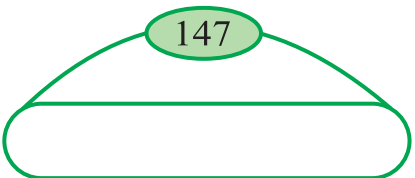
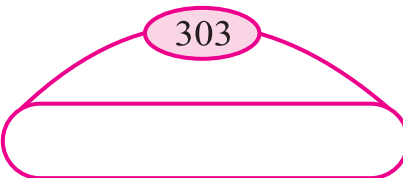
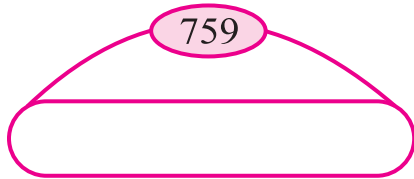
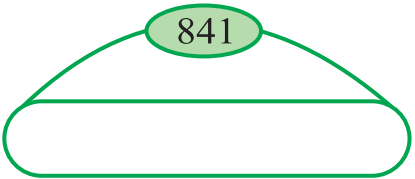
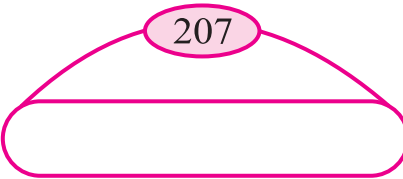
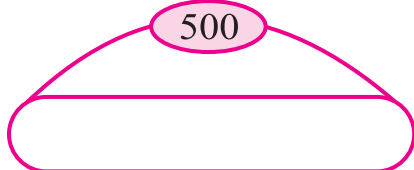
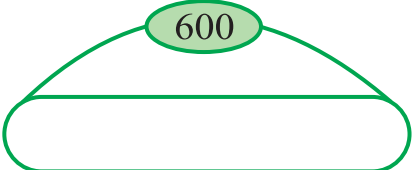


- By adding 1 to any number, we get its successor.
- By subtracting 1 from any number, we get its predecessor.

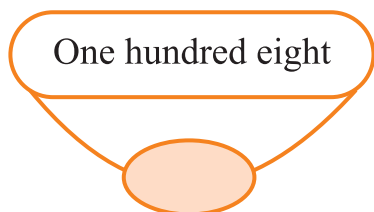
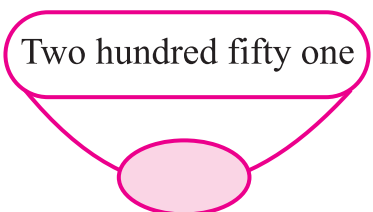
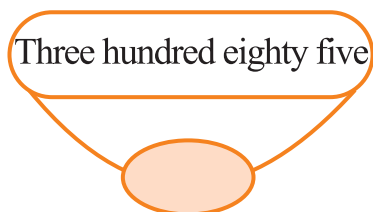
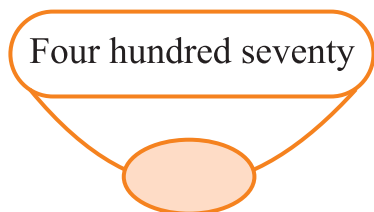
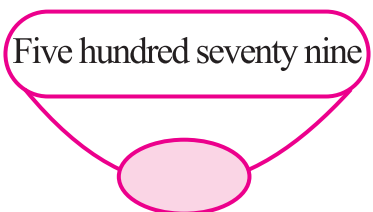
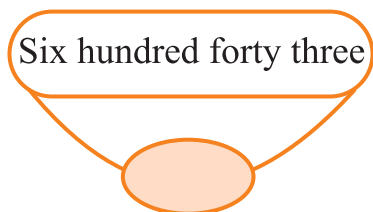
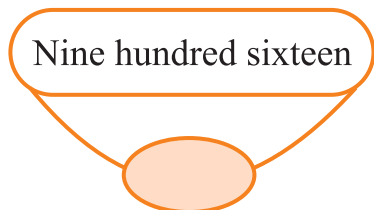
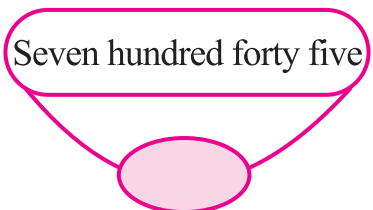
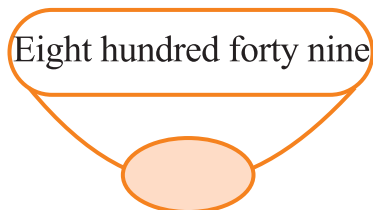
In our daily life

Last year	Current year	Next year
	2021	

9. Write the given numbers in words :-

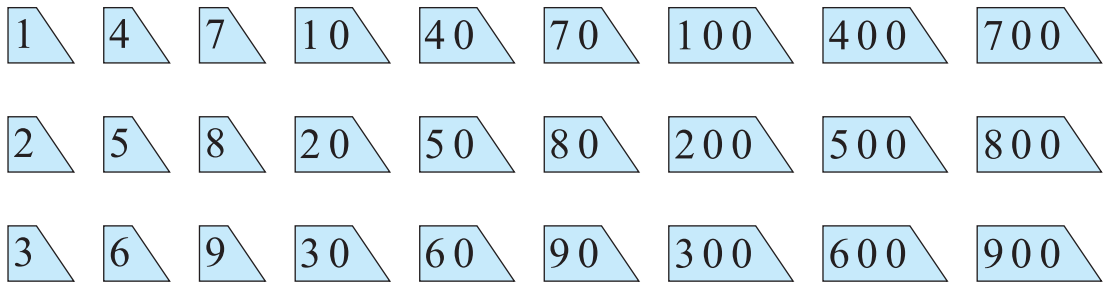
10. Write the numbers in figures :-

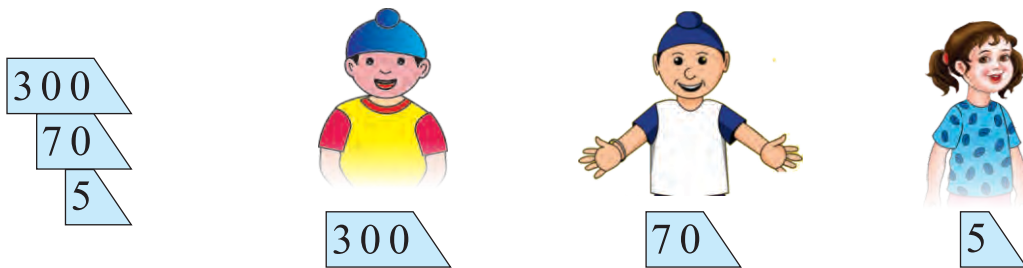
Practical Activity

- Objective** : Teaching the place value to children by play way method.
- Material** : Maan cards of 0 to 9, 10, 20...90, 100, 200...900
- Procedure** :

1. Say any 3-digits number and ask the children to form the number with maan cards.



2. The child who forms the correct number first, then give the three cards of that number to the three children. Like 375.



3. To ask the place value of digit 7 from the number 375.

70

4. To ask the place value of digit 5 from the number 375.

5

5. To ask the place value of digit 3 from the number 375.

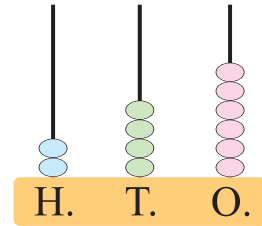
300



Place value

Unit		
Hundreds	Tens	Ones
2	4	6

6 Ones = $6 \times 1 = 6$
 4 Tens = $4 \times 10 = 40$
 2 Hundreds = $2 \times 100 = 200$



2 Hundreds 4 Tens 6 Ones

The place of digits in a given number determines its place value

Hundreds	Tens	Ones
4	3	5

3 Tens = 30

Place value of same digits may be different

Hundreds	Tens	Ones
6	3	3

3 Ones = 3
 3 Tens = 30

Moving from right to left, place value of digit is increased by 10 times

Digit	Place value
3	$3 \times 1 = 3$
3	$3 \times 10 = 30$
6	$6 \times 100 = 600$

The place value of '0' is always 0

Hundreds	Tens	Ones
3	0	7

0 Tens = 0



Let's do

Find the place value of encircled digit in the number :

④ 1 5 =

Hundreds	Tens	Ones
4	1	5

→ 4 Hundreds = $4 \times 100 =$ 400

5 0 ⑦ =

Hundreds	Tens	Ones

6 ① 0 =

Hundreds	Tens	Ones

7 ① 0 =

Hundreds	Tens	Ones

⑧ 4 7 =

Hundreds	Tens	Ones

Practical activity

Place value by play way method

Objective

: In a number, the place value of digits change by changing their place.

Material

: Dice, any 6 digits from 0 to 9, pencil/pen and place value chart.

Procedure

: 1. The teacher will choose three children. All the three children will make place value chart on their note books.

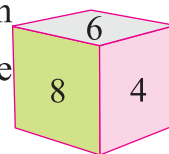
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones

Tarleen

Parneet

Rasleen

2. First of all, Tarleen will role the dice, whichever digit will appear on the dice, three children will write that digit on their own place value chart by their choice. Suppose digit 6 has appeared on rolling the dice.



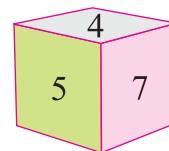
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
	6		6					6

Tarleen

Parneet

Rasleen

3. Second time Parneet will roll the dice, whichever digit will appear on the dice, three children will write that digit on their own place value chart at the remaining two places by their choice. Suppose digit 4 has appeared on rolling the dice now.



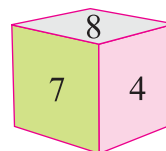
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
	6	4	6	4		4		6

Tarleen

Parneet

Rasleen

4. Third time, Rasleen will roll the dice, whichever digit will appear on the dice, three children will write that digit on their own place value chart at the remaining place, by their choice. Suppose digit 8 has appeared on rolling the dice now.



Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
8	6	4	6	4	8	4	8	6

Tarleen

Parneet

Rasleen

5. Teacher will ask the three children to write the number formed at the place value chart on the blackboard. He will ask the children for the place value of 8.

Place value of 8 =

800	8	80
Tarleen	Parneet	Rasleen

6. Teachers will ask all the children to form more numbers by using digits 8, 6 and 4 and then will ask the place value of 8, 6 and 4 from those numbers.



Expanded form

To write any number in expanded form, the place value of every digit is determined. Then the number is expressed in the form of place values. For example, expanded form of 675 is as given below.

Hundreds	Tens	Ones
6	7	5

→ 5 Ones	= 5×1	= 5
→ 7 Tens	= 7×10	= 70
→ 6 Hundreds	= 6×100	= 600

Expanded form of 675 = 6 Hundreds + 7 Tens + 5 Ones

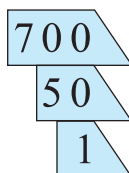
Expanded form of 675 = 600 + 70 + 5

Practical activity

Take the maan cards for 751.

1. Ask one child to pick maan card for 751.
2. If the number is correct, then show the maan card to all the children.
3. $751 = 700 + 50 + 1$

Method to learn





Let's do

1. Write in the expanded form :

	1 Hundred	4 Tens	9 Ones
	Hundreds	Tens	Ones
	Hundreds	Tens	Ones
	Hundreds	Tens	Ones
	Hundreds	Tens	Ones
	Hundreds	Tens	Ones

2. Write the expanded form of the following numbers :

$$413 = \boxed{400} + \boxed{10} + \boxed{3}$$

$$507 = \boxed{} + \boxed{} + \boxed{}$$

$$700 = \boxed{} + \boxed{} + \boxed{}$$

$$210 = \boxed{} + \boxed{} + \boxed{}$$

$$118 = \boxed{} + \boxed{} + \boxed{}$$

$$662 = \boxed{} + \boxed{} + \boxed{}$$

3. Write the number from expanded form :

$$100 + 60 + 2 = \boxed{162}$$

$$300 + 7 = \boxed{}$$

$$400 + 10 = \boxed{}$$

$$100 + 40 = \boxed{}$$

$$800 + 60 = \boxed{}$$

$$600 + 50 + 8 = \boxed{}$$

Comparison of 3-digits numbers

I am small
I have two digits

98

106

I am big I
have three digits

$98 < 106$

If the number of digits of one number is more than the number of digits of the second number, then the number having more digits is greater.

I have 3 hundreds

383

421

I have 4 hundreds

$383 < 421$

Hundreds	Tens	Ones
3	8	3

Hundreds	Tens	Ones
4	2	1

If two numbers have same number of digits then we will compare their hundreds place digits. The number having greater digit at hundreds place, is greater.

I have 7 tens

575

515

I have one tens

Hundreds	Tens	Ones
5	7	5

Hundreds	Tens	Ones
5	1	5

$575 > 515$

If two numbers have same hundreds place digits then compare the tens place digits. The number having greater digit at tens place, is greater.

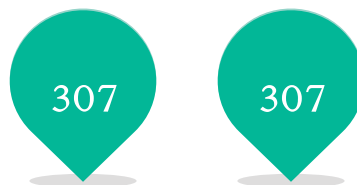


Hundreds	Tens	Ones
7	7	9

Hundreds	Tens	Ones
7	7	3

$$779 > 773$$

**If two numbers have same digits at hundreds and tens place then compare the ones place digits.
The number having greater digit at ones place, is greater.**



Hundreds	Tens	Ones
3	0	7

Hundreds	Tens	Ones
3	0	7

$$307 = 307$$

If two numbers have same digits at hundreds, tens and ones place then both numbers are equal.

Let's do

1. Fill the blank spaces with sign $>$, $<$ or $=$:

125 115

829 819

333 44

305 315

440 404

299 399

205 250

701 710

390 903

185 185

500 400

547 547

2. Write the smaller number in small fish and greater number in big fish :

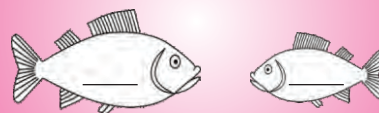
246, 393



160, 259



415, 610



768, 566



908, 269



809, 980



3. Write the smallest number in small fish and greatest number in big fish :

700, 500, 900



480, 408, 840



271, 712, 721



629, 879, 389

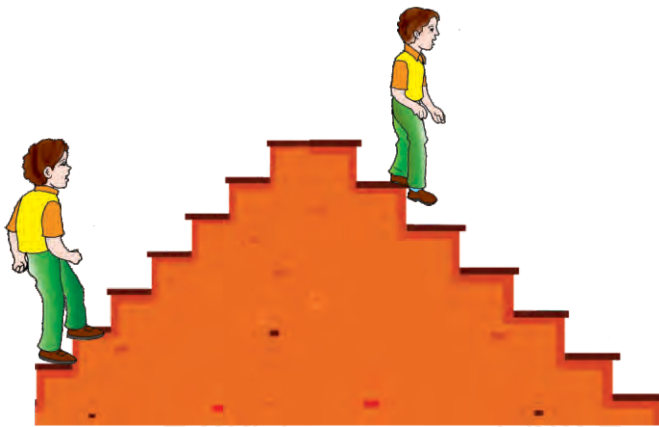


584, 458, 845



999, 888, 777





When the given numbers are written in order from the smallest to the greatest, then it is called ascending order

When the given numbers are written in order from the greatest to the smallest, then it is called descending order

- smallest to the greatest means ascending order
- greatest to smallest means descending order

Let's do

1. Write in the ascending order :

200, 900, 600, 400, 100	100 200 400 600 900
322, 475, 715, 805, 605,	
169, 289, 359, 479, 539	
308, 820, 119, 426, 511	

2. Write in the descending order :

715, 810, 418, 751, 690	
306, 422, 86, 673, 724	
972, 949, 740, 704, 384	
865, 764, 467, 359, 901	

3. Write in the ascending order ;

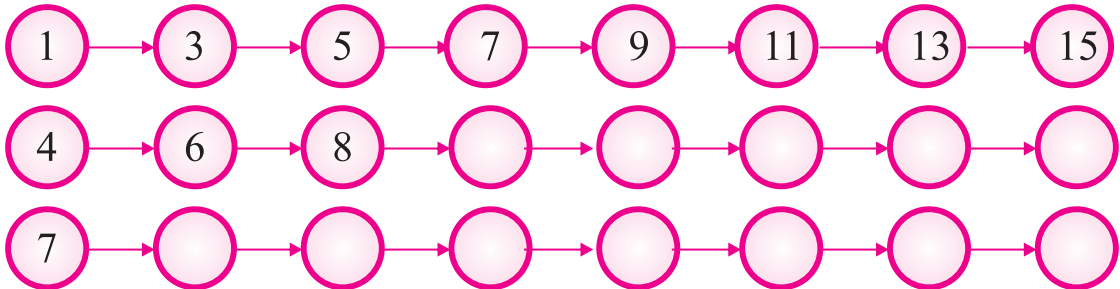
575, 525, 700	331, 307, 340	403, 473, 440
721, 785, 716	202, 227, 222	175, 120, 150

. Write in the descending order :

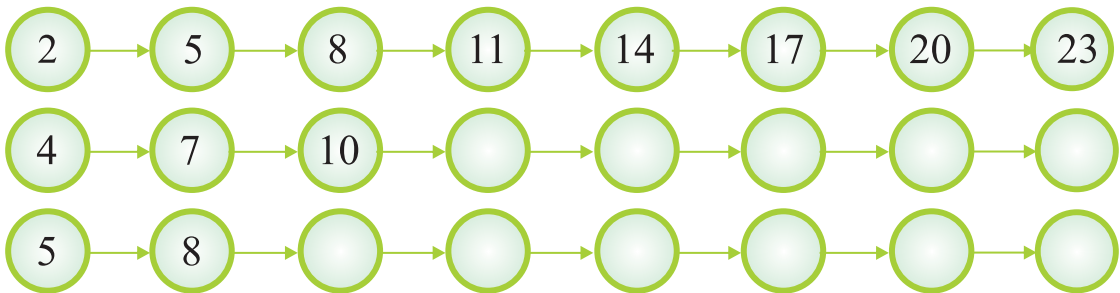
515, 545, 520	107, 109, 103	206, 260, 216
407, 418, 435	515, 218, 337	928, 375, 357

Counting by different methods

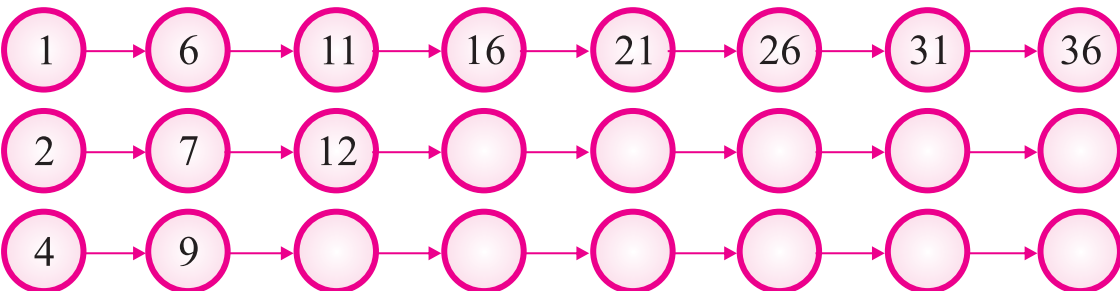
Jump 2 steps



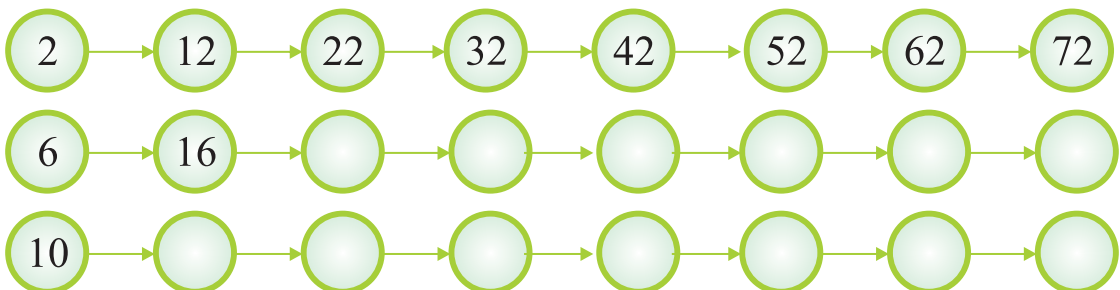
Jump 3 steps



Jump 5 steps



Jump 10 steps



Practical activity

Objective : To make the greatest/smallest three digits number from the given digits.

Material : Flashcards from 0 to 9

Procrdure: 1. Spread the flashcards from 0 to 9 on the table



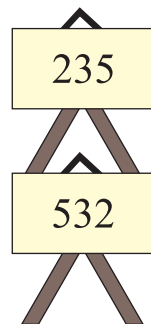
2. Call any three students from the class and ask them to choose one card each.



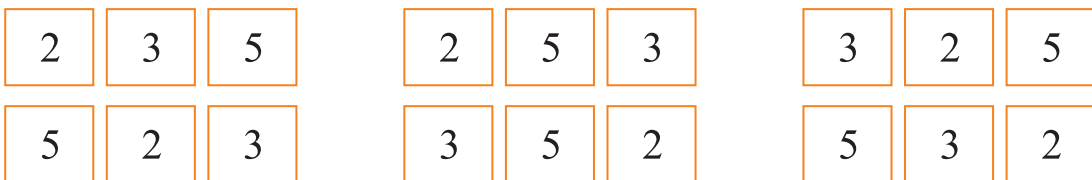
3. Now, ask the three students to make the smallest number by using three digits.



4. Ask them to make the biggest number with these digits.



5. Now ask them to make all numbers.



6. Teacher can ask them to write the numbers formed in step 5 in ascending order/descending order.

7. Teacher can ask them to write all the numbers in words.



Tips for teacher

- If a Student chooses a flash card marked with '0' and to make three digits number he starts with '0', then teacher should explain him that it is a two digits number not a three digits number.
- Tell all the students that 3 digits greatest and smallest number can be made by repeating the three given digits.



Let's do

1. Make the smallest 3-digits number.

- (i) 8, 4, 2 (ii) 7, 2, 5 (iii) 1, 0, 8
(iv) 3, 8, 1 (v) 9, 6, 7 (vi) 7, 9, 8

2. Make the greatest 3-digits number.

- (i) 6, 0, 2 (ii) 4, 1, 3 (iii) 5, 9, 7

3. Make the greatest 3-digits number by repeating the digits.

- (i) 5, 1 (ii) 8, 2 (iii) 5, 8

4. Make the smallest 3-digits number by repeating the digits.

- (i) 2, 5 (ii) 7, 6 (iii) 7, 2

5. Encircle the correct answer.

3 Hundreds + 2 Ones	320	302
4 Hundreds + 3 Tens + 1 Ones	431	413
2 Hundreds + 7 Tens	207	270

6. Fill in the blanks

The number is just before the smallest 2-digits number.

The number is just before the greatest 2-digits number.

The number is just after the smallest 3-digits number.

The number is just after the greatest 3-digits number.

7. Form three digits number :

That has 6 at tens place, has 2 more than 7 at ones place and has a digit between 4 and 6 at hundreds place.

Worksheet

1. Write the numbers in figures and words mentioned by currency notes :

	In figures	In words
	= 	
	= 	
		

2. Show the numbers on the abacus :

H. T. O.	H. T. O.	H. T. O.
589	306	140

3. Think, understand and complete the counting :

100	→	200	→		→		→	
50	→	100	→		→		→	

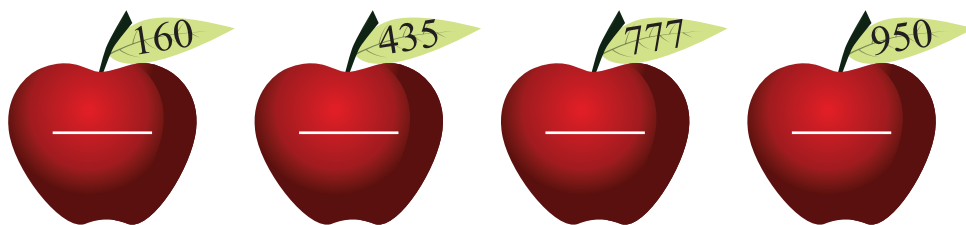
4. Write the backward counting :

	←		←		←	308	←	309
	←		←		←		←	730

5. Write the place value of the encircled digit :

6(9)2	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; background-color: #e0f0ff; text-align: center;">Hundreds</td> <td style="width: 33%; background-color: #e0ffe0; text-align: center;">Tens</td> <td style="width: 33%; background-color: #ffe0ff; text-align: center;">Ones</td> </tr> <tr> <td style="border: 1px solid black; height: 40px;"></td> <td style="border: 1px solid black; height: 40px;"></td> <td style="border: 1px solid black; height: 40px;"></td> </tr> </table>	Hundreds	Tens	Ones				7(5)0	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; background-color: #e0f0ff; text-align: center;">Hundreds</td> <td style="width: 33%; background-color: #e0ffe0; text-align: center;">Tens</td> <td style="width: 33%; background-color: #ffe0ff; text-align: center;">Ones</td> </tr> <tr> <td style="border: 1px solid black; height: 40px;"></td> <td style="border: 1px solid black; height: 40px;"></td> <td style="border: 1px solid black; height: 40px;"></td> </tr> </table>	Hundreds	Tens	Ones			
Hundreds	Tens	Ones													
Hundreds	Tens	Ones													
	Place value = 		Place value = 												

6. Write in words :



7. Write in figures :



8. Write in the expanded form :

$$863 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

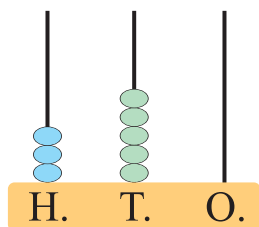
$$787 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

$$416 = \boxed{\text{trapezoid}} + \boxed{\text{trapezoid}} + \boxed{\text{trapezoid}} \quad 393 = \boxed{\text{trapezoid}} + \boxed{\text{trapezoid}} + \boxed{\text{trapezoid}}$$

9. Form the numbers :

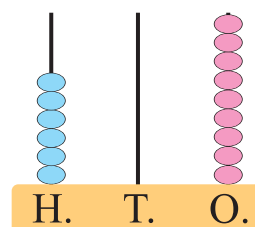
$$\boxed{200} + \boxed{10} + \boxed{4} = \boxed{\hspace{2cm}} \quad \boxed{600} + \boxed{90} + \boxed{7} = \boxed{\hspace{2cm}}$$

10. From the abacus write the numbers in figures and words :



In figures =

In words =



In figures =

In words =

11. How many notes of Rs. 100, Rs. 10 and rupee 1 make a number 347 ?

12. How many notes of Rs. 100, Rs. 10 and rupee 1 make a number 865 ?

Points to remember

- The smallest 1-digit number = 1
- The greatest 1-digit number = 9
- The smallest 2-digits number = 10
- The greatest 2-digits number = 99
- The smallest 3-digits number = 100
- Greatest 3-digits number = 999

We have learnt.

Numbers



3-digits number



Knowledge of ones, tens and hundreds

Comparison



Place value, expanded form

Ascending order, descending order

2

Addition and Subtraction

Objectives

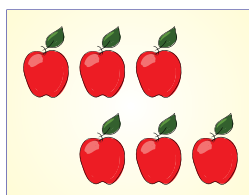
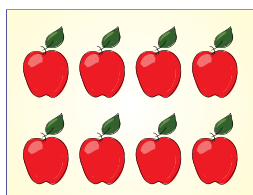
- To solve the problems of addition and subtraction with the help of pictures and story method.
- To guess the sum or difference of the given digits.
- Formation of problems on facts of addition and subtraction.
- Addition and subtraction by vertical method with grouping and without grouping two numbers.
- Addition and subtraction with carrying, borrowing using place value.

Do you remember?

1. Add :



$$3 + 6 =$$



$$8 + 6 =$$

2. Addition by forward counting method :

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

$$10 + 8 =$$

10

$$15 + 4 =$$

15

$$80 + 6 =$$

$$54 + 5 =$$

3. Write the number in tens/ones :

$$42 = \text{----- Tens} + \text{----- Ones}$$

$$63 = \text{----- Tens} + \text{----- Ones}$$

4. Make the number

$$7 \text{ Tens} + 4 \text{ Ones} = \text{-----}$$

$$3 \text{ Tens} + 0 \text{ Ones} = \text{-----}$$

5. Addition by splitting one number :

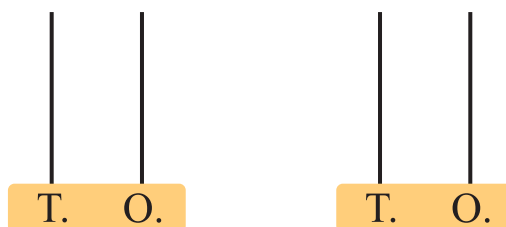
$$42 + 26 =$$

$$70 + 19 =$$

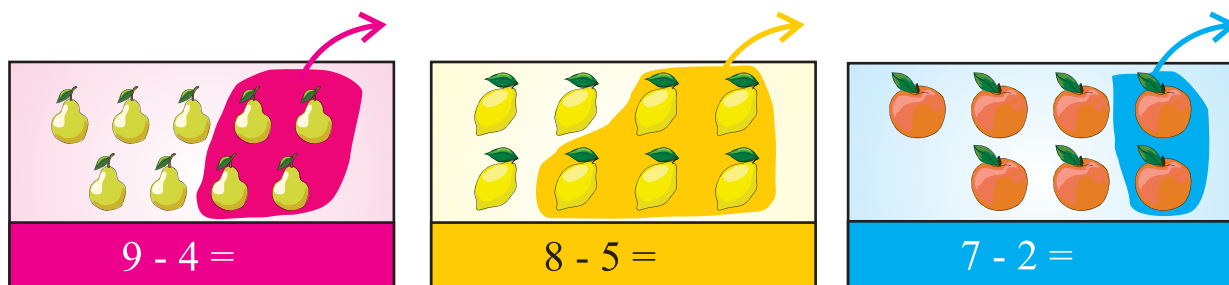
6. Addition by splitting both numbers :

$$39 + 52$$

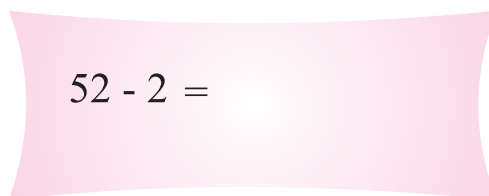
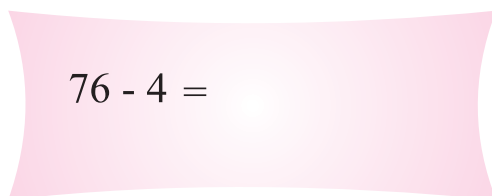
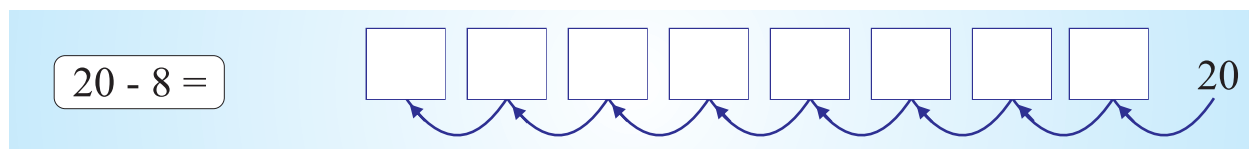
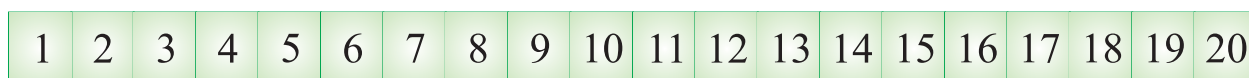
7. Add $35 + 23$ by putting beads in the abacus :



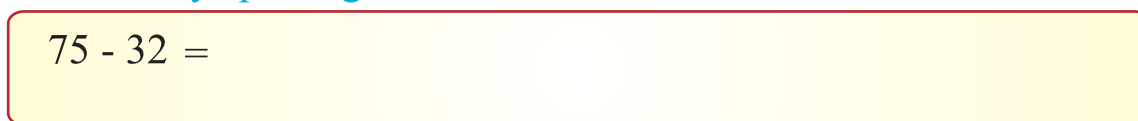
8. Subtract by omitting :



9. Subtract by backward counting :



10. Subtraction by splitting one number :



Activity

Addition with the help of pictures and story method

On monday, Avneet Singh, Sippi, Aslam and Sharishti were playing in the school playground. Sippi wanted to know that how many students are studying in 3rd class.



Aslam

Sippi, do you know how many students are there in 3rd class?

Yes Aslam, there are two sections of 3rd class. In section A there are 30 students and in section B there are 36 students.



Sippi



Avneet Singh

Then how many students are there in both sections?

Let's add them



Sharishti

Addition means adding all things together.

Tens	Ones
3	0
+	3
	6
6	6

→ Sum

$30 + 36 = 66$
There are 66 students in 3rd class.



Sippi

Let's do



Sum of 2-digits numbers.

Tens	Ones
8	0
+	5

Tens	Ones
9	2
+	5

Tens	Ones
6	0
+	4

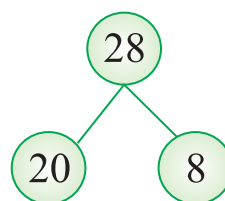
Tens	Ones
6	4
+	2



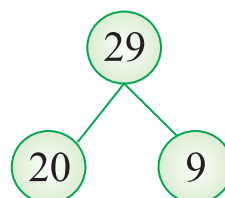
Different methods of addition

By splitting one number :

$$\begin{aligned} \text{(i) } 64 + 28 &= 64 + 20 + 8 \\ &= 64 + 20 + 8 \\ &= 84 + 8 \\ &= 92 \end{aligned}$$

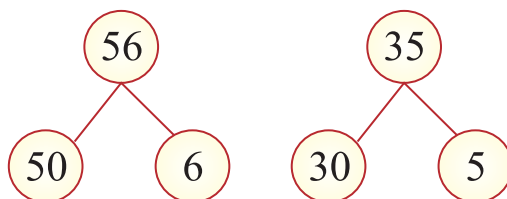


$$\begin{aligned} \text{(ii) } 125 + 29 &= 125 + 20 + 9 \\ &= 125 + 20 + 9 \\ &= 145 + 9 \\ &= 154 \end{aligned}$$

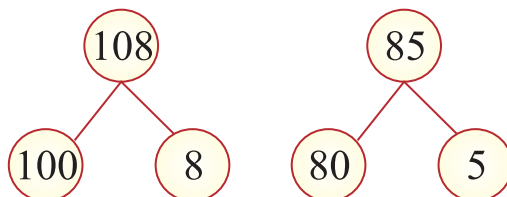


By splitting both numbers :

$$\begin{aligned} \text{(i) } 56 + 35 &= 50 + 6 + 30 + 5 \\ &= 50 + 30 + 6 + 5 \\ &= 80 + 11 = 91 \end{aligned}$$

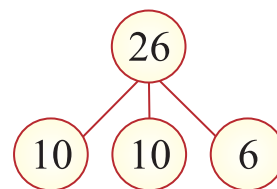


$$\begin{aligned} \text{(ii) } 108 + 85 &= 100 + 8 + 80 + 5 \\ &= 100 + 80 + 8 + 5 \\ &= 180 + 13 \\ &= 193 \end{aligned}$$

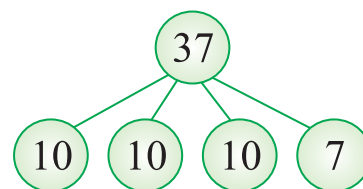


By making pairs of 10's

$$\begin{aligned}
 \text{(i) } 67 + 26 &= 67 + \boxed{10} + \boxed{10} + \boxed{6} \\
 &= 67 \rightarrow 77 \rightarrow 87 \rightarrow 93 \\
 &= \boxed{67 + 26 = 93}
 \end{aligned}$$



$$\begin{aligned}
 \text{(ii) } 148 + 37 &= 148 + \boxed{10} + \boxed{10} + \boxed{10} + \boxed{7} \\
 &= 148 \rightarrow 158 \rightarrow 168 \rightarrow 178 \rightarrow 185 \\
 &= \boxed{148 + 37 = 185}
 \end{aligned}$$



Let's do

1 Add by splitting one number

(a) $46 + 18 =$	(b) $48 + 29 =$	(c) $40 + 20 =$
(d) $76 + 40 =$	(e) $92 + 18 =$	(f) $33 + 44 =$
(g) $104 + 30 =$	(h) $316 + 22 =$	(i) $526 + 47$

2 Add by splitting both numbers :

$$63 + 46 =$$

$$90 + 40 =$$

$$75 + 49 =$$

$$76 + 52 =$$

$$266 + 39 =$$

$$317 + 69 =$$

Add by counting, making pairs of 10's :

$$56 + 38 =$$

$$90 + 50 =$$

$$617 + 57 =$$

$$217 + 35 =$$

Activity

Subtraction by picture and story method

On Tuesday, Avneet Singh, Sippi, Aslam and Sharishti were playing.

Avneet Singh: Aslam, you have many stamps.

Aslam: I like to collect stamps.

Sippi: I had 74 stamps. I gave 30 stamps to Sippi.

Sharishti: How many stamps do you have?

Sharishti: I think less than 50

Avneet Singh: It means now you have 30 stamps less

Sharishti: How many stamps are left?

Aslam: Let's see by subtracting

Subtraction means taking away
The Symbol of Subtractions is (-)

	Tens	Ones	
-	7	4	
	3	0	
	4	4	→ Difference

Aslam: I have 44 stamps.

Find the difference of the given numbers

	Tens	Ones
-	8	7
		5

	Tens	Ones
-	9	6
		6

	Tens	Ones
-	8	0
	6	0

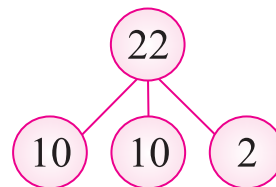
	Tens	Ones
-	7	2
	2	2



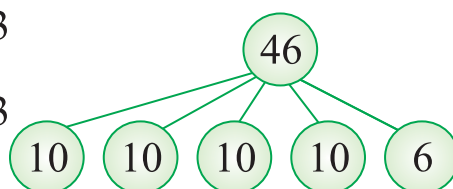
Different methods of subtraction

By making pairs of 10's :

$$\begin{aligned}
 \text{(i) } 57 - 22 &= \boxed{2} \leftarrow \boxed{10} \leftarrow \boxed{10} \leftarrow 57 \\
 &\boxed{35} \leftarrow \boxed{37} \leftarrow \boxed{47} \leftarrow 57 \\
 &\boxed{57 - 22 = 35}
 \end{aligned}$$



$$\begin{aligned}
 \text{(ii) } 63 - 46 &= \boxed{6} \leftarrow \boxed{10} \leftarrow \boxed{10} \leftarrow \boxed{10} \leftarrow \boxed{10} \leftarrow 63 \\
 &\boxed{17} \leftarrow \boxed{23} \leftarrow \boxed{33} \leftarrow \boxed{43} \leftarrow \boxed{53} \leftarrow 63 \\
 &\boxed{63 - 46 = 17}
 \end{aligned}$$



By making smaller number as the multiple of 10 :

$$\begin{aligned}
 \text{(i) } 56 - 37 &= \boxed{56 + 3} - \boxed{37 + 3} \\
 &= \boxed{59} - \boxed{40} \\
 &= 19
 \end{aligned}$$

$$\begin{aligned}
 \text{(ii) } 92 - 86 &= \boxed{92 + 4} - \boxed{86 + 4} \\
 &= \boxed{96} - \boxed{90} \\
 &= 6
 \end{aligned}$$

By making smaller number as the multiple of 100 :

$$\begin{aligned}
 \text{(i) } 427 - 192 &= \boxed{427 + 8} - \boxed{192 + 8} \\
 &= \boxed{435} - \boxed{200} \\
 &= 235
 \end{aligned}$$

$$\begin{aligned}
 \text{(ii) } 709 - 397 &= \boxed{709 + 3} - \boxed{397 + 3} \\
 &= \boxed{712} - \boxed{400} \\
 &= 312
 \end{aligned}$$



Let's do

1. Subtract by making pairs of 10's :

$92 - 42 =$	$78 - 40 =$	$62 - 38 =$
$175 - 100 =$	$325 - 210 =$	$478 - 150 =$

2. Subtract by making one of the given numbers as multiple of 10 :

$75 - 29$	$80 - 24$	$88 - 42$
$61 - 57$	$97 - 49$	$92 - 63$

3. Subtract by making one of the given numbers as the multiple of 100 :

$709 - 395$	$587 - 195$	$591 - 123$
$488 - 190$	$893 - 410$	$776 - 592$

Practical activity

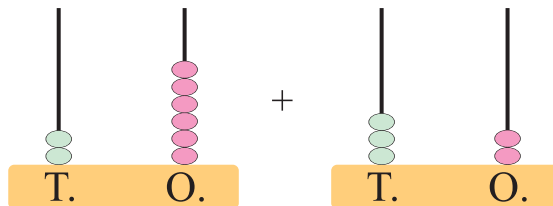
Addition on abacus (without carrying)

Rasleen had 26 beads. Parneet gave 32 more beads to Rasleen. How many beads do Rasleen have now ?

Objective : To develop the understanding of addition.

Material : Abacus

Procedure : Put beads in two abacus as given ($26 + 32$).



2. Add the beads of ones of both abacus and put them in one rod.

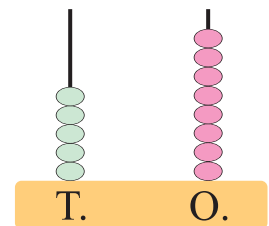
$$6 + 2 = 8$$

3. Add the beads of tens of both abacus and put them in one rod.

$$20 + 30 = 50$$

4. Answer = 5 Tens and 8 Ones $50 + 8 = 58$

Thus, Rasleen has 58 beads now.



Harmeet Singh has ₹142. Lakhveer Singh has ₹232. How many ₹ do they both have?

Procedure : 1. Put beads in two abacus as given ($142 + 232$).

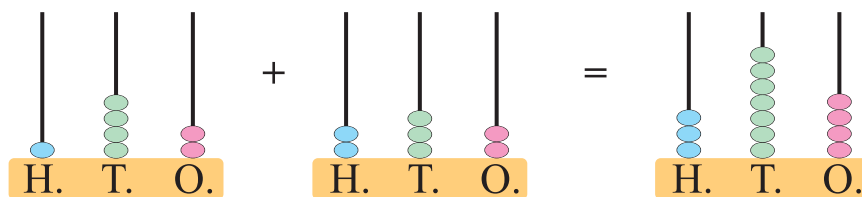
2. Add the beads of ones of both abacus and put them in one rod

$$2 + 2 = 4$$

3. Add the beads of tens of both abacus and put them in one rod

$$40 + 30 = 70$$

4. Add the beads of hundreds of both abacus $100 + 200 = 300$



5. Answer = 3 Hundred, 7 Tens and 4 Ones $300 + 70 + 4 = 374$

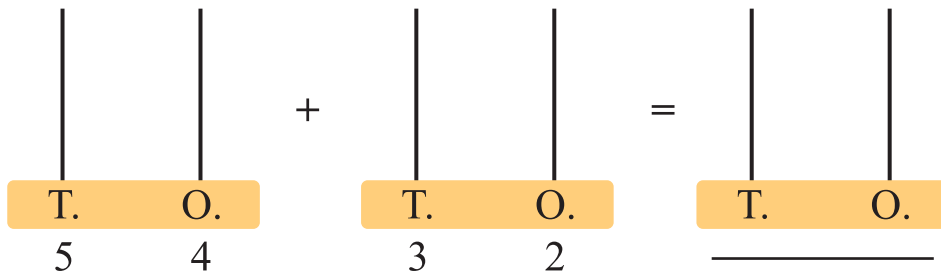
Thus, both of them have ₹ 374 now.



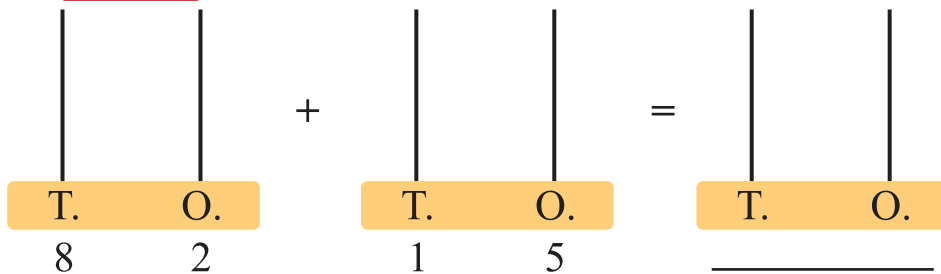
Let's do

Add by putting beads in abacus :

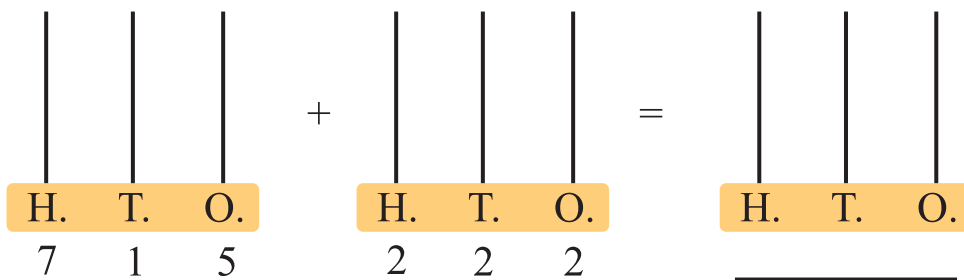
(i) $54 + 32$



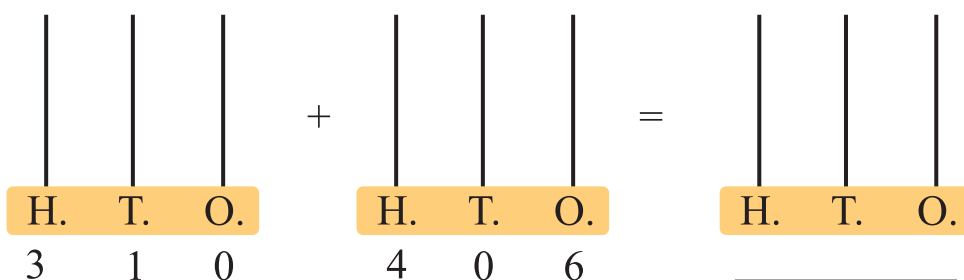
(ii) $82 + 15$



(iii) $715 + 222$



(iv) $310 + 406$



Practical activity

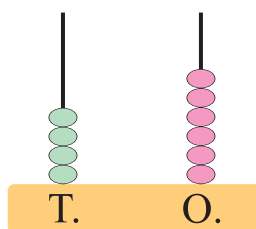
Subtraction on abacus (without borrowing)

Supreet had 46 beads. She gave 22 beads to Manmeet. How many beads do supreet have now?

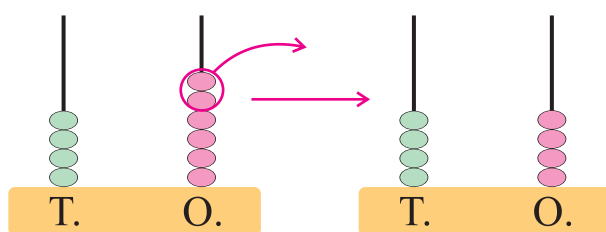
Objective : To develop the understanding of subtraction

Material : Abacus, beads

Procedure : 1. Put beads in abacus according to the given greater number 46.

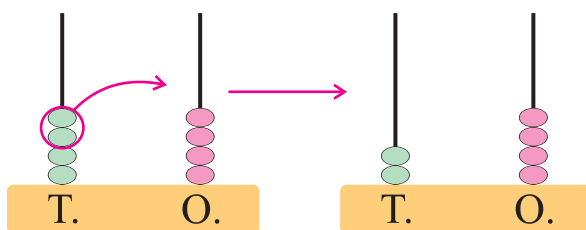


2. Here, in the greater number the digit 6 is at ones place and the number, which we have to subtract from it, has digit 2 at ones place. So we remove 2 beads from ones stick.



$$6 - 2 = 4$$

3. The digit at tens place is 4, which is greater than the tens digit 2 of the number 22. So we remove 2 beads from tens stick.



4. Write number : 2 Tens 4 Ones

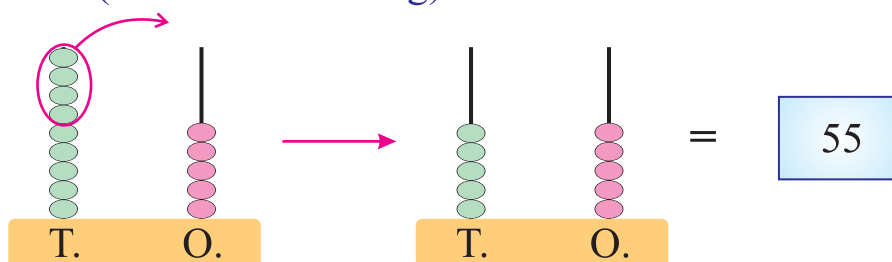
$$= 20 + 4$$

Thus $46 - 22 = 24$

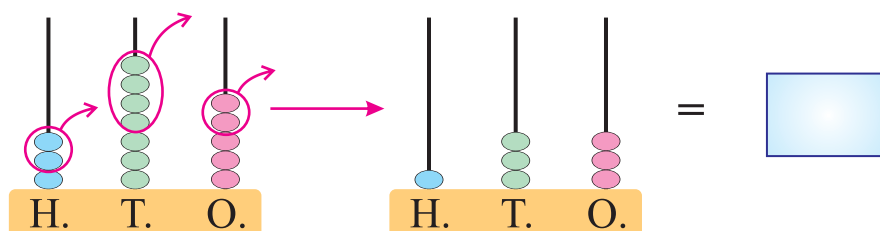
Let's do

Subtraction on abacus (without borrowing) :

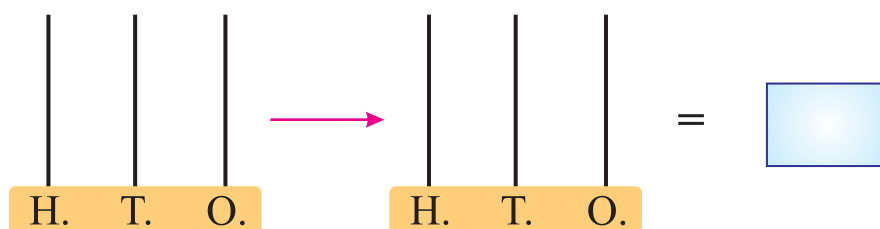
(i) $95 - 40$



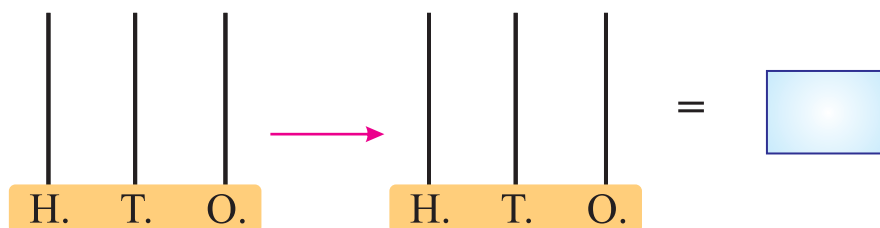
(ii) $375 - 242$



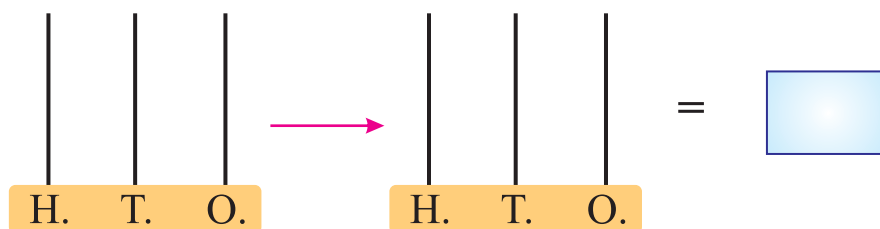
(iii) $60 - 20$



(iv) $824 - 312$



(v) $915 - 413$





Addition of two numbers (without carrying)

$$23+51$$

Procedure

1. Add the ones $3+1 = 4$

2. Add the tens $2+5=7$

$$23+51= 74$$

T.	O.		T.	O.
2	3	→	2	3
5	1	+	5	1
	4		7	4

Addition of two numbers (with carrying)

$$75+25$$

Procedure

1. Add the Ones

$$5+5 = 10 \text{ Ones} = 1 \text{ Tens} + 0 \text{ Ones}$$

H.	T.	O.
	7	5
	2	5
		0

Write the digit '0' under ones column and carry the digit '1' to tens column

2. Add the Tens

$$7+2+1 = 10 \text{ Tens} = 1 \text{ Hundred} + 0 \text{ Tens}$$

H.	T.	O.
	7	5
	2	5
	0	0

Write the digit '0' under Tens column and carry the digit '1' to Hundred column

3. Add the Hundreds

$$75 + 25 = 100$$

H.	T.	O.
1	7	5
	2	5
	0	0



Let's do

1. Addition of 2-digits numbers (without carrying)

	3	0
+	4	0
	7	0

	5	0
+	3	0

	6	0
+	2	0

	1	0
+	3	0

	3	7
+	2	0

	5	9
+	4	0

	7	0
+	2	9

	4	0
+	4	6

	5	2
+	3	3

	4	6
+	2	3

	6	2
+	1	7

	7	4
+		4

2. Addition of 2-digits numbers (with carrying)

	3	7
+	4	6

	4	8
+	3	6

	7	5
+	1	8

	9	4
+		8

	8	0
+	3	0

	7	0
+	3	2

	5	4
+	8	0

	9	2
+	7	0

	7	0
+	5	0

	8	7
+	2	4

	6	6
+	5	9

	7	4
+	8	8

Subtractions of 2-digits numbers (Without borrowing)

$$75-23$$

Procedure

1. Subtract the ones $5-3 = 2$

T.	O.
7	5
- 2	3
	2

2. Subtract the tens $7-2 = 5$

T.	O.
7	5
- 2	3
5	2

$$75-23 = 52$$

Subtractions of 2-digits numbers (With borrowing)

$$62-39$$

Procedure

1. Subtract the ones

Since $9 > 2$, so we cannot subtract 9 from 2. Thus, we did grouping as given below for one tens from the column of tens.

$$1 \text{ Tens} + 2 \text{ ones} = 10 \text{ ones} + 2 \text{ ones} = 12 \text{ ones}$$

Now we can subtract 9 from 12.

$$12 - 9 = 3$$

2. Subtract the tens :

Since 1 tens is taken as 10 ones So, in tens column there are 5 tens remaining after borrowing one tens from 6 tens.

Now subtract the tens

$$50-30 = 20$$

$$\text{Thus } 62-39 = 23$$

For subtraction column method we can borrow from the left column, if needed.

1. Subtraction of 2-digits numbers (without borrowing)

	4	8
−	3	6
	1	2

	7	0
−	4	0

	6	0
−	2	0

	9	0
−	7	0

	2	9
−	1	0

	3	8
−	2	0

	4	7
−	3	0

	9	4
−	5	0

	7	5
−	3	2

	6	7
−	4	4

	9	2
−	4	2

	8	6
−	5	6

2. Subtraction of 2-digits numbers (with borrowing)

	⁽⁵⁾ 6	⁽¹⁵⁾ 5
−	4	7
	1	8

	7	2
−	5	8

	8	5
−	6	9

	9	6
−	5	8

	3	0
−	1	8

	4	0
−	3	8

	7	0
−	5	2

	9	0
−	6	5

	5	2
−	2	6

	6	4
−	3	7

	7	8
−	4	9

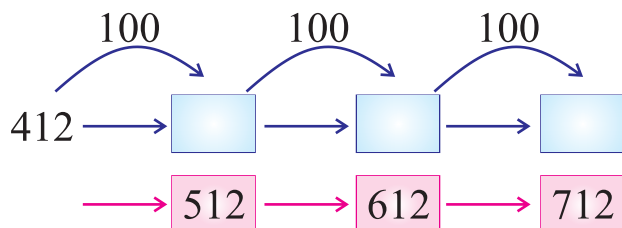
	9	1
−	8	7



Addition of 3–digits numbers (without carrying)

(i) Addition by splitting in groups of 100's :

$$412 + 300$$



$$412 + 300 = 712$$

	H.	T.	O.
	4	1	2
+	3	0	0
	7	1	2

(ii) Addition by place value

$$412 + 300$$

	Hundred	Ten	One
+			

(iii) Addition by splitting one number :

$$\begin{aligned}
 412 + 300 &= 400 + 12 + 300 \\
 &= 400 + 300 + 12 \\
 &= 700 + 12 \\
 &= 712
 \end{aligned}$$

$$\begin{aligned}
 400 + 300 &= 700 \\
 700 + 12 &= 712
 \end{aligned}$$

Let's do



H.	T.	O.		H.	T.	O.		H.	T.	O.		H.	T.	O.
3	2	5		3	2	5		3	2	5		3	2	5
1	4	1	→	1	4	1		1	4	1		1	4	1
						6			6	6		4	6	6

We can also add the three numbers in the same way. For example

H.	T.	O.		H.	T.	O.		H.	T.	O.
3	0	2		3	0	0		2	1	0
4	1	4		4	0	0		1	7	0
	4	3		1	0	0		3	0	0
7	5	9		8	0	0		6	8	0

1. Find the sum :

4	1	0		5	0	0		3	8	2		5	7	5
3	0	0		2	0	0		2	1	0		4	0	0

4	3	0		2	2	2		2	5	7		5	5	9
2	0	0		3	0	6		1	0	0		4	3	0
	6	0		1	4	0			4	0			1	0

$$475 + 403$$

4	7	5
4	0	3

$$362 + 307$$

3	6	2
3	0	7

$$836 + 112$$

8	3	6
1	1	2

$$200 + 300$$

2	0	0
3	0	0

2. Find the sum :

$$124, 301, 232$$

$$310, 21, 410$$

$$405, 330, 42$$

$$30, 40, 242$$



Let's learn

Addition of 3-digits number (with carrying)

Carrying in ones only

$$318 + 234$$

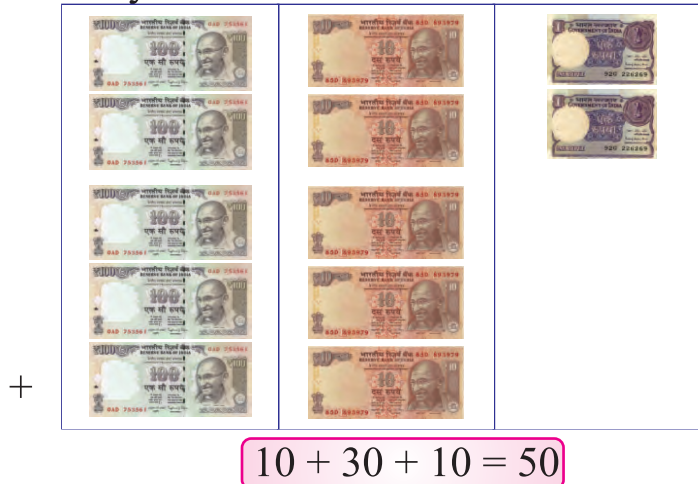
1. To count the currency notes of Rs. 100, Rs. 10 and rupee 1 according to the given number.

2. To count the currency notes of rupee 1 : $8 + 4 = 12$

Since these are more than 10. So, count the notes after adding the note of Rs. 10 in notes of tens. In the remaining notes of ones, 2 notes of rupee 1 will be left.

3. To count the currency notes of Rs. 10



4. To count the currency notes of Rs. 100

$$300 + 200 = 500$$

5. To count all the notes together

$$500 + 50 + 2 = 552$$

We can also solve this question as given below :

Carrying in ones only:

3	1	8	First step	3	1	8	Second step	3	1	8	Third step	3	1	8
2	3	4		2	3	4		2	3	4		2	3	4
						2			5	2		5	5	2

Carrying in tens only:

5	7	2	First step	5	7	2	Second step	5	7	2	Third step	5	7	2
2	6	5		2	6	5		2	6	5		2	6	5
						7			3	7		8	3	7

Carrying in ones and tens only:

4	8	8	First step	4	8	8	Second step	4	8	8	Third step	4	8	8
3	4	5		3	4	5		3	4	5		3	4	5
						3			3	3		8	3	3



Let's do

Find the sum :

2	0	8
3	1	6

4	1	5
1	0	6

2	7	4
1	7	6

5	7	6
3	8	9

5	6	0
2	8	8

6	7	0
2	5	4

6	7	0
1	5	0

7	7	7
1	4	8

6	4	0
2	0	7
1	1	0

4	9	0
2	1	6
1	6	5

3	7	3
2	1	2
2	1	8

6	1	8
1	9	2
1	0	4

3	0	0
2	0	0
4	0	0

4	2	8
2	3	9
2	4	0

5	0	6
3	0	7
1	6	3

3	9	1
2	0	2
1	0	4

2	2	1
2	7	6
3	6	1

2	5	6
2	4	5
3	7	2

7	5	9
2	3	1
1	2	3

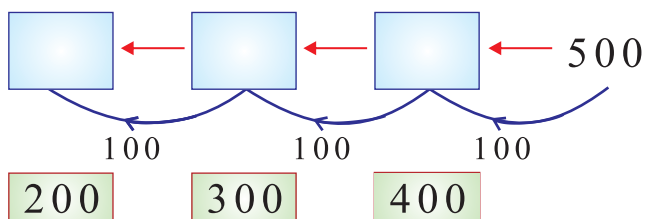
2	9	9
2	6	6
2	2	2



Subtraction of 3-digits numbers

(i) To subtract by splitting in group of 100's :

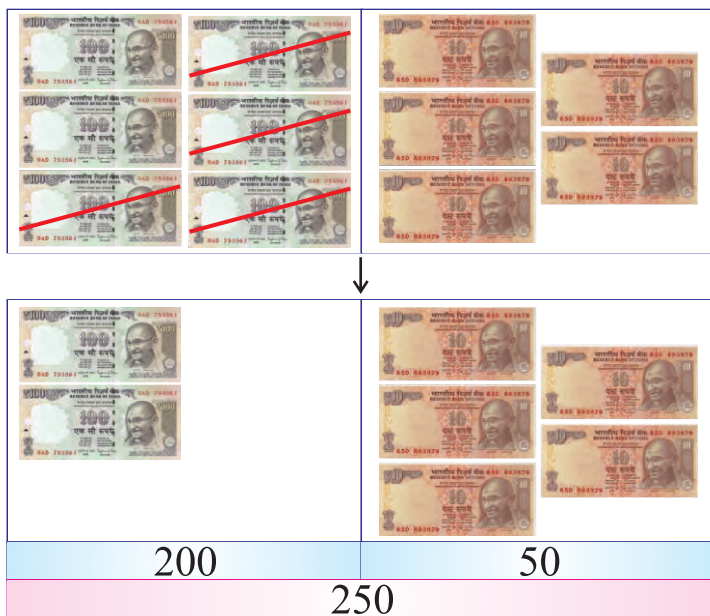
$$500 - 300$$



$$500 - 300 = 200$$

(ii) Subtraction by their place value :

$$650 - 400$$

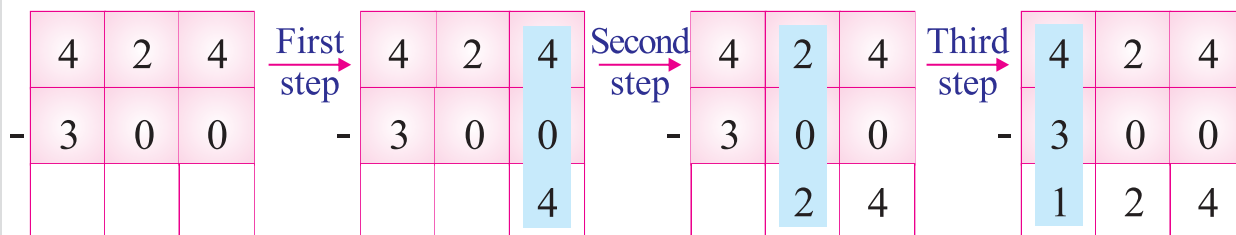


6	5	0
4	0	0
2	5	0

$$650 - 400 = 250$$

(iii) Find the difference :

$$424 - 300$$



$$346 - 40$$

3	4	6
	4	0
3	0	6

$$792 - 62$$

7	9	2
	6	2
7	3	0

$$840 - 30$$

8	4	0
	3	0
8	1	0

Let's do

1. Solve the following sums :

5	7	0
	7	0

2	4	0
	3	0

4	4	5
	3	4

8	5	7
2	2	3

9	4	2
5	4	0

4	7	5
	3	2

2. Find the difference :

(i) 688 and 243

(ii) 375 and 140

(iii) 482 and 212

3. Subtract by splitting number in 100's :

$$700 - 500$$

$$880 - 400$$

$$360 - 200$$

Subtract using place value :

$$650 - 300$$

$$435 - 200$$

$$350 - 100$$

Find the difference :

	5	3	2
–	3	0	0

	4	0	0
–	3	0	0

	6	1	8
–	4	0	0



Properties of addition :

1. By adding 1 to a given number, we get the successor of that number.

$$400 + 1 = 401$$

$$375 + 1 = 376$$

2. By adding 0 to a given number, the value of that number does not change.

$$136 + 0 = 136$$

$$256 + 0 = 256$$

3. By changing the order of the terms of addition, sum of the terms remains the same.

$$375 + 64 = 64 + 375$$

$$200 + 300 = 300 + 200$$

Properties of subtraction :

1. By subtracting 1 from a given number, we get the predecessor of that number.

$$847 - 1 = 846$$

$$736 - 1 = 735$$

2. By subtracting 0 from a given number, the value of that number does not change.

$$125 - 0 = 125$$

$$147 - 0 = 147$$

3. By subtracting a number from itself gives 0 as the difference.

$$375 - 375 = 0$$

$$215 - 215 = 0$$



Let's do

1. Fill in the blanks :

(i) $310 + 25 = \underline{\quad} + 310$

(ii) $0 + \underline{\quad} = 475$

(iii) $\underline{\quad} + 1 = 918$

(iv) $347 - \underline{\quad} = 346$

2. Tick ☒ the correct answer :

(i) $425 + 25 = 400$ ☐

(ii) $310 + 0 = 310$ ☐

(iii) $743 + 1 = 744$ ☐

(vi) $540 - 0 = 541$ ☐



Let's learn

Add :

140, 222, 320

	1	4	0
	2	2	2
+	3	2	0
	6	8	2

$140 + 222 + 320 = 682$

204, 220, 36

	2	0	4
	2	2	0
+		3	6
	4	6	0

$204 + 220 + 36 = 460$

310, 21, 410

	3	1	0
		2	1
+	4	1	0
	7	4	1

$310 + 21 + 410 = 741$

Let's do

Find the sum :

124, 301, 232

405, 330, 42

610, 321, 203

212, 311, 615

33, 722, 227



1. Sukhdev bought a toy car for ₹ 120 and a flower pot for ₹ 135 from a fare. How much money did Sukhdev spend in all ?
2. There are 140 pages in Pooja's Punjabi book and 156 in her Mathematics book. How many total pages are there in both books?
3. Tarleen bought a bag for ₹ 255 for herself and a watch for ₹ 368 for her brother. How much money did she spend?
4. There are 164 guavas in one basket and 128 guavas in another basket. How many guavas are there in the two baskets?
5. One box contains 350 marbles. If 268 marbles are taken out. How many marbles are left in the box?
6. A farmer has 763 cows and second farmer has 459 cows. How many cows do they have in total ?
7. In a garden, there were 215 mango trees. If 169 more mango trees were planted in the garden, then how many mango trees are there in the garden?
8. There are 368 boys and 327 girls in a school. How many total students are there in the school?
9. Tejas had ₹ 563 in his piggy bank. His father gave him ₹ 278 more. How many rupees Tejas has now?
10. There were 375 toffees in a toffee box. If 167 more toffees were put in that box. How many toffees were there in the box now?
11. Parneet has ₹ 680. He bought a bag for ₹ 575. How many rupees is he left with ?
12. Sukhdev's school is 824 walking steps far from his house. If he has covered 379 steps. How many more steps he has to walk to reach the school?

Worksheet

1. Fill in the blanks :

(i) $62 + 0 = \underline{\quad}$

(ii) $115 + 1 = \underline{\quad}$

(iii) $\underline{\quad} + 0 = 348$

(iv) $518 + \underline{\quad} = 519$

(v) $410 + 35 = \underline{\quad} + 410$

2. Tick ☒ the correct answer :

(i) $45 + 30 =$ 75 ☐ 65 ☐ 85 ☐

(ii) $82 - 32 =$ 40 ☐ 50 ☐ 60 ☐

(iii) $90 - 50 =$ 40 ☐ 60 ☐ 30 ☐

3. Add :

4 Hundreds + 2 Tens + 3 Ones and 3 Hundred + 2 Ones

4. Add by splitting the number :

(i) $55 + 42$

(ii) $416 + 110$

5. Subtract by splitting the number :

(i) $78 - 20$

(ii) $525 - 225$

6. Put the sign of (+) or (-) :

(i) $400 \dots\dots\dots 200 = 600$

(ii) $700 \dots\dots\dots 300 = 400$

(iii) $210 \dots\dots\dots 210 = 0$

(iv) $515 \dots\dots\dots 1 = 514$

7. 295 passengers boarded a train from Sahibzada Ajit Singh Nagar. 190 more passengers boarded the train at the station Morinda.

How many total passengers are there in the train now?

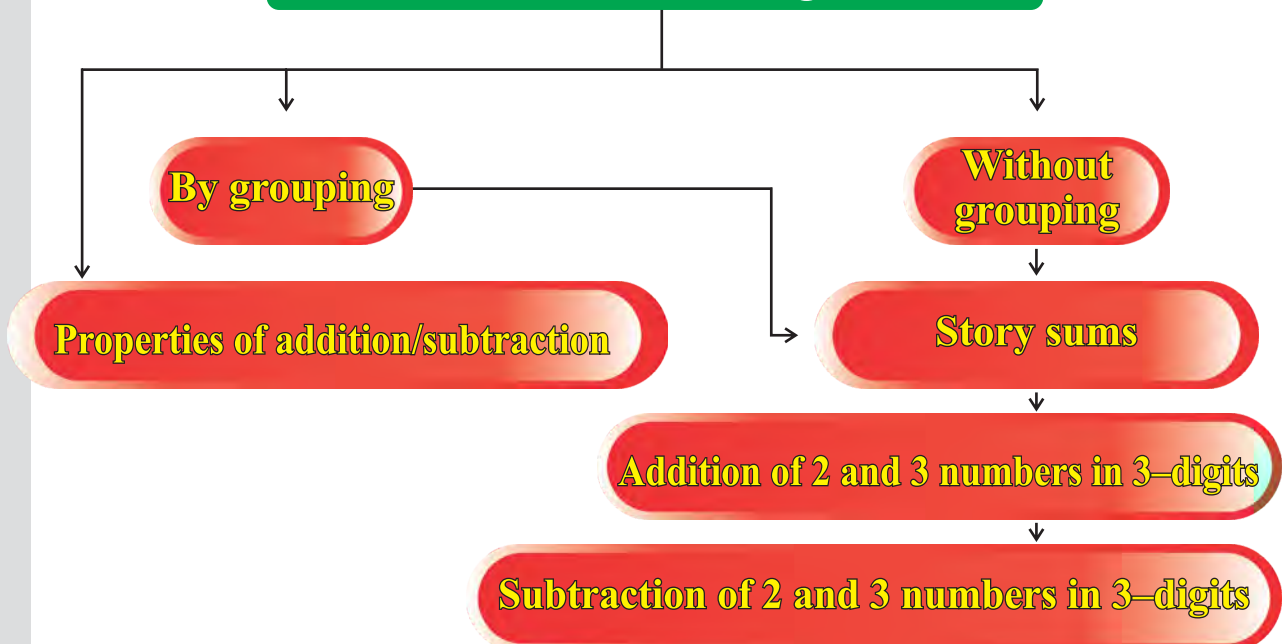
8. At Fatehgarh Sahib railway station, out of total of 485 passengers, 210 got down from the train. How many passengers are left in the train now ?

Points to remember

- If we add or subtract '0' to any number, it remains the same.
- Compare smaller and greater number before subtraction.

We have learnt

Addition/subtraction of 3–digits numbers

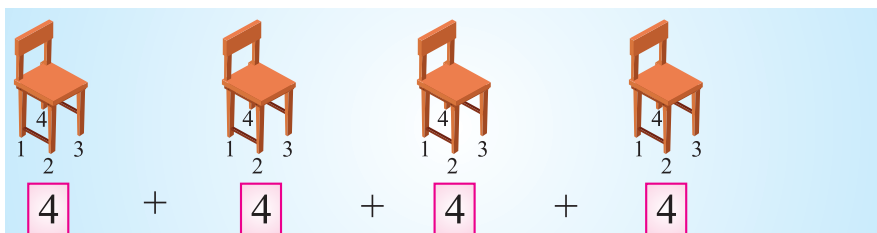
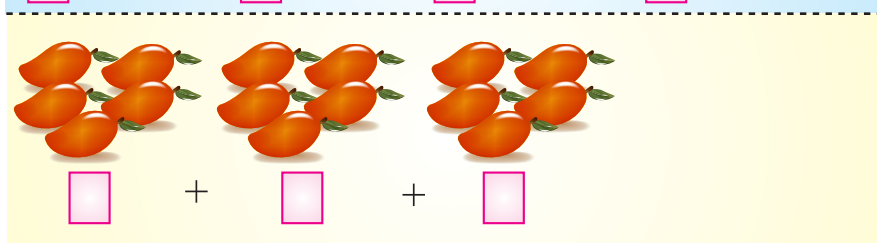


Objectives

- Step counting by play way method.
- To develop the understanding of repeated addition in multiplication.
- From groups to multiplication.
- To develop the understanding of the multiplication table of 2, 3, 5, and 10.
- To develop the understanding of multiplication of 1-digit, 2-digits numbers by splitting 1-digit and 2-digits numbers.
- Multiplication of 3-digits numbers with 1-digit numbers.

Do you remember?

Fill in the blanks :

	_____ Times
	_____ Times

Avneet Singh has three toy cars. One car has 4 wheels. How many wheels are there in the three cars together?



$$\boxed{4} + \boxed{4} + \boxed{4} = \bigcirc$$

If there are 6 children in a class and each child has 5 pencils. How many pencils do all the children have?



$$\boxed{} + \boxed{} + \boxed{} + \boxed{} + \boxed{} + \boxed{} = \bigcirc$$

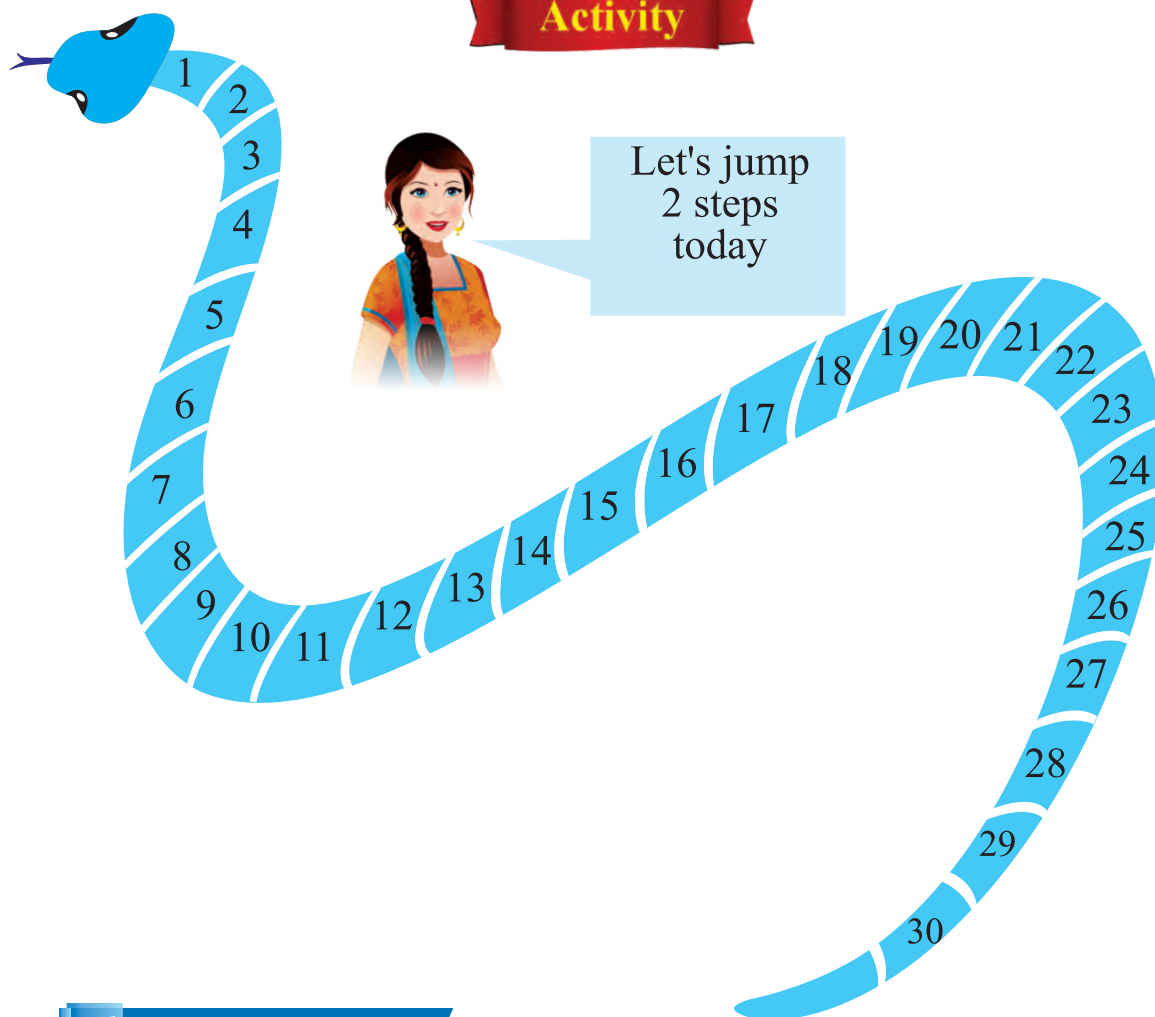
Write repeated addition in the form of multiplication :

$2 + 2 + 2 + 2 + 2$	5×2
$3 + 3 + 3$	$\text{---} \times 3$
$4 + 4 + 4 + 4$	$\text{---} \times \text{---}$
$5 + 5 + 5 + 5 + 5 + 5$	$\text{---} \times \text{---}$
$6 + 6 + 6 + 6 + 6$	$\text{---} \times \text{---}$
$7 + 7 + 7 + 7 + 7 + 7$	$\text{---} \times \text{---}$
$8 + 8 + 8 + 8$	$\text{---} \times \text{---}$
$9 + 9 + 9 + 9 + 9 + 9 + 9$	$\text{---} \times \text{---}$
$8 + 8 + 8 + 8 + 8 + 8$	$\text{---} \times \text{---}$
$7 + 7 + 7 + 7 + 7$	$\text{---} \times \text{---}$

Write multiplication as repeated addition :

2×8	
3×7	
5×5	
4×6	
7×2	
9×5	

Activity

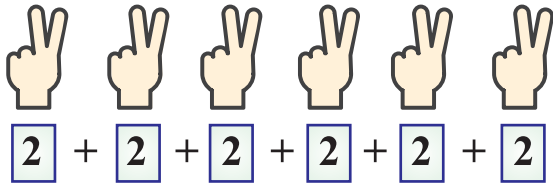


Tips for teacher

- Use jump of different digits to remember the step counting.



All the student, show
2-2 fingers of their
hands.



$$2 + 2 + 2 + 2 + 2 + 2$$

By adding the same number
repeatedly, we can express it as
multiplication

Means addition of
same digit
repeatedly.



6 times 2
to write 6×2

$$= 6 \times 2 = 12$$



$$3 + 3 + 3 + 3 = 4 \times 3 = 12$$

$$4 + 4 + 4 + 4 + 4 = 5 \times 4 = 20$$

$$5 + 5 + 5 + 5 + 5 + 5 + 5 = 7 \times 5 = 35$$



Tips for teacher

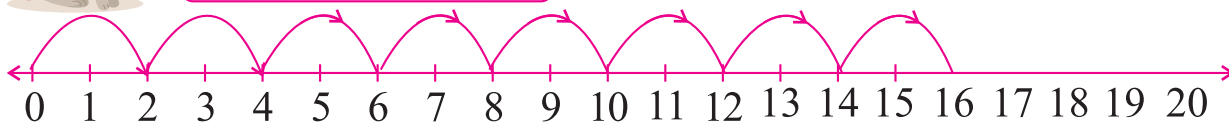
- The teacher can develop the understanding of multiplication tables by using 10 fingers of hands.
- The teacher can develop the understanding by using different things (pencils, pens, sticks).

Let's do

Step counting



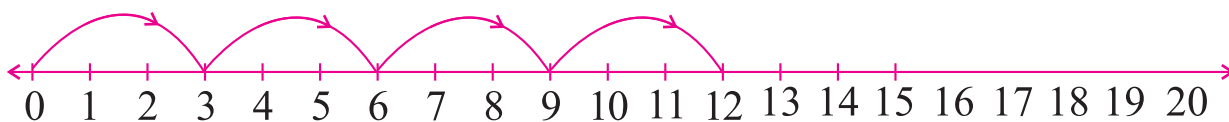
Jump 2 steps 8 times



2, 4, 6, 8, 10, 12, 14, 16



Jump 3 steps 4 times



3, 6, 9, 12



Jump 4 steps 5 times

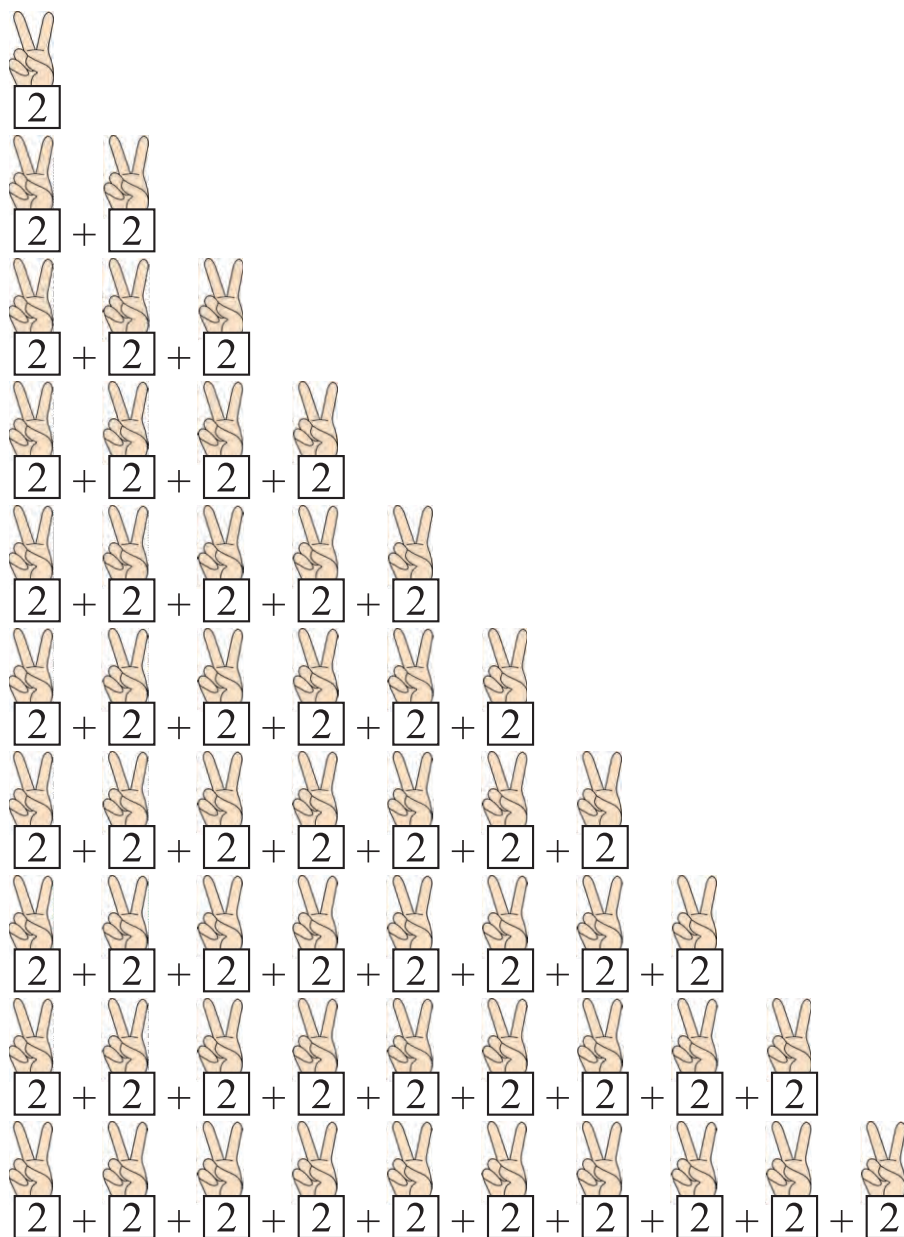


Jump 5 steps 4 times





Multiply by 2



1 time 2 = $1 \times 2 = 2$

2 times 2 = $2 \times 2 = 4$

3 times 2 =

4 times 2 =

5 times 2 =

6 times 2 =

7 times 2 =

8 times 2 =

9 times 2 =

10 times 2 =



We can write table of 2 by this method also.

$2 \times 1 = 2$

$2 \times 2 = 4$

$2 \times 3 = 6$

$2 \times 4 = 8$

$2 \times 5 = 10$

$2 \times 6 = 12$

$2 \times 7 = 14$

$2 \times 8 = 16$

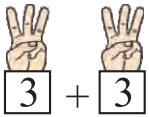
$2 \times 9 = 18$

$2 \times 10 = 20$

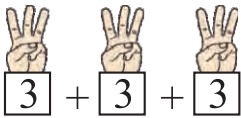
Multiply by 3



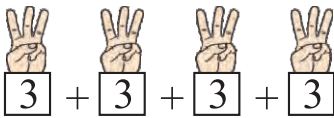
1 time 3 = $1 \times 3 = 3$



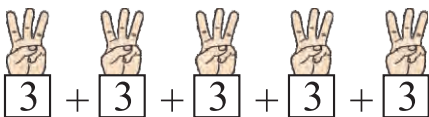
2 times 3 =



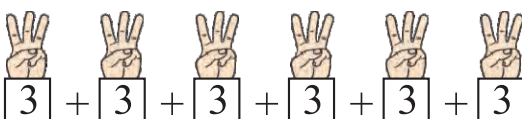
3 times 3 =



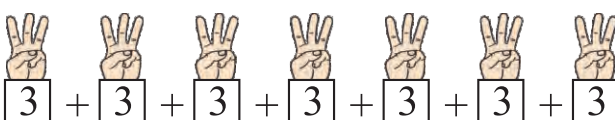
4 times 3 =



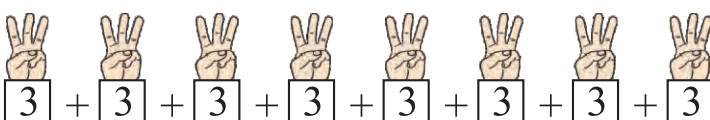
5 times 3 =



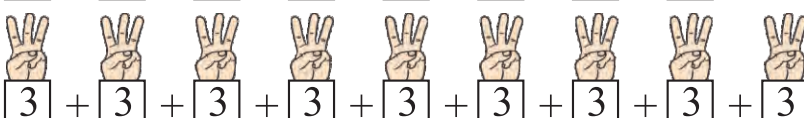
6 times 3 =



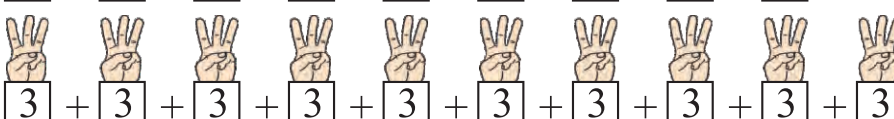
7 times 3 =



8 times 3 =



9 times 3 =



10 times 3 =



We can write table of 3 by this method also.

$3 \times 1 = 3$

$3 \times 6 = 18$

$3 \times 2 = 6$

$3 \times 7 = 21$

$3 \times 3 = 9$

$3 \times 8 = 24$

$3 \times 4 = 12$

$3 \times 9 = 27$

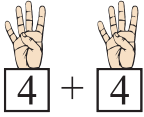
$3 \times 5 = 15$

$3 \times 10 = 30$

Multiply by 4



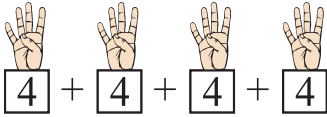
1 time 4 = $1 \times 4 = 4$



2 times 4 =



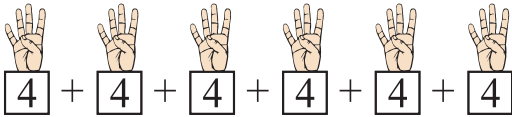
3 times 4 =



4 times 4 =



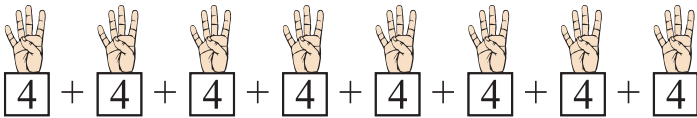
5 times 4 =



6 times 4 =



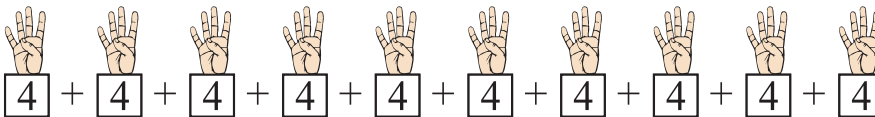
7 times 4 =



8 times 4 =



9 times 4 =



10 times 4 =



We can write table of 4 by this method also.

$4 \times 1 = 4$

$4 \times 6 = 24$

$4 \times 2 = 8$

$4 \times 7 = 28$

$4 \times 3 = 12$

$4 \times 8 = 32$

$4 \times 4 = 16$

$4 \times 9 = 36$

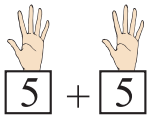
$4 \times 5 = 20$

$4 \times 10 = 40$

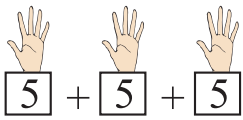
Multiply by 5



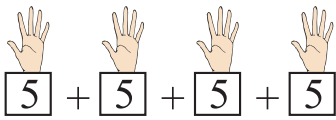
1 time 5 = $1 \times 5 = 5$



2 times 5 =



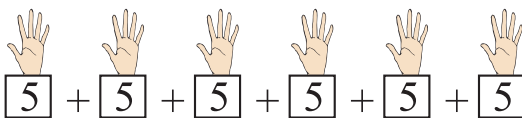
3 times 5 =



4 times 5 =



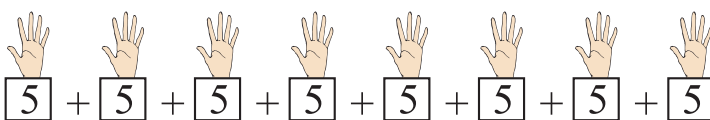
5 times 5 =



6 times 5 =



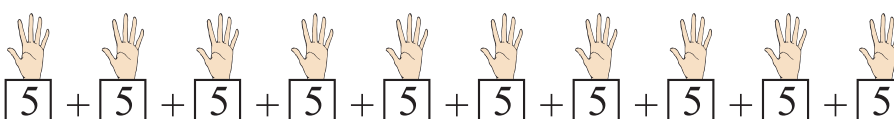
7 times 5 =



8 times 5 =



9 times 5 =



10 times 5 =



We can write table of 5 by this method also.

$5 \times 1 = 5$

$5 \times 6 = 30$

$5 \times 2 = 10$

$5 \times 7 = 35$

$5 \times 3 = 15$

$5 \times 8 = 40$

$5 \times 4 = 20$

$5 \times 9 = 45$

$5 \times 5 = 25$

$5 \times 10 = 50$

Practical Activity

Objective - To develop the understanding of tables.

Material - Sticks

Procedure -

1. Arrange the sticks :

Sticks in vertical
position = 2

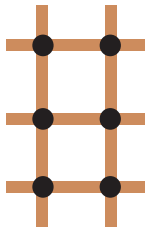


Sticks in vertical
position = 3

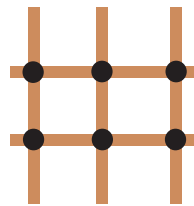


2. Now arrange sticks over them in horizontal position.

Sticks in horizontal
position = 3



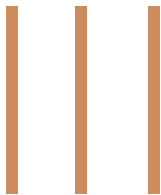
Sticks in horizontal
position = 2



3. Count the intersection points by arranging sticks in vertical and horizontal position.

$$2 \times 3 = 6$$

$$3 \times 2 = 6$$



Sticks in vertical position = 3
Sticks in horizontal position = 0
Number of points of intersection = 0
 $3 \times 0 = 0$

Sticks in vertical position = 0
Sticks in horizontal position = 4
Number of points of intersection = 0
 $0 \times 4 = 0$



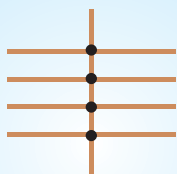
Tips for teacher

- Ask oral questions while changing the digit to the children in groups using sticks activity.

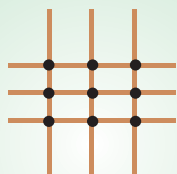
Let's do



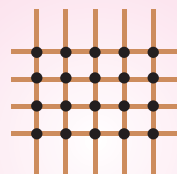
Look at the pictures and fill in the blanks



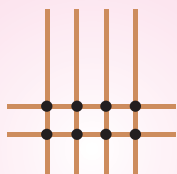
$$\boxed{1} \times \boxed{4} = \boxed{4}$$



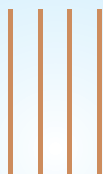
$$\boxed{} \times \boxed{} = \boxed{}$$



$$\boxed{} \times \boxed{} = \boxed{}$$



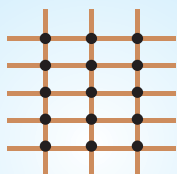
$$\boxed{} \times \boxed{} = \boxed{}$$



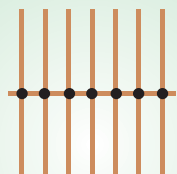
$$\boxed{} \times \boxed{} = \boxed{}$$



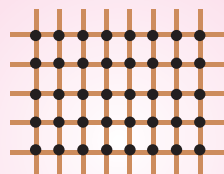
$$\boxed{} \times \boxed{} = \boxed{}$$



$$\boxed{} \times \boxed{} = \boxed{}$$



$$\boxed{} \times \boxed{} = \boxed{}$$



$$\boxed{} \times \boxed{} = \boxed{}$$



Multiplication Tables

$2 \times 1 = 2$

$2 \times 2 = 4$

$2 \times 3 = 6$

$2 \times 4 = 8$

$2 \times 5 = 10$

$2 \times 6 = 12$

$2 \times 7 = 14$

$2 \times 8 = 16$

$2 \times 9 = 18$

$2 \times 10 = 20$

$5 \times 1 = 5$

$5 \times 2 = 10$

$5 \times 3 = 15$

$5 \times 4 = 20$

$5 \times 5 = 25$

$5 \times 6 = 30$

$5 \times 7 = 35$

$5 \times 8 = 40$

$5 \times 9 = 45$

$5 \times 10 = 50$

$4 \times 1 = 4$

$4 \times 2 = 8$

$4 \times 3 = 12$

$4 \times 4 = 16$

$4 \times 5 = 20$

$4 \times 6 = 24$

$4 \times 7 = 28$

$4 \times 8 = 32$

$4 \times 9 = 36$

$4 \times 10 = 40$

$3 \times 1 = 3$

$3 \times 2 = 6$

$3 \times 3 = 9$

$3 \times 4 = 12$

$3 \times 5 = 15$

$3 \times 6 = 18$

$3 \times 7 = 21$

$3 \times 8 = 24$

$3 \times 9 = 27$

$3 \times 10 = 30$

$10 \times 1 = 10$

$10 \times 2 = 20$

$10 \times 3 = 30$

$10 \times 4 = 40$

$10 \times 5 = 50$

$10 \times 6 = 60$

$10 \times 7 = 70$

$10 \times 8 = 80$

$10 \times 9 = 90$

$10 \times 10 = 100$



Yes, I have learnt tables.



Let's do

Write multiplication tables



$$2 \times 1 = 2$$



$$3 \times 1 = 3$$



$$4 \times 1 = 4$$



$$5 \times 1 = 5$$



$$3 \times 1 = 3$$



$$4 \times 1 = 4$$



$$5 \times 1 = 5$$



$$10 \times 1 = 10$$

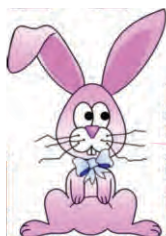
Word problems

In our daily life



A cat has 2 eyes. How many eyes do four cats have?

$$4 \times 2 = 8$$



One rabbit has 2 ears. Find the number of ears of 5 rabbits.

$$\square \times \square = \square$$



One table has 4 legs. How many legs do 3 tables have?

$$\square \times \square = \square$$



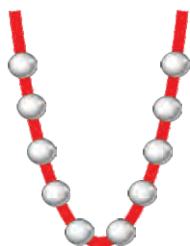
A flower has 3 petals. Find the number of petals of 8 flowers.

$$\square \times \square = \square$$



One jeep has 4 tyres. How many tyres do 5 jeeps have?

$$\square \times \square = \square$$



A necklace has 10 beads. How many beads do 8 necklaces have?

$$\square \times \square = \square$$



One hand has 5 fingers.
Find the number of
fingers of two hands.

$$\square \times \square = \square$$



One chair has 4 legs.
Find the number of
legs of 5 chairs.

$$\square \times \square = \square$$



A cat has 4 legs. Find
the number of legs
of 10 cats.

$$\square \times \square = \square$$



One balloon costs ₹ 5.
Find the cost of
4 balloons.

$$\square \times \square = \square$$



One toffee costs ₹ 2. Find
the cost of 4 toffees.

$$\square \times \square = \square$$



Multiplication by changing the order :



$$2 \times 5 = 10$$

$$2 \times 5 = 5 \times 2$$



$$5 \times 2 = 10$$

We get the same answer on multiplication by changing the order

Multiply by 1



$$1 \times 5 = 5$$



$$7 \times 1 = 7$$

A number multiplied by 1 gives the number itself

Number $\times 1 =$ same number

$$\begin{array}{rcl} 1 & \times & 1 = 1 \\ 2 & \times & 1 = 2 \\ 3 & \times & 1 = 3 \\ 4 & \times & 1 = 4 \\ 5 & \times & 1 = 5 \end{array}$$

$$\begin{array}{rcl} 6 & \times & 1 = 6 \\ 7 & \times & 1 = 7 \\ 8 & \times & 1 = 8 \\ 9 & \times & 1 = 9 \\ 10 & \times & 1 = 10 \end{array}$$

Multiply by zero (0) :

$$3 \times 0 = 0$$

$$5 \times 0 = 0$$

Number $\times 0 = 0$

A number multiplied by '0' gives '0'

$$\begin{array}{rcl} 1 & \times & 0 = 0 \\ 2 & \times & 0 = 0 \\ 3 & \times & 0 = 0 \\ 4 & \times & 0 = 0 \\ 5 & \times & 0 = 0 \end{array}$$

$$\begin{array}{rcl} 6 & \times & 0 = 0 \\ 7 & \times & 0 = 0 \\ 8 & \times & 0 = 0 \\ 9 & \times & 0 = 0 \\ 10 & \times & 0 = 0 \end{array}$$

- When we read a multiplication table of a number, then the numbers we get are the multiples of that number, like 2, 4, 6, 8, 10..... are the multiples of 2 .
- Multiple of 2 ends with 0, 2, 4, 6, 8.
- Multiple of 5 ends with 5 or 0 .



Let's do

1. Fill in the blanks :

$$4 \times 2 = \square \times 4$$

$$9 \times 3 = \square \times 9$$

$$7 \times \square = 4 \times 7$$

$$9 \times 7 = \square \times \square$$

$$5 \times 9 = \square \times \square$$

$$5 \times 7 = \square \times \square$$

$$\square \times 5 = \square \times \square 4$$

$$\square \times \square 2 = \square \times \square 9$$

$$\square 6 \times \square = 8 \times \square$$

2. Fill in the blanks :

$$5 \times 1 = \square$$

$$7 \times 1 = \square$$

$$4 \times 1 = \square$$

$$3 \times 1 = \square$$

$$8 \times 1 = \square$$

$$9 \times 1 = \square$$

$$3 \times 0 = \square$$

$$7 \times 0 = \square$$

$$5 \times 0 = \square$$

$$0 \times 2 = \square$$

$$0 \times 3 = \square$$

$$0 \times 8 = \square$$

$$4 \times 0 = \square$$

$$9 \times 0 = \square$$

$$6 \times 0 = \square$$

$$0 \times 4 = \square$$

$$0 \times 6 = \square$$

$$0 \times 9 = \square$$

3. Tick (✓) the correct multiples of 2 :

14

☐

13

☐

18

☐

16

☐

20

☐

17

☐

4. Tick (✓) the correct multiples of 5 :

12

☐

15

☐

10

☐

18

☐

20

☐

30

☐

• **Fill in the blanks :**

$4 \times 2 =$	$5 \times 2 =$	$2 \times 5 =$
$4 \times 4 =$	$9 \times 3 =$	$9 \times 4 =$
$8 \times 3 =$	$4 \times 10 =$	$7 \times 10 =$
$5 \times 5 =$	$3 \times 3 =$	$2 \times 2 =$
$7 \times 2 =$	$7 \times 4 =$	$7 \times 5 =$
$8 \times 2 =$	$8 \times 3 =$	$2 \times 10 =$

• **Multiply 1-digit number with 1-digit number :**

$4 \times 2 =$ $\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$	$5 \times 3 =$ $\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$	$9 \times 3 =$ $\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$	$7 \times 5 =$ $\begin{array}{r} 7 \\ \times 5 \\ \hline \end{array}$
$6 \times 2 =$	$5 \times 3 =$	$7 \times 5 =$	$7 \times 4 =$
$7 \times 2 =$	$6 \times 4 =$	$4 \times 5 =$	$3 \times 10 =$
$9 \times 2 =$	$8 \times 3 =$	$9 \times 5 =$	$8 \times 10 =$

Brain teasers



Raman has two almonds and Aman also has two almonds. How many total almonds do they both have ?

$$2 + 2 = 4$$



But 2×2
is also $= 4$

Double means
multiplying by 2



$$3 + 3 = 6 \text{ or } 2 \times 3 = 6$$



Let's do

Fill in the blanks

- (a) Double of 2 —————
- (c) Double of 4 —————
- (e) Double of 6 —————
- (g) Double of 8 —————

- (b) Double of 3 —————
- (d) Double of 5 —————
- (f) Double of 7 —————
- (h) Double of 9 —————

×	2	3	4	5
2				
3				
4				
5				

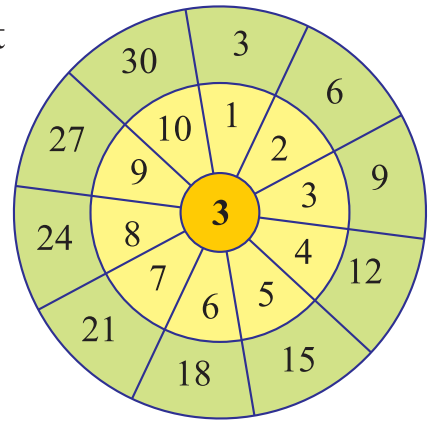
Practical Activity

Objective - Write multiplication table.

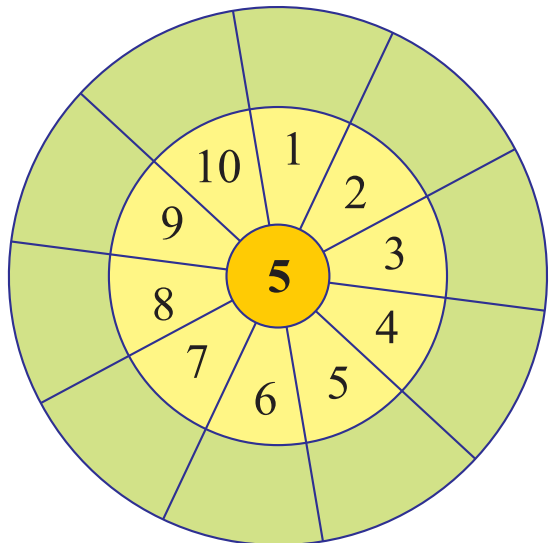
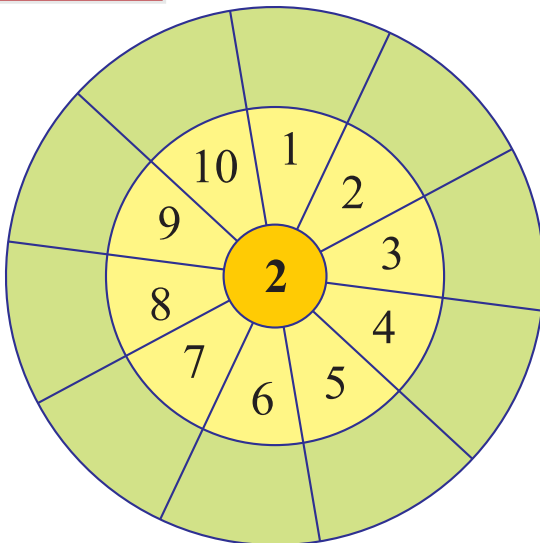
Material - Paper plate and colours

Procedure -

1. Draw lines on paper plate as shown.
2. In the central circle write any one digit from 2 to 5 that table which the child has to do.
3. Now write counting from 1 to 10 in the next circle.
4. Tell the students to multiply and complete the table.



Let's do



Tips for teacher

- Ask to write different multiplication tables.
- The teachers can ask to colour the paper plates with different colours and display them in the classroom.

Let's count the currency notes of Rs. 10 :

	$= 1 \times 10$	$= 10$
	$= 2 \times 10$	$= \underline{\hspace{2cm}}$
	$= 4 \times 10$	$= \underline{\hspace{2cm}}$
	$= \underline{\hspace{2cm}}$	$= \underline{\hspace{2cm}}$
	$= \underline{\hspace{2cm}}$	$= \underline{\hspace{2cm}}$

Tick (✓) the correct multiples of 10 :

18	20	30	70	37	40
☐	☒	☒	☒	☐	☒
35	40	50	86	90	60
☐	☐	☐	☐	☐	☐
42	23	50	96	70	88
☐	☐	☐	☐	☐	☐

Multiples of 10 ends with '0'



Multiply 2-digits number with 1-digit number

1. Write the number (20×2) according to its place.

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 2 \quad 0 \\ \times \quad 2 \\ \hline \end{array}$$

2. Multiply 2 by 0 (ones place)

Write $2 \times 0 = '0'$ at ones place

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 2 \quad 0 \\ \times \quad 2 \\ \hline \end{array}$$

3. Multiply 2 by 2 (tens place)

Write $2 \times 2 = '4'$ at tens place

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 2 \quad 0 \\ \times \quad 2 \\ \hline 4 \quad 0 \end{array}$$

Let's do



$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 1 \quad 0 \\ \times \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 4 \quad 0 \\ \times \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 5 \quad 0 \\ \times \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 2 \quad 0 \\ \times \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 1 \quad 0 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 2 \quad 0 \\ \times \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 3 \quad 0 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 6 \quad 0 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 2 \quad 0 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 4 \quad 0 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 8 \quad 0 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad \text{O.} \\ 7 \quad 0 \\ \times \quad 2 \\ \hline \end{array}$$



Multiplication of large numbers



A necklace has 23 beads, How many beads do the 5 such necklaces have ?

How can we do it ?



Firstly split 23 into $20 + 3$

×	20	3
5		



$5 \times 20 = 100$ and $5 \times 3 = 15$

×	20	3
5	100	15

Add 100 and 15



×	20	3
5	100	15

 = 115

This is very easy



Tips for teacher

- To develop the concept of multiplication by splitting the numbers and by using activity.
- Multiplication taught with the traditional method, poses as a barrier in the understanding for the students.
- Ask them to multiply in mind or by guessing, then finally ask the question.

There are 32 flowers in a bed. How many flowers are there in 3 such beds?

Number of beds = 3
One bed has flowers = 32
Total flowers =

Estimate

32×3 means
 30×3
which is less than 100



×	30	2	→	×	30	2	→	×	30	2	=	96
3				3		6		3	90	6		

Let's do

1. One ice cream costs ₹ 55. Find the cost of 5 such ice creams.

×	50	5
5		

Estimate =

$55 \times 5 =$

2. A chalk box contains 43 chinks . How many chinks do the 3 boxes have ?

×	40	3
3		

Estimate =

$43 \times 3 =$



Multiplication with column method :

$$12 \times 2$$

$$2 \text{ Ones} \times 2 = 4 \text{ Ones} \longrightarrow$$

$$1 \text{ Tens} \times 2 = 2 \text{ Tens} \longrightarrow$$

Tens	Ones
	4
2	0
2	4

$$\begin{array}{r} 12 \\ \times 2 \\ \hline 4 \leftarrow 2 \times 2 \\ 20 \leftarrow 10 \times 2 \\ \hline 24 \end{array}$$

$$28 \times 3$$

$$8 \text{ Ones} \times 3 = 24 \text{ Ones} \longrightarrow$$

$$= 2 \text{ Tens} + 4 \text{ Ones}$$

$$2 \text{ Tens} \times 3 = 6 \text{ Tens} \longrightarrow$$

Tens	Ones
2	4
6	0
8	4

$$\begin{array}{r} 28 \\ \times 3 \\ \hline 24 \leftarrow 8 \times 3 \\ 60 \leftarrow 20 \times 3 \\ \hline 84 \end{array}$$

Let's do

$$86$$

$$\times 5$$

$$\leftarrow 6 \times 5$$

$$\leftarrow 80 \times 5$$

$$62$$

$$\times 2$$

$$\leftarrow 2 \times 2$$

$$\leftarrow 60 \times 2$$

$$78$$

$$\times 3$$

$$\leftarrow 8 \times 3$$

$$\leftarrow 70 \times 3$$



Multiplication of 2-digits numbers with 2-digits numbers



If you have 10
currency notes of
₹ 10 then how much
money do you have ?

$$10 \times 10 = 100$$



If you have 15
currency notes of
₹ 10 then how
much money do
you have ?

$$15 \times 10 = 150$$



If you have 20
currency notes of
₹ 10 then how
much money do
you have ?

$$20 \times 10 = 200$$

Let's do



$$20 \times 10 =$$

$$30 \times 10 =$$

$$40 \times 10 =$$

$$60 \times 10 =$$

$$70 \times 10 =$$

$$90 \times 10 =$$



Multiplication of 2-digits numbers with 2 digits-numbers



One packet contains 25 biscuits. How many biscuits are there in 13 such packets?



How it can be done ?

Firstly, split 25 and 13

$$25 = 20 + 5$$

$$13 = 10 + 3$$

×	20	5
10		
3		



$$10 \times 20 = 200 \text{ and } 10 \times 5 = 50$$

$$3 \times 20 = 60 \text{ and } 3 \times 5 = 15$$

×	20	5
10	200	50
3		

×	20	5
10	200	50
3	60	15

Find the sum of $200 + 50 + 60 + 15$



×	20	5
10	200	50
3	60	15

$$= 325$$

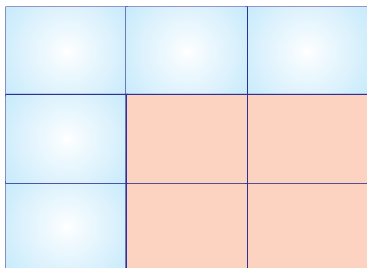
This is very easy



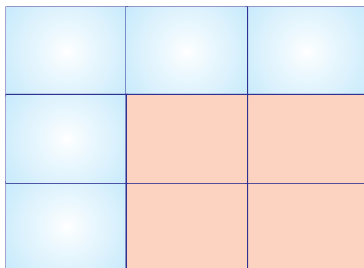


Let's do

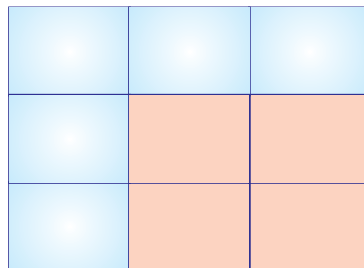
$32 \times 21 =$



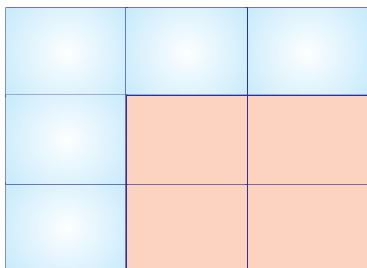
$22 \times 32 =$



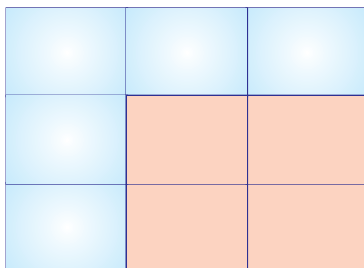
$32 \times 33 =$



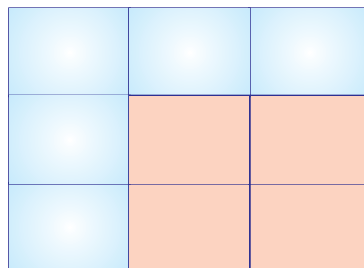
$12 \times 52 =$



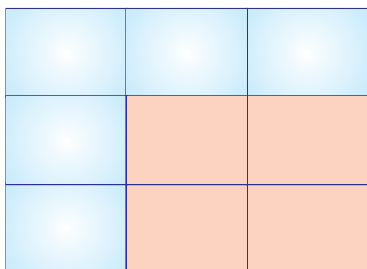
$23 \times 12 =$



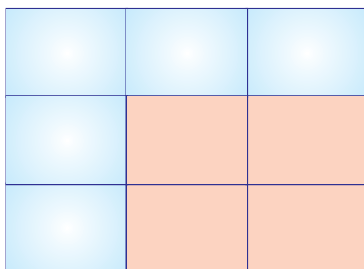
$42 \times 25 =$



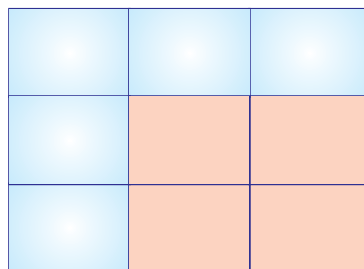
$15 \times 42 =$



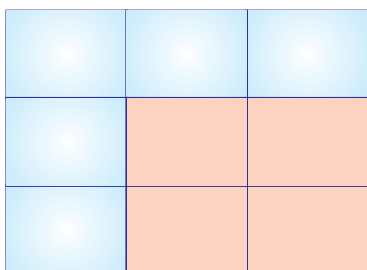
$33 \times 32 =$



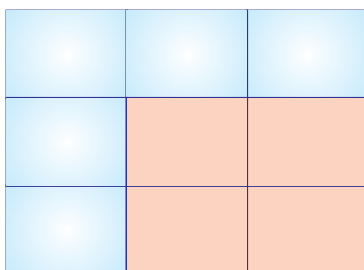
$25 \times 31 =$



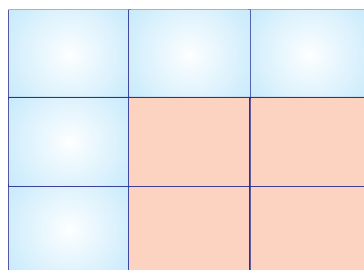
$55 \times 12 =$



$52 \times 32 =$



$35 \times 23 =$





3-digits Multiplication



If you have 1 currency note of ₹100 then how much money do you have?

$$1 \times 100 = 100$$



If you have 2 currency notes of ₹100 then how much money do you have?

$$2 \times 100 = 200$$

Let's do



$$2 \times 100 = \square$$

$$3 \times 100 = \square$$

$$8 \times 100 = \square$$

$$5 \times 100 = \square$$

$$2 \times 200 = \square$$

$$2 \times 300 = \square$$

$$7 \times 100 = \square$$

$$3 \times 200 = \square$$

$$3 \times 300 = \square$$

$$9 \times 100 = \square$$

$$5 \times 200 = \square$$

$$2 \times 400 = \square$$



Multiplication of 3-digits number with 1-digit number

We can split the 3-digits numbers as done in earlier question.

For example 121×4

$$121 = 100 + 20 + 1$$

$\times$	100	20	1
4	400	80	4

$$= 400$$

$$80$$

$$+ \begin{array}{r} 4 \\ \hline 484 \end{array}$$

$$121 \times 4 = 484$$

- Answer of multiplication is called product.

Let's do

$$114 \times 2$$

$\times$	100	10	4
2			

=

$$221 \times 3$$

$\times$			

=

$$122 \times 3$$

$\times$			

=

$$212 \times 4$$

$\times$			

=

$$214 \times 2$$

$\times$			

=

$$133 \times 3$$

$\times$			

=



Lattice Algorithm method of multiplication.

$$58 \times 3$$

Step 1 : $8 \times 3 =$

2
4

 Write like this

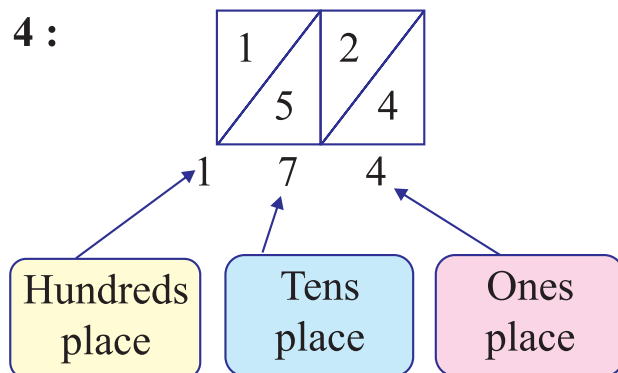
Step 2 : $5 \times 3 =$

1
5

 Write like this

Step 3. Write ones place digit = 4, at tens place write one digit of the sum of diagonal digits (sky colour) = $5 + 2 = 7$ Write diagonal digit (yellow colour) = 1 at hundreds place. Now we get the digits 1, 7, 4 which form the number 174 which is the result of multiplication of 58 and 3.

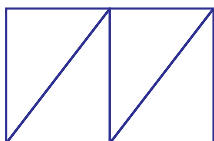
Step 4 :



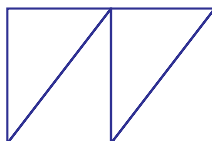
Let's do

$$58 \times 3 = 174$$

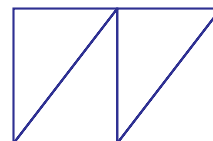
$$24 \times 2$$



$$33 \times 3$$



$$43 \times 5$$



Practical Activity

Objective : To develop the concept of multiplication

Material : Sticks

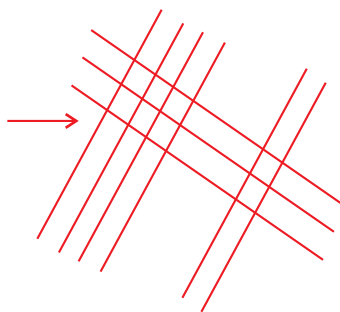
Procedue : 42×3

- (i) Arrange the sticks according to the given number at tens and ones place (The numbers to be multiply)

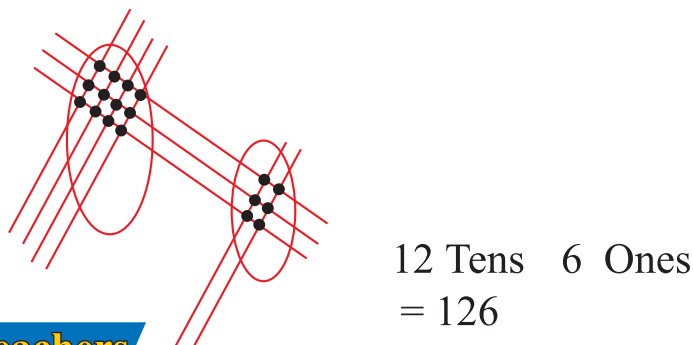
Example $42 = 4 \text{ Tens } 2 \text{ Ones}$



- (ii) Now put the sticks according to multiplier as shown in example. Then put 3 sticks on already kept sticks as shown in first step.



- (ii) Now count the intersecting points as tens and ones.



Tip for teachers

The teachers can develop the concept of multiplication by changing the numbers.

Worksheet

1. Match the columns :-

4×3	18
3×6	35
5×7	90
9×10	12

2. Encircle the correct answer :-

(i) $12 \times 3 =$ 39 36 63 (ii) $10 \times 5 =$ 60 40 50

3. Fill in the blanks :-

(i) $5 + 5 + 5 + 5 + 5 =$ _____ $\times$ _____

(ii) $10 + 10 + 10 + 10 + 10 + 10 + 10 =$ _____ $\times$ _____

4. Fill in the blanks :-

(i) $0 \times 5 =$

(ii) $4 \times 1 =$

(iii) $3 \times 2 =$ $\times$

5. Find the product :-

(i) 25×3

(ii) 42×14

(iii) 70×10

6. Fill in the blanks :-

(i) $7 \times$ _____ $= 21$

(ii) $4 \times$ _____ $= 16$

(iii) _____ $\times 5 = 20$

7. Write multiplication table of 4.

Points to remember

- We get the same number on multiplying number with '1'.
- We get '0' as answer on multiplying any number with '0'.
- The answer obtained after multiplication is called product.

We have learnt

Multiplication

Step counting of 2, 3, 4, 5

Multiplication table
of 2, 3, 4, 5 and 10

To change a numbers in the
form of multiplication after
repeated addition

Properties of multiplication

Multiplication of 1-digit,
2-digits and 3-digits numbers

Objectives

- Explaining the concept of division with by equal group distribution.
- Explain, division with the help of repeated subtraction.
- Relationship between multiplication and division.
- Explain division methods with group formation and with multiplication tables.
- Mental arithmetic addition and subtractions of one digit and two digits numbers orally.
- Doubling two digits numbers orally.

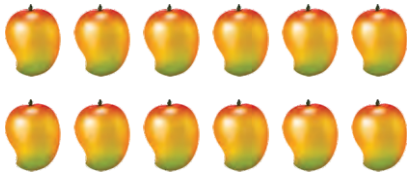
Do you remember?



- (i) There are.....ladoos in plates.
- (ii) Ladoos are distributed in.....groups.
- (iii) There are.....ladoos in each group.



Let's divide 12 mangoes among 3 children.

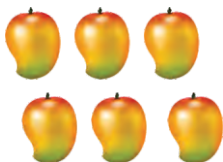


Out of 12 mangoes, give one mango to each child. We are left with 9 mangoes.



$$12 - 3 = 9$$

Out of 9 mangoes, give one mango to each child again. We are left with 6 mangoes.



$$9 - 3 = 6$$

Out of 6 mangoes, give one mango to each child again. We are left with 3 mangoes.



$$6 - 3 = 3$$

Remaining three mangoes divided into three children. We are left with 0 mango.



$$3 - 3 = 0$$

Each child got 4 mangoes.

Thus $12 \div 3 = 4$



Division means subtracting same number repeatedly.



Let's divide 20 balloons among 5 children.



Out of 20 balloons, we give one balloon to each of the 5 children. We are left with 15 balloons.



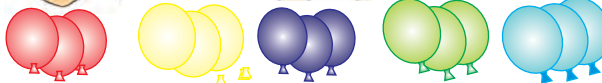
$$20 - 5 = 15$$

Out of 15 balloons, we give one balloon to each of the 5 children. We are left with 10 balloons.



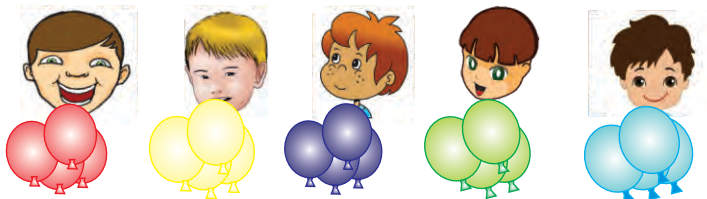
$$15 - 5 = 10$$

Out of 10 balloons, we give one balloon to each of the 5 children. We are left with 5 balloons.



$$10 - 5 = 5$$

Out of 5 balloons, we give one balloon to each of the 5 children. We are left with 0 balloons.



$$5 - 5 = 0$$

Each child got 4 balloons, Thus $20 \div 5 = 4$



Let's do

Division by subtraction method

$20 \div 4$

First time

$$\begin{array}{r} 20 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ - 4 \\ \hline \end{array}$$

Second time

$$\begin{array}{r} 12 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ - 4 \\ \hline \end{array}$$

Third time

$$\begin{array}{r} 4 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ - 4 \\ \hline \end{array}$$

Fourth time

$$\begin{array}{r} 0 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ - 4 \\ \hline \end{array}$$

Fifth time

$$\begin{array}{r} 0 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ - 4 \\ \hline \end{array}$$

$20 \div 4 =$

5

$15 \div 5$

$18 \div 6$

$8 \div 2$



	Number of groups $8 \div 2 = \boxed{4}$
	$12 \div 4 = \boxed{3}$
	$12 \div 6 = \boxed{2}$



	$9 \div 3 = \boxed{}$
	$12 \div 4 = \boxed{}$
	$4 \div 2 = \boxed{}$
	$8 \div 4 = \boxed{}$
	$14 \div 2 = \boxed{}$
	$15 \div 5 = \boxed{}$

Divide equally

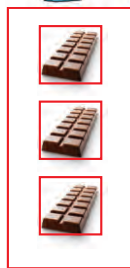


Today is my birthday.
I have invited four
of my friends.

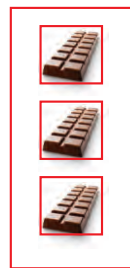
I will distribute 12
chocolates among
my friends.



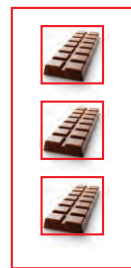
Each one will get equal
number of chocolates.



3



3



3



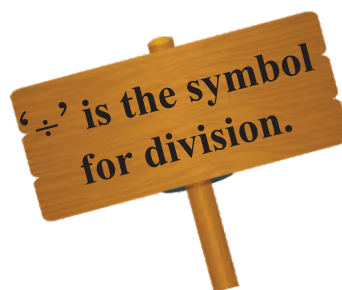
3



Each one has
got 3 chocolates.

Each got 3 chocolates.

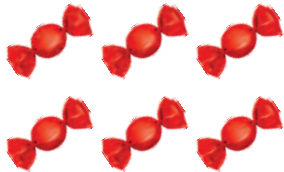
$$12 \div 4 = 3$$



$12 \div 4$ means division or dividing equally.



Divide 6 toffees among 3 children equally.



$$\boxed{6} \div \boxed{3} = \boxed{2} \text{ Toffees to each child.}$$

Place 4 flowers in 2 vases equally.



$$\boxed{4} \div \boxed{2} = \boxed{2} \text{ Flowers in each vase.}$$



Let's do

Divide 12 apples in 3 plates equally.



$$\boxed{} \div \boxed{} = \boxed{} \text{ Apples in each plate.}$$

Divide 8 ice creams among 2 children equally.



$$\boxed{} \div \boxed{} = \boxed{} \text{ Ice-creams. each child.}$$

The method of distributing things equally is called division.

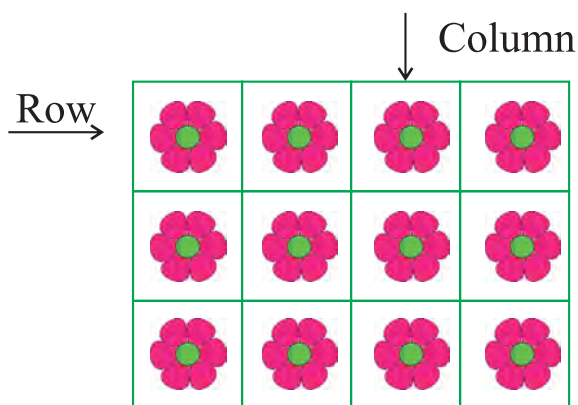
The symbol of division is ' $\div$ '



Relationship between multiplication and division.



12 flowers are arranged in rows and columns.



$$12 \div 3 = 4$$

4 flowers in each row.

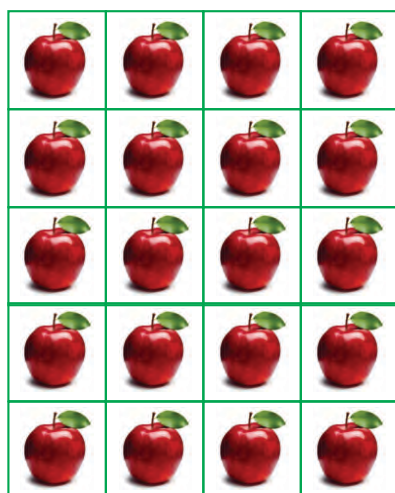
$$12 \div 4 = 3$$

3 flowers in each column.

$$3 \times 4 = 12$$

$$12 \div 3 = 4$$

$$12 \div 4 = 3$$



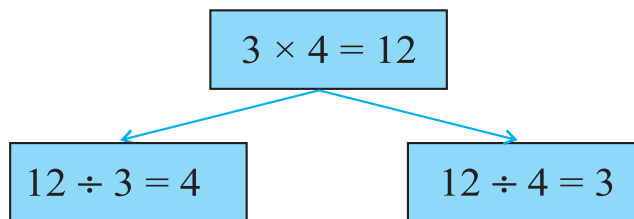
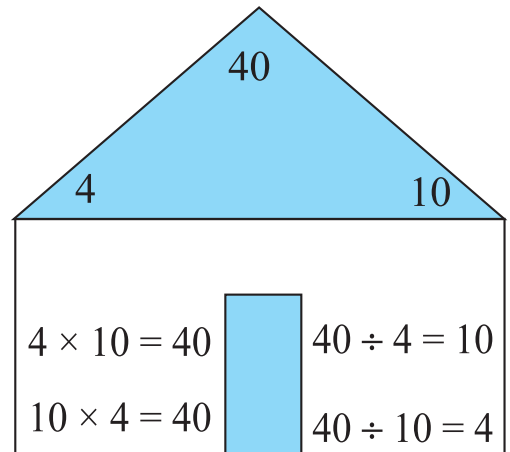
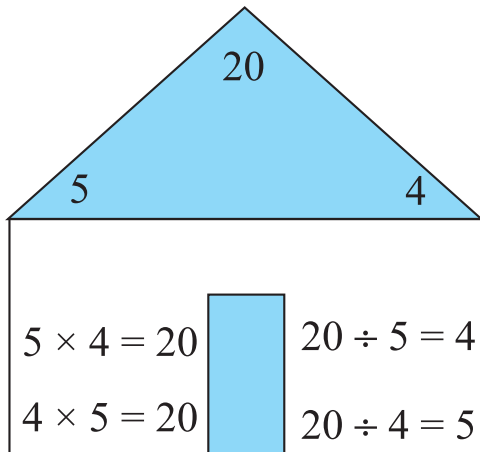
$$5 \times 4 = 20$$

$$20 \div 5 = 4$$

4 apples in each row.

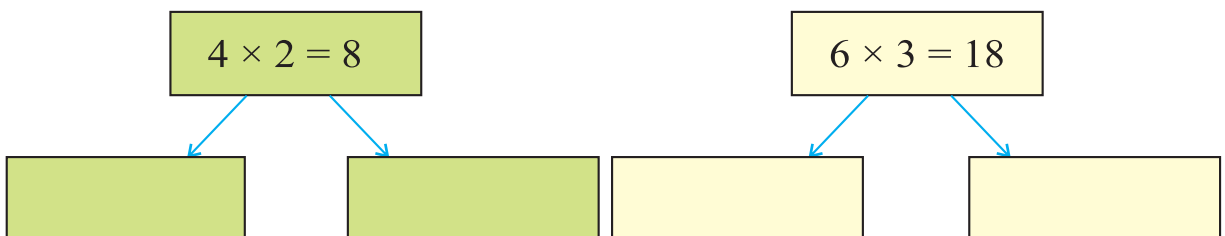
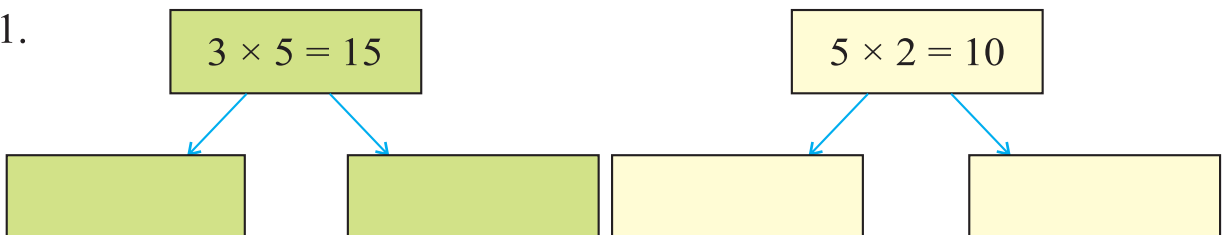
$$20 \div 4 = 5$$

5 apples in each column.

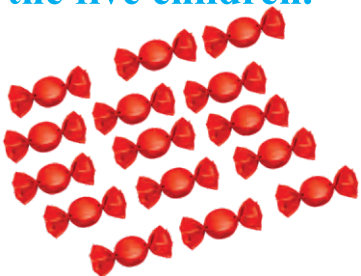


Let's do 

1.



Avneet has 15 toffees. He distributes these to fees equally among the five children.



(a) (i) each child will get.....toffees.

(ii) $15 \div 5 = \underline{\hspace{2cm}}$

(b) If he distributes these toffees among 3 children, then

(i) each child will get....toffees.

(ii) $15 \div 3 = \underline{\hspace{2cm}}$

Rasleen has 12 Balloons, he distributes these balloons equally among 3 children.



(a) (i) each child will getballoons.

(ii) $12 \div 3 = \underline{\hspace{2cm}}$

(b) If he distributes these balloons among 4 children, then

(i) each child will get _____ balloons.

(ii) $12 \div 4 = \underline{\hspace{2cm}}$



Division by using multiplication tables

- Use multiplication table of 2 and divide.

$18 \div 2 = 9$	$2 \times 9 = 18$
$8 \div 2 =$	$2 \times 4 = 8$
$12 \div 2 =$	$2 \times 6 = 12$
$16 \div 2 =$	$2 \times 8 =$
$14 \div 2 =$	$2 \times 7 =$
$10 \div 2 =$	$2 \times 5 =$
$6 \div 2 =$	$2 \times 3 =$

- Use multiplication table of 5 and divide.

$15 \div 5 =$	$5 \times 3 =$
$20 \div 5 =$	$5 \times 4 =$
$25 \div 5 =$	
$30 \div 5 =$	
$10 \div 5 =$	
$40 \div 5 =$	
$35 \div 5 =$	

- Use multiplication table of 10 and divide.

$40 \div 10 =$	$10 \times 4 =$
$50 \div 10 =$	$10 \times 5 =$
$30 \div 10 =$	
$20 \div 10 =$	
$80 \div 10 =$	
$60 \div 10 =$	

Properties of Division

1. When a Number is divided by 1, we get the same number as answer.



8 Ladoos



$$8 \div 1 = 8$$

2. When a number is divided by it self, we get 1 as the answer.



5 balloons



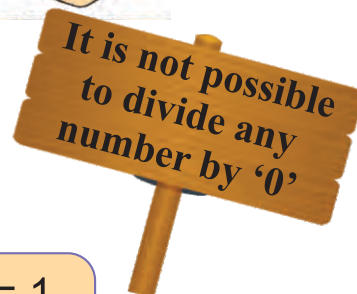
$$5 \div 5 = 1$$

3. When we divide '0' by any number, we get '0' as the answer. always.



$$0 \div 3 = 0$$

Let's do



1. Fill in the blanks.

(i) $4 \div 4 = \underline{\quad}$

(ii) $3 \div \underline{\quad} = 1$

(iii) $0 \div 5 = \underline{\quad}$

(iv) $\underline{\quad} \div 2 = 0$

(v) $2 \div 2 = \underline{\quad}$

(vi) $10 \div \underline{\quad} = 1$

Division by play way method



Today, we will learn division with the help of currency notes.

I have ₹ 16. I want to distribute it equally between two children. How many rupees will each child get?

We will use currency notes of 1,2,5 and 10 for division.

Choose any two children to demonstrate and one more child to take ₹ 16 from currency notes and tell him to distribute it in between two children.

Can you give ₹ 10 to each child ?

Can You give ₹ 5 to each child?

No Mam, It will be more than ₹ 16.

Yes Mam,
 $5 + 5 = 10$

Two children took away ₹ 5 each out of ₹ 16.

Now, we are left with ₹ 6 we cannot give 5 to each. Then give ₹ 2 to each child ($2+2=4$).

Now, we are left with ₹ 2 we can give ₹ 1 to each child. Thus, each of the child got ₹ 8.



$$16 \div 2 = 8$$

2	$\begin{array}{r} 16 \\ - 10 \\ \hline 6 \\ - 4 \\ \hline 2 \\ - 2 \\ \hline 0 \end{array}$	$\begin{array}{r} 5 \\ 2 \\ 1 \\ \hline \times \end{array}$
---	---	---

$$5 + 2 + 1 = ₹ 8$$



$$36 \div 3$$

$$\begin{array}{r} 3 \overline{) 36} \\ \underline{-30} \\ 6 \\ \underline{-6} \\ 0 \end{array} \begin{array}{l} 10 \\ 2 \end{array}$$

$$10 + 2 = 12$$

$$48 \div 2$$

$$\begin{array}{r} 2 \overline{) 48} \\ \underline{-20} \\ 28 \\ \underline{-20} \\ 8 \\ \underline{-4} \\ 4 \\ \underline{-4} \\ 0 \end{array} \begin{array}{l} 10 \\ 10 \\ 2 \\ 2 \end{array}$$

$$10 + 10 + 2 + 2 = 24$$

$$48 \div 2 = 24$$

To solve more complex sums add currency notes of ₹ 20 in
Currency notes of ₹ 1, 2, 5 and 10.

$$48 \div 2$$

$$\begin{array}{r} 2 \overline{) 48} \\ \underline{-40} \\ 8 \\ \underline{-4} \\ 4 \\ \underline{-4} \\ 0 \end{array} \begin{array}{l} 20 \\ 2 \\ 2 \end{array}$$

$$20 + 2 + 2 = 24$$

$$48 \div 2 = 24$$

$$75 \div 3$$

$$\begin{array}{r} 3 \overline{) 75} \\ \underline{-60} \\ 15 \\ \underline{-15} \\ 0 \end{array} \begin{array}{l} 20 \\ 5 \end{array}$$

$$20 + 5 = 25$$

$$75 \div 3 = 25$$

$$75 \div 3 = 25$$

Dividend Divisor Quotient



Let's do

Divide 2-digits number by 1-digit number

$$12 \div 2$$

$$18 \div 2$$

$$24 \div 3$$

$$30 \div 3$$

$$16 \div 4$$

$$28 \div 4$$

$$80 \div 10$$

$$57 \div 3$$

$$65 \div 5$$

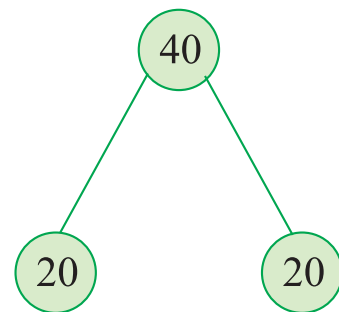
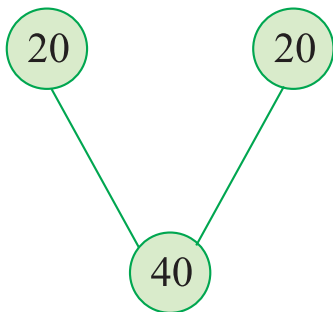
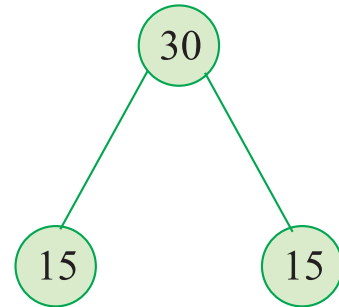
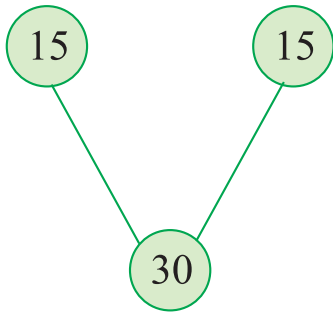
Tania has 32 toffees. She wants to distribute these toffees equally between her two friends. How many toffees will each of her friend get?

Avneet has 10 erasers. He wants to distribute these erasers equally among his 5 friends. How many erasers will each friend get?

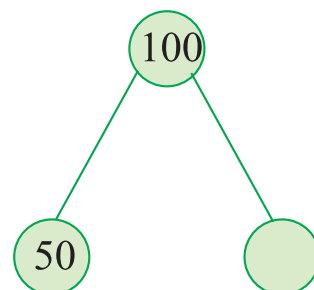
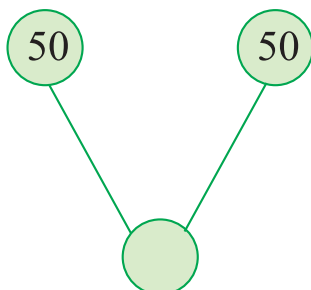
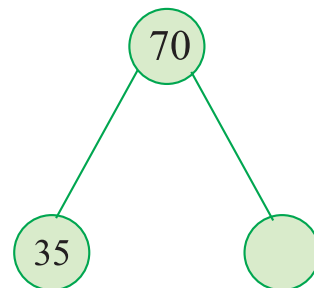
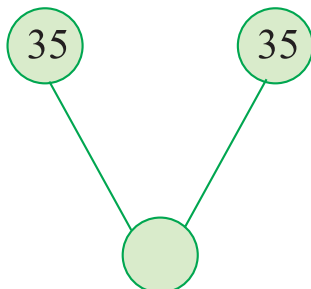
There are 20 students in a class. They are sitting equally in 4 rows. How many students are sitting in each row?



Orally double/ half in following



Let's do



Mental Exercise

- | | |
|---------------------------|--------------------|
| (i) Think of any number | 27 |
| (ii) Add 3 to it. | $27 + 3 = 30$ |
| iii) multiply it by 2 | $30 \times 2 = 60$ |
| iv) Subtract 4 from it. | $60 - 4 = 56$ |
| v) Divide it by 2 | $56 \div 2 = 28$ |
| vi) Subtract 1 out of it. | $28 - 1 = 27$ |

Answer : Number you had thought.

- | | |
|----------------------------------|---------------|
| (i) Think of any 2-digits number | 23 |
| (ii) Add 7 to it. | $23 + 7 = 30$ |
| iii) Subtract 3 from it | $30 - 3 = 27$ |
| iv) Again add 7 to it | $27 + 7 = 34$ |
| (v) Subtract 1 out of it. | $34 - 1 = 33$ |

Answer : 10 less than the result of calculations = 23

- | | |
|---|-----------------|
| i) Think of any two 1-digit numbers | 6, 7 |
| ii) Add them together | $6 + 7 = 13$ |
| iii) Subtract smaller digit from larger digit. | $7 - 6 = 1$ |
| iv) Find the difference of addition and subtraction | $13 - 1 = 12$ |
| v) Divide the answer by 2 | $12 \div 2 = 6$ |

Answer : The Smaller number you had thought

- | | |
|---|--------------------|
| i) Think of any 2-digits number | 14 |
| ii) Double it | $14 \times 2 = 28$ |
| iii) Add 14 to it. | $28 + 14 = 42$ |
| iv) Divide it by 2 | $42 \div 2 = 21$ |
| v) Subtract out of it the number you had thought. | $21 - 14 = 7$ |

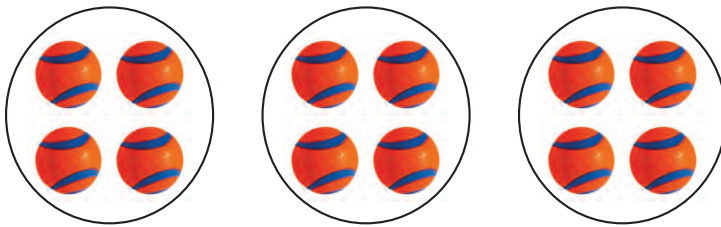
Answer : Always 7

Worksheet

1. Divide using repeated subtraction method.

- (i) $15 \div 5$ (ii) $40 \div 10$ (iii) $20 \div 4$

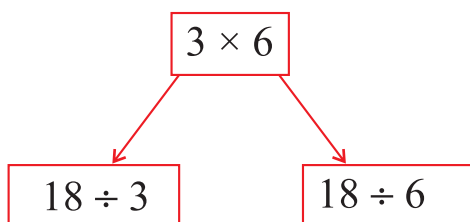
2. Fill in the blanks.



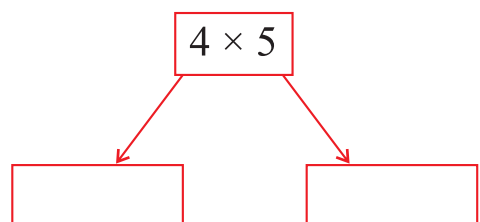
- (i) How many total balls are there?
- (ii) How many total groups are there?
- (iii) How many balls does each group has?

3. Write the division fact of the given multiplication fact.

(i)



(ii)



4. Solve :

(i) $2 \times 4 = \square$	$4 \times 2 = \square$	$8 \div 2 = \square$	$8 \div 4 = \square$
(ii) $4 \times 5 = \square$	$5 \times 4 = \square$	$20 \div 4 = \square$	$20 \div 5 = \square$
(iii) $3 \times 2 = \square$	$2 \times 3 = \square$	$6 \div 3 = \square$	$6 \div 2 = \square$

5. Fill in the blanks :

(i) $15 \div 15 = \square$

(ii) $18 \div 3 = \square$

(iii) $0 \div 20 = \square$

(iv) $32 \div \square = 1$

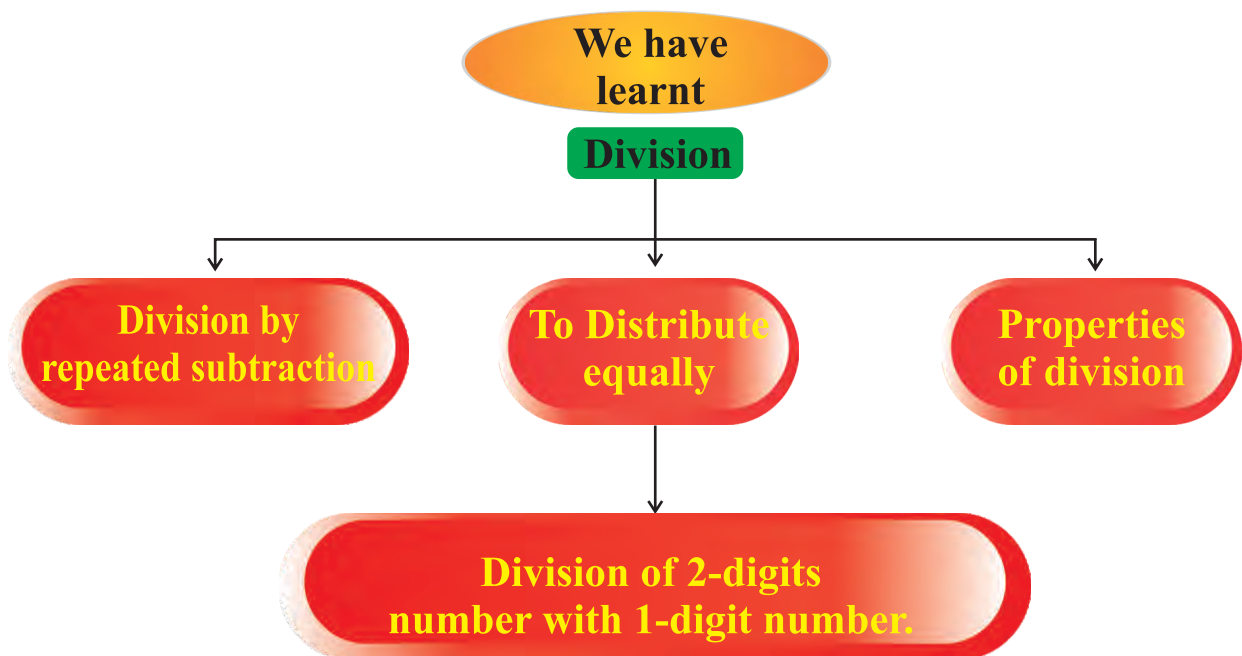
(v) $\square \div 42 = 0$

6. Divide :

(i) $48 \div 3 =$

(ii) $56 \div 4 =$

(iii) $70 \div 5 =$



Objectives

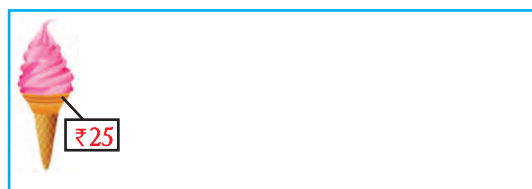
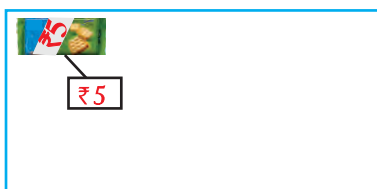
- To know about use of money in our daily life.
- Knowledge of relationship between rupee and paise.
- To Change rupee into paise.
- Addition/Subtration of money.
- Knowledge about bill and rate list.

Do you remember?

1. Add the amount of coins :

(a)				
(b)				

2. Convert the given amount into coins.



Introduction

- We need money to buy things from the market.
- In Indian currency money is expressed in rupees and paise.

These are the pictures of currency coins and notes.



You should know that symbol '₹' is used to write rupees.





These coins are used as paise.



Let's learn about the relationship between rupees and paise.



10 coins of 10 paise, 4 coins of 25 paise, 2 coins of 50 paise, they all are equal to ₹ 1.



₹ 1
= 100 paise



Now all the students will prepare currency notes and coins

Activity-1

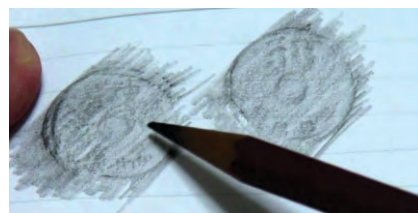


Let us make the currency notes and learn more about money.

Objective : To make the students aware of currency notes of our country and enable them to buy-sell the objects in daily life.

Procedure :

1. To give them paper of different sizes and also give them coin of ₹1, ₹2, ₹5,.
2. Now put these coins under the given paper and tell the children to do the shading of the coin shape with help of pencil till the coins get imprinted on the paper.
3. Then cut the paper according to the shape of coin.
4. After making paper coins, children will exchange them with their friends and play.



5. Similarly, they will prepare new currency notes with the given rectangular paper



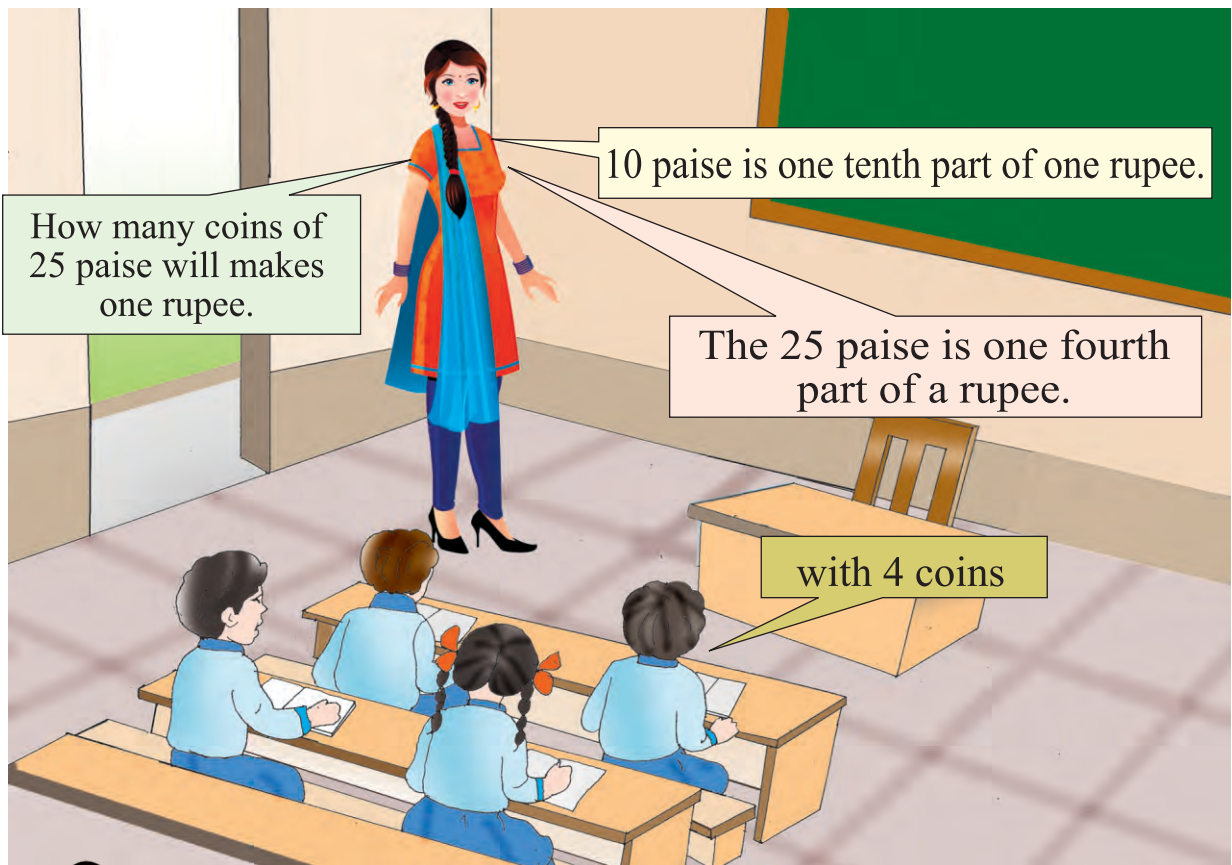
Activity



The teacher will tell them to put all their coins of 10 paise, 20 paise, 25 paise and 50 paise, that makes one rupee.



- 10 coins of 10 paise
- 50 coins of 20 paise
- 4 coins of 25 paise
- 2 coins of 50 paise



How many coins of 50 paise will make one rupee ?

50 paise is half part of one rupee

with 2 coins

100 paise = ₹ 1





Let's do

1. Mark $>$ or $<$ between two coins given below :

(a)



(b)



(c)



(d)



Conversion of rupees into paise



Dear children ! you already know that ₹ 1 = 100 paise. Can you tell, how many paise are there in ₹ 2 ?

200 paise

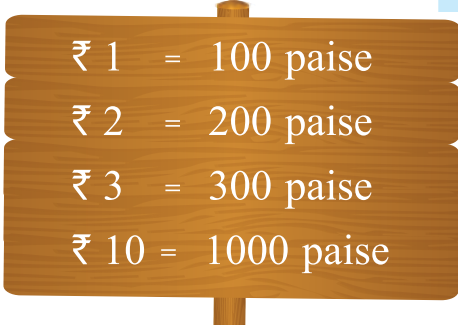


How many paise are there in ₹ 3 ?

300 paise



We will write like this



₹ 1 = 100 paise
₹ 2 = 200 paise
₹ 3 = 300 paise
₹ 10 = 1000 paise



10 paise and 25 paise coins are not used anymore.

We can write rupees/paise in two different ways.



Can you prepare coins?

Rupees	paise	Long Form	Short Form
		Rupees 10 and 50 paise	₹10.50
	   	Rupees 25 and 75 paise	₹25.75
		Rupees 100 and 50 paise	₹100.50



₹ 4



₹ 5



Let's do

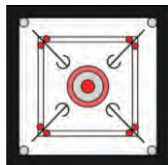
₹ 12

₹ 17

₹ 18

Activity

Kuljeet, Navneet and Baljeet went to the market to buy birthday gifts for his friend. They bought some toys from the toys shop. How many rupees did they give to the shopkeeper ? Calculate from the activity given below :-

Kuljeet	Navneet	Baljeet
Kuljeet bought a toy car 	Navneet bought geomatry box 	Baljeet bought a carrom board 
		

How many Rupees did kuljeet give to the shopkeeper ? ₹

How many Rupees did Navneet give to the shopkeeper ? ₹

How many Rupees did Baljeet give to the shopkeeper ? ₹

While adding amount of money we should always count the bigger amount first and lesser amount in the end.





To make currency notes or coins for the given article :

	or	



Make currency notes or coins for the given article :

How much money left with you ?

Harjot had money



Harjot spent money = ₹ 10

Money left =

Prabhjot had money



Prabhjot spent money = ₹ 10

Money left =

Sandeep had money



Harjot spent money = ₹ 67

Money left =

Surjit had money



Surjit spent money = ₹ 52

Money left =

Manjeet had money



Manjeet spent = ₹ 110

Money left =

Simranjeet had money



Simranjeet spent money = ₹ 500

Money left =

Activity

In a zoo, there are different amount of fare for different rides



Camel ride
(₹30)



Elephant ride
(₹20)



Swing ride
(₹25)



Boat ride (₹40)



Horse ride (₹35)

Help Chetan to pay the fare if he rides in the following manner

(a)



$$₹ \square + ₹ \square = ₹ \square$$

(b)



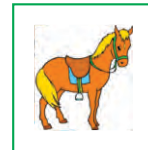
$$₹ \square + ₹ \square = ₹ \square$$

(c)



$$₹ \square + ₹ \square = ₹ \square$$

(d)

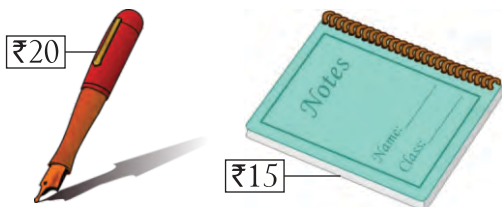


$$₹ \square + ₹ \square = ₹ \square$$



Adding of money

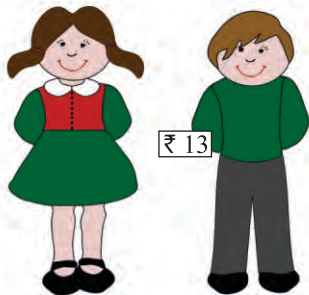
Sonu bought a pen for ₹ 20 and a copy for ₹15. How much money did he spend ?



$$\begin{array}{rcl} \text{Cost of one pen} & = & ₹ 20 \\ \text{Cost of one copy} & = & ₹ 15 \\ \text{Total cost} & = & ₹ 20 \\ & + & ₹ 15 \\ \hline & & ₹ 35 \end{array}$$

Thus, sonu spent total ₹35.

Anju had ₹ 85. Her brother gave her ₹ 13. How much money does she have now?



$$\begin{array}{rcl} \text{Anju had money} & = & ₹ 85 \\ \text{Her brother gave her} & = & ₹ 13 \\ \text{Anju has total money} & = & ₹ 85 \\ & + & ₹ 13 \\ \hline & & ₹ 98 \end{array}$$

Thus, Anju has total money = ₹98

Let's do

1. Kamal bought balloons for ₹ 40. Lovepreet bought balloons for ₹33. How much amount did they spend together to buy these balloons?



1. Honey had ₹36 in his money bank, He put ₹23 more into it, How much amount is in Honey's money bank now ?

Subtraction of money



Surjeet had ₹ 50. He bought a notebook for ₹ 20. How much money is left with him ?

$$\begin{array}{rcl} \text{Surjeet had money} & = & ₹ 50 \\ \text{Cost of copy} & = & ₹ 20 \\ \text{Money left with surjeet} & = & ₹ 50 \\ & - & ₹ 20 \\ \hline & & ₹ 30 \end{array}$$

Thus, ₹30 left with surjeet

Avneet had ₹ 98. She gave ₹46 to her brother. How much money does Avneet have now ?

$$\begin{array}{rcl} \text{Avneet had money} & = & ₹ 98 \\ \text{Money given by Avneet to her brother} & = & ₹ 46 \\ \text{Money left with Avneet} & = & ₹ 98 \\ & - & ₹ 46 \\ \hline & & ₹ 52 \end{array}$$

Thus, ₹52 left with Avneet



Let's do

1. Meena had ₹85. She bought a geometry box for ₹35. How much money is left with her ?
2. Jagveer had ₹ 77. He bought a chocolate for ₹15. How much money is left with him ?
3. Nazia had ₹ 66. She bought a pen for ₹ 12. How much money does she have now ?

Bill amount of cash memo



Seerat went to a restaurant with her family

We ordered one juice, two cups of tea, two samosas and a kulcha



How much amount we have to pay?



I enjoyed reading the menu and ordered so many things



Menu

Tea	₹ 10.00
Juice	₹ 30.00
Lassi	₹ 25.00
Milk	₹ 30.00
Samosas	₹ 15.00
Bread pakoda	₹ 15.00
Kulcha	₹ 25.00
Tikki	₹ 22.00
Dahi-Bhalla	₹ 35.00

Let's see how much she paid the bill?

Let's do

Date :		Bill		Table no.7			
S. No.	Particular items	Quantity	Rate	Table cost	₹	p.	
1.	Juice	1	30	₹ 30.00 × 1	30	00	
2.	Tea	2	10	₹ 10.00 × 2	20	00	
3.	Samosa	2	15	₹ 15.00 × 2	30	00	
4.	Kulcha	1	25	₹ 25.00 × 1	25	00	
				Total	₹ 105	00	

Date :		Bill		Table no.10			
S. No.	Particular items	Quantity	Rate	Table cost	₹	p.	
1.	Samosa	1		₹ 15.00 × 1			
2.	Tikki	1		₹ 22.00 × 1			
3.	Juice	2		₹ 30.00 × 2			
4.	Bread Pakoda	1		₹ 15.00 × 2			
				Total = ₹			

The cost of each item = cost price of one item × its quantity

Worksheet

1. Convert rupees into paise

- a) ₹ 9 = b) ₹ 6 =
c) ₹ 2 = d) ₹ 8 =

2. Add

$$\begin{array}{r} ₹ 6.50 \\ + ₹ 7.00 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} ₹ 9.50 \\ + ₹ 14.75 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} ₹ 23.50 \\ + ₹ 26.50 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} ₹ 19.50 \\ + ₹ 9.25 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} ₹ 40.05 \\ + ₹ 18.30 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} ₹ 55.50 \\ + ₹ 20.45 \\ \hline \\ \hline \end{array}$$

3. Subtract

$$\begin{array}{r} ₹ 55.60 \\ - ₹ 25.50 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} ₹ 75.50 \\ - ₹ 25.50 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} ₹ 43.65 \\ - ₹ 20.60 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} ₹ 55.75 \\ - ₹ 23.10 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} ₹ 64.65 \\ - ₹ 27.30 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} ₹ 73.80 \\ - ₹ 52.10 \\ \hline \\ \hline \end{array}$$

4. Count and write

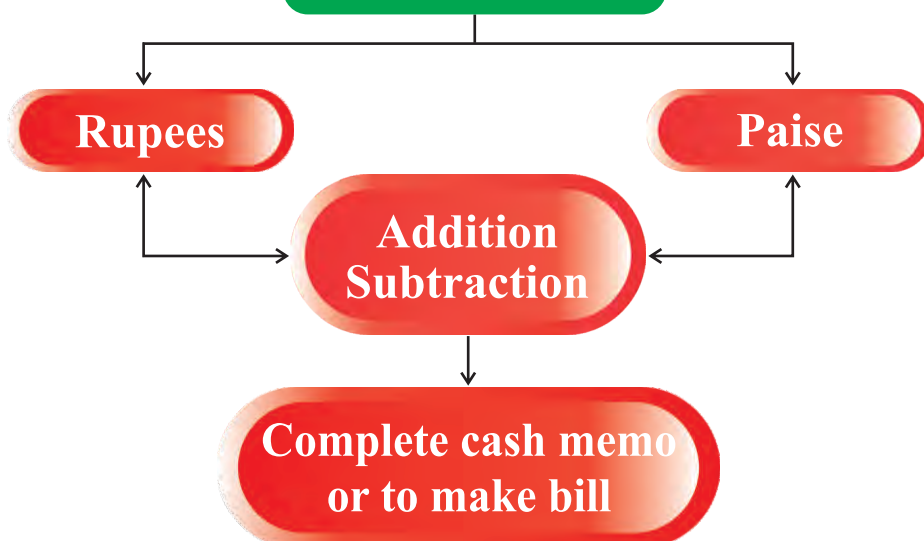
				₹
				₹

Things be remember

- In ₹ 1 there are 2 coins of 50 paise.
- In ₹ 1 there are 4 coins of 25 paise.
- In ₹ 1 there are 5 coins of 20 paise.
- In ₹ 1 there are 10 coins of 10 paise.

We have learnt

Money (Currency) Introduction



Objectives

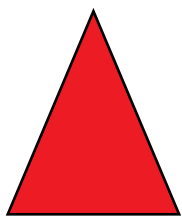
- The students should learn about shapes, with the help of paper cutting or paper pasting.
- To Identify 2-D shapes.
- To draw different shapes with linear, curved lines.
- Form shapes with help of pieces of tangram.
- To make special tiling patterns with tiles of special types.
- To learn about the map of an area.
- To make 2-D and 3-D shapes.

Three sides-say triangle,
square, rectangle have four.
circle has no side ,
even it is oval.



Do you remember?

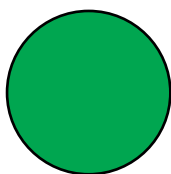
1. A Jaker is given below. Colour it according to given guidelines and count the figures.



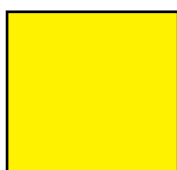
Triangle



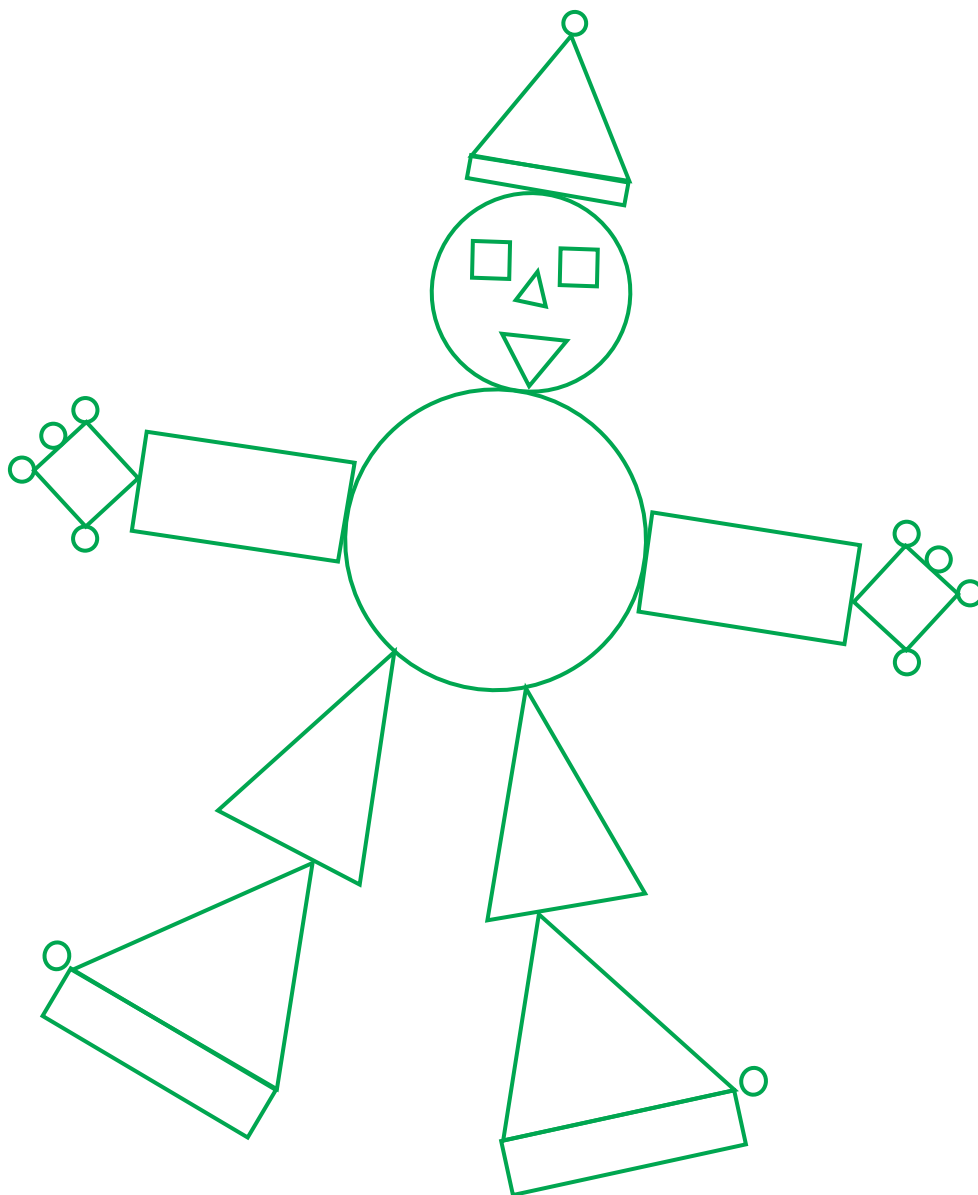
Rectangle



Circle



Square



See the picture and write

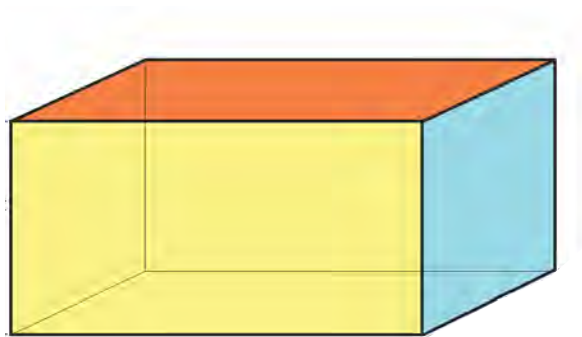
(1) Number of triangles =

(3) Number of rectangles =

(3) Number of squares =

(4) Number of circles =

2. Count and write faces, vertices and edges of the figure given below :



Faces =
Vertices =
Edges =

3. Name the shapes of different figures :

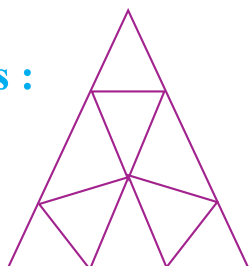








4. Count the triangles :



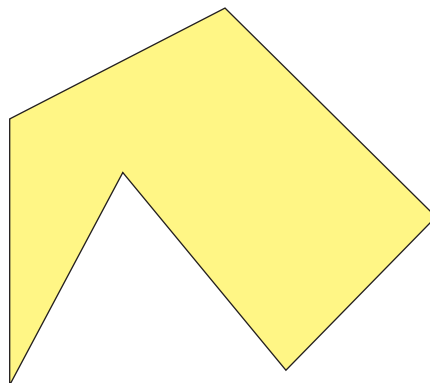
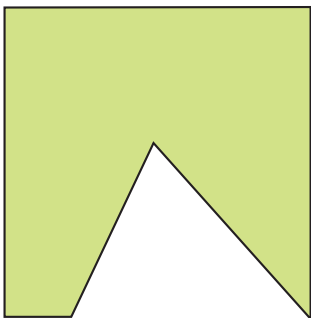
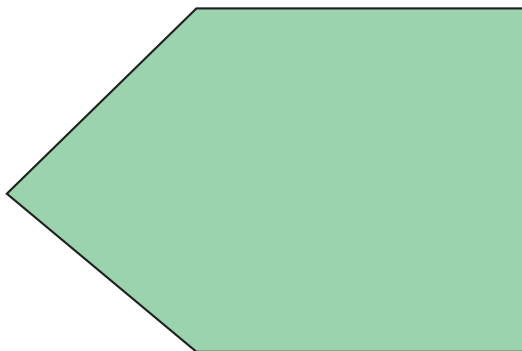
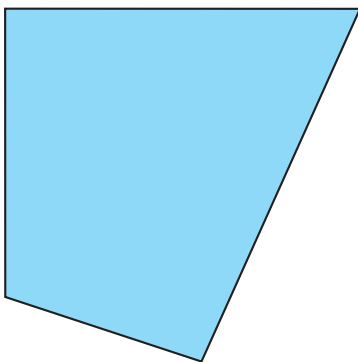


In previous class, we have learnt about triangle, rectangle, square and circle. In this class, we will learn more about these shapes with paper cutting activities and will try to understand more about these shapes.

Activity

On entering the class the teacher will tell the students that today, we will play a game of making different shapes of paper.

Cut the largest possible rectangle with the help of papers given below.



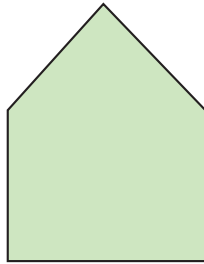
Tips for teacher :

Ask the students to make different shapes with the help of coloured paper.

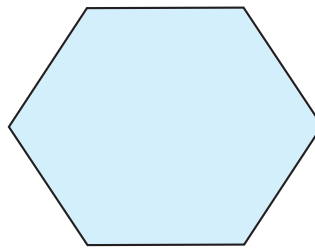
Some more 2-D shapes



We know about circle, square, triangle and rectangle. Can we make any shape by using four or more lines ?

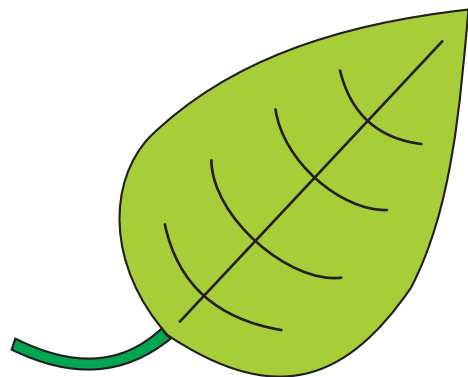
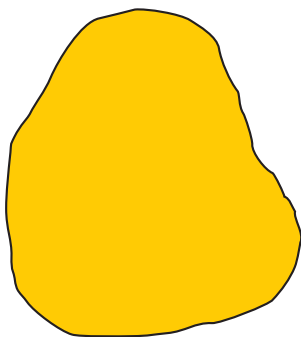


Pentagon



Hexagon

There are also 2-D shapes like triangle, square and rectangle. Besides this, we have some more figures which have no fixed shape.

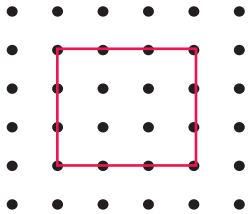


Tips for teacher :

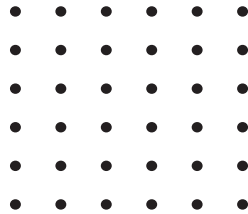
The teacher will draw the shapes on the blackboard having 5 sides and 6 sides.

Let's do

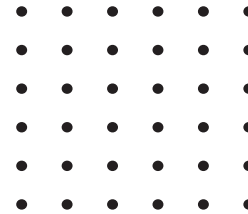
1. Form shapes by joining the dots of the dot grid given below :



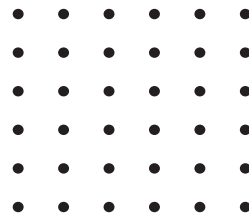
Square



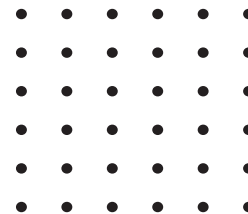
Pentagon



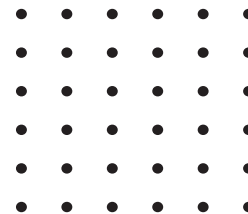
Triangle



Hexagon

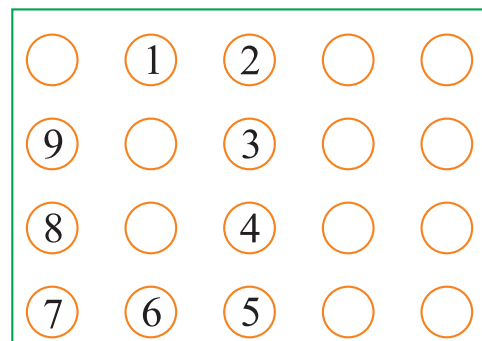
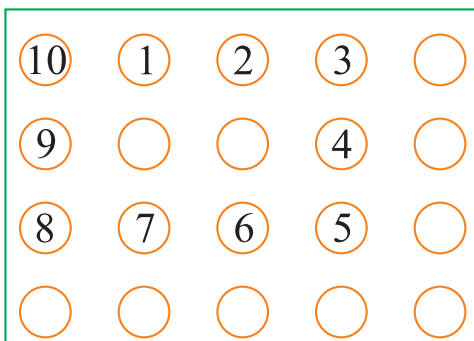
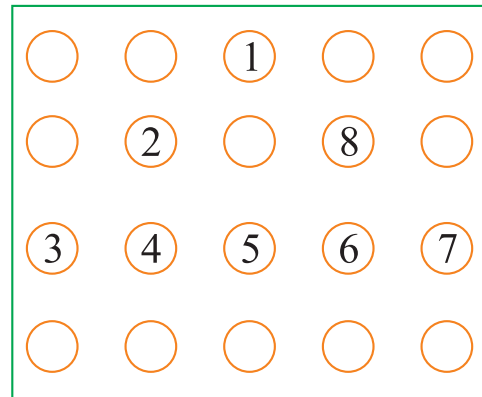
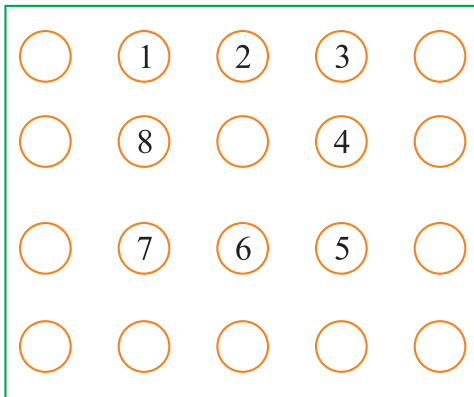


Rectangle



Shape of your choice

2. Join the counting and make the shape :

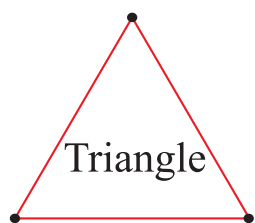




Identify 2-D shapes according to their properties :

We have already learnt about different 2-D shapes. These shapes have their own properties and characteristic. Now we will learn about their properties.

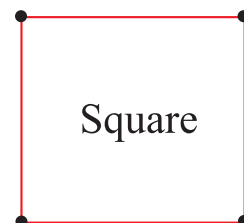
We know that each 2-D shape has sides and vertices. We can identify them from these sides and vertices. For example triangles have three sides and three vertices. Similarly rectangles and squares have four sides and four vertices.



Three sides
Three vertices

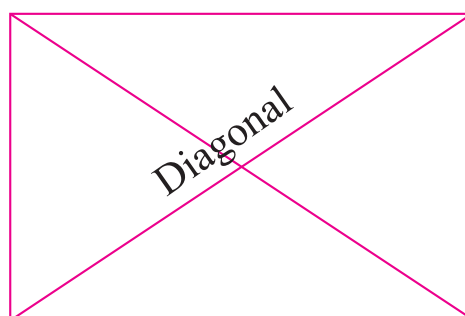
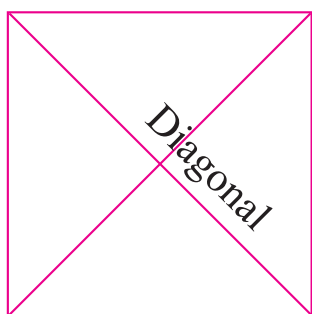


Four sides
Four vertices



Four sides
Four vertices

Now, we will know one more characteristic of the square and the rectangle. That is diagonal. If we join the opposite vertices of rectangle or square then we get the diagonal.



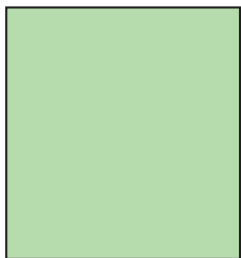
Each rectangle and square have two diagonals. But a circle and a triangle has no diagonal at all.



Let's do

Write the sides and vertices of the following 2-D shapes :

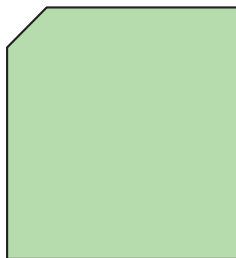
(a)



Sides =

Vertices =

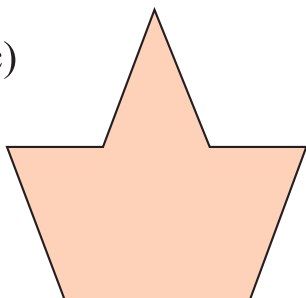
(b)



Sides =

Vertices =

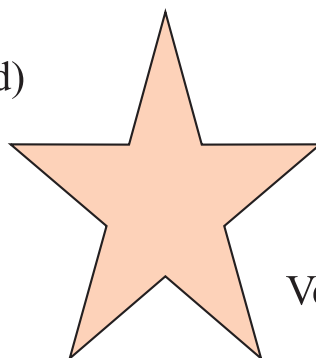
(c)



Sides =

Vertices =

(d)



Sides =

Vertices =

Draw the diagonals in the following figures :

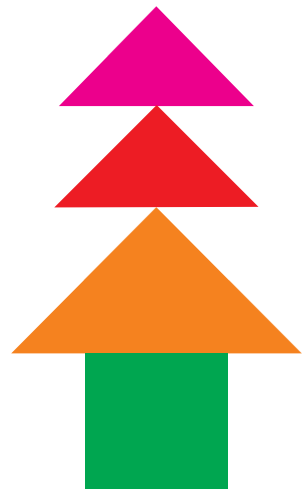
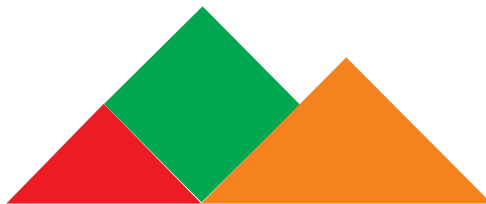
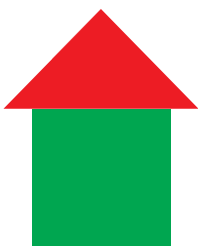
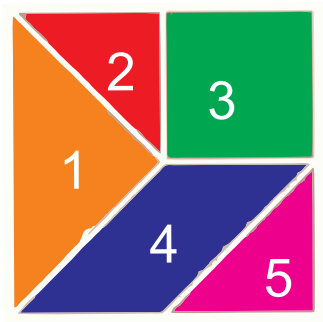




Make shapes with Tangram

We can make many shapes with the help of different pieces of tangram. Today, we will make shapes with the help of tangram of 5 pieces and 7 pieces.

Tangram of 5 pieces : The square made from 5 pieces is called a tangram of 5 pieces. Draw the following shapes by using the tangram of 5 pieces shown in diagram.



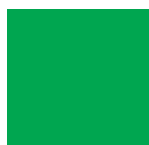
Tips for teacher :

To make tangram of chart on cardboard.



Let's do

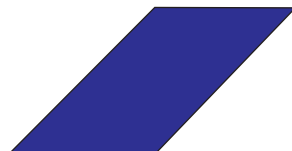
1. How many triangles are there in your tangram ?
2. Make the following shapes by using pieces of tangram.



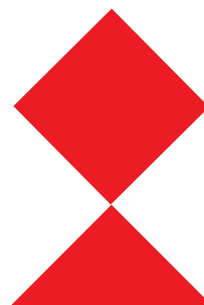
(1)



(2)



(3)



(4)

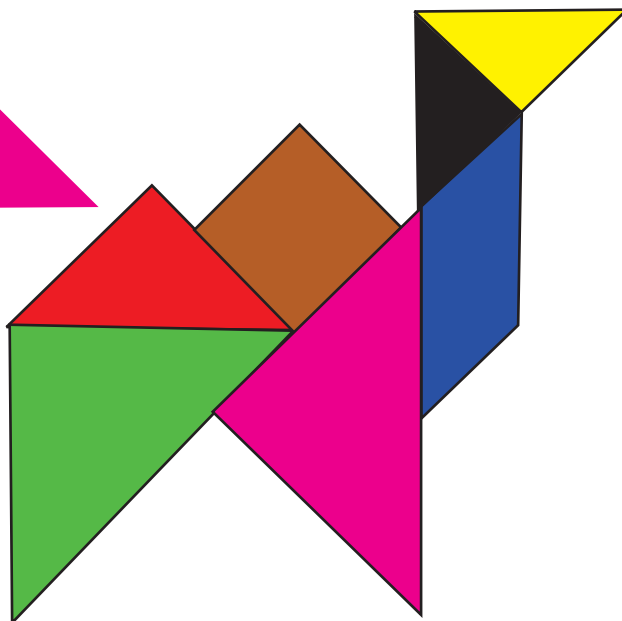
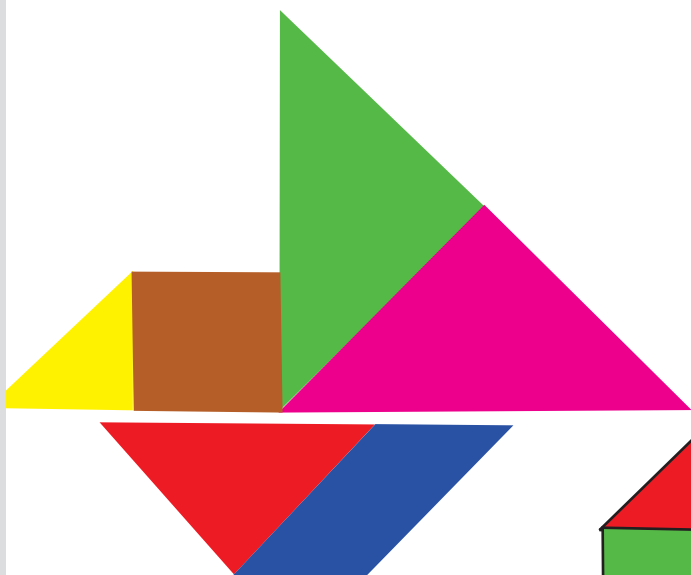
3. Try to know that which edge is equal in piece number 2 and 4.



Tangram of 7 pieces

The square made from 7 pieces is called a tangram of 7 pieces. Draw the following shapes by using the tangram of 7 pieces shown in the diagram.





Let's do

(a) Draw the following shape by using only triangles.



(b) Draw the following figure by using piece number 1, 2, 3 and 5.



(c) Draw the following figure by using only two triangles.



(d) Draw the following figure by using piece number 5 and 7.



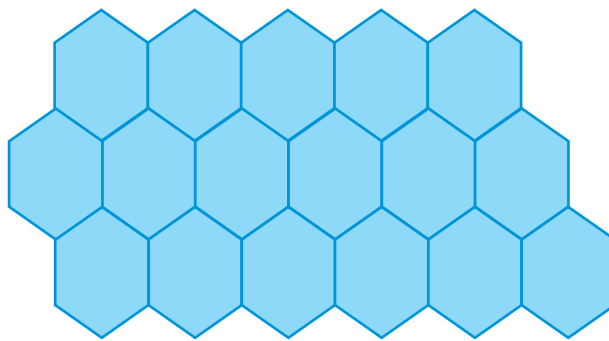


Make shapes with the special type of tiles

You must have seen the floor of your house. There are different design made with different tiles. For example look at this tile :

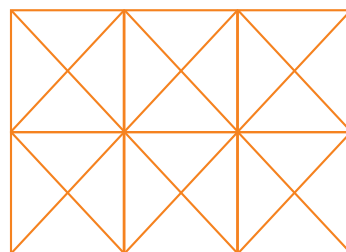
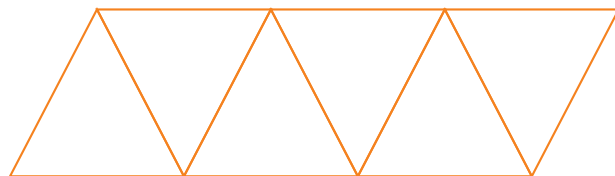
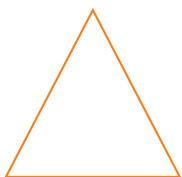


These tiles cover the floor completely without any gap

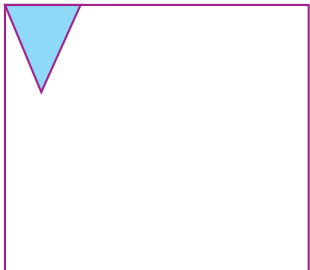
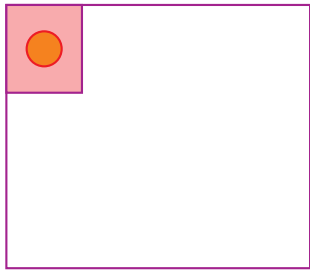


Let's do

1. Here, we have two tiles. There are two designs in front of them. Match the design with tile from which it was made.



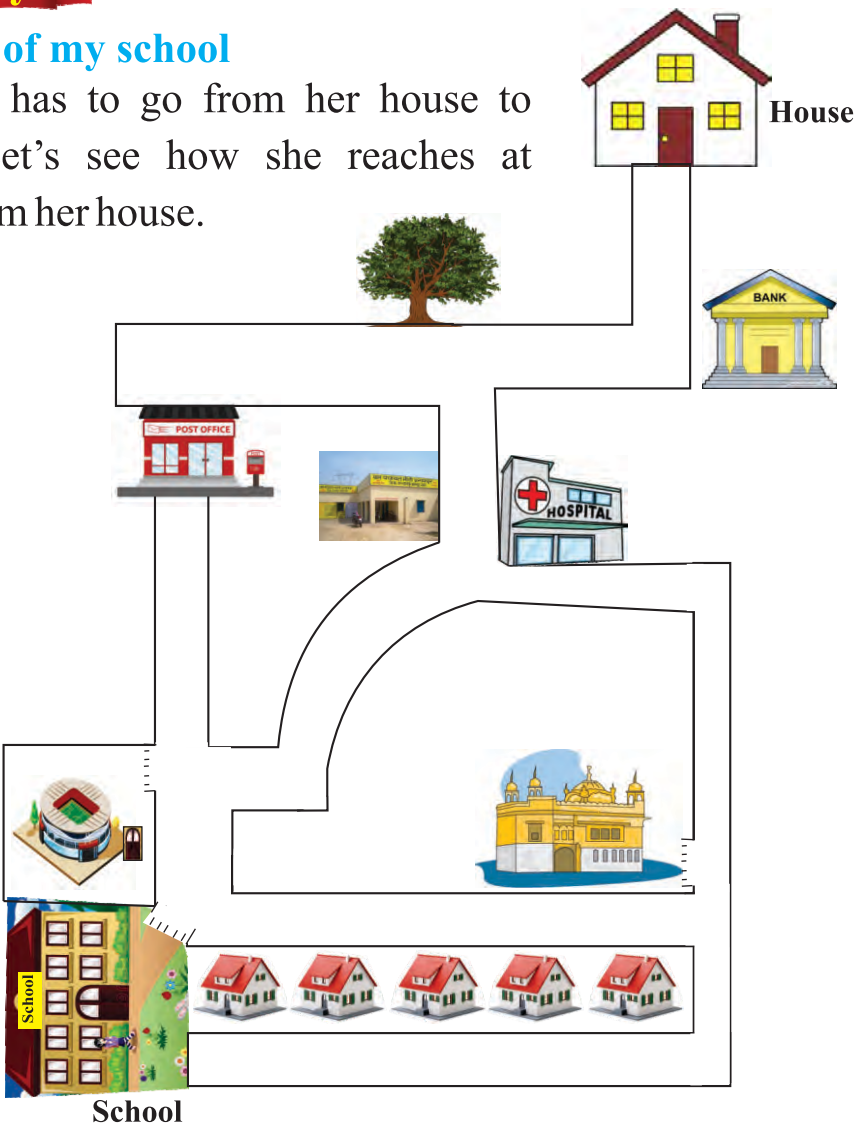
2. Cover the following area with shown tiles and colour them.



Activity

The path of my school

Manpreet has to go from her house to school. Let's see how she reaches at school from her house.



1. Manpreet starts off from her house.
2. She will go straight from her house, there is bank at left hand side.
3. From bank she turns right.
4. She goes straight and there is an old banyan tree.
5. If she goes straight the road is closed.
6. She turns to the left to go to school.
7. Then she turns to the left and walks straight. She walks along the curved road in front of Panchayat Ghar.
8. She turns right there is stadium gate.
9. She does not go towards stadium gate, she turns left.
10. Finally she sees her school gate.
11. Cover the road with tiles from Manpreet's house to her school.



Let's do

- Make a map to go the Gurudwara from your house.
- Does it take longer to reach Gurudwara than to the school.
- Is Manpreet's school farther from the Gurudwara ?
- List those places that comes between Manpreet's school and Gurudwara.

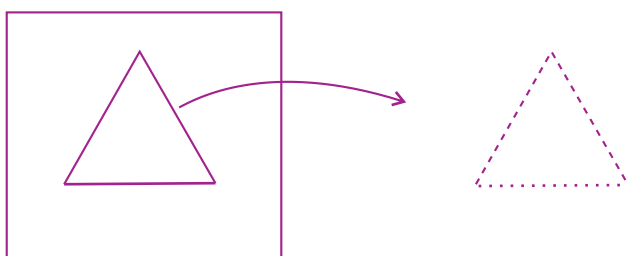
Making 3-dimensional shapes

We have already learnt about 3-dimensional shapes in previous class. We also know about cube, cuboid, cone, cylinder and sphere. We also know about faces, vertices and edges of the solid 3-dimensional shapes. Now we will learn how to make 3-dimensional shapes by using 2-dimensional shapes.

Activity

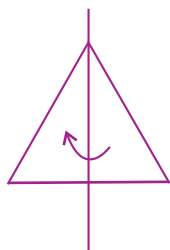
Making Cone from a triangle

The teacher will cut the triangle from a paper.



Piece of paper

The teacher will rotate it on its vertices.



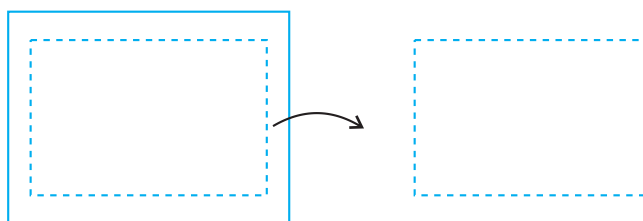
Thus, we get a shape of cone.



Activity

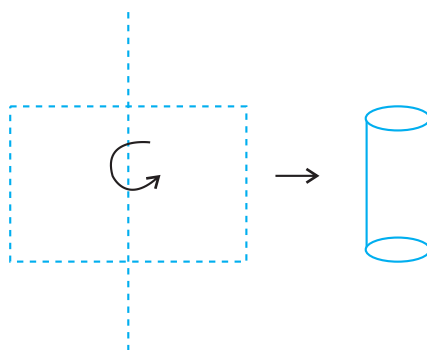
Making a cylinder from a rectangle

The teacher will cut a rectangular shape from a paper.



Piece of paper

The teacher will rotate it from the centre.

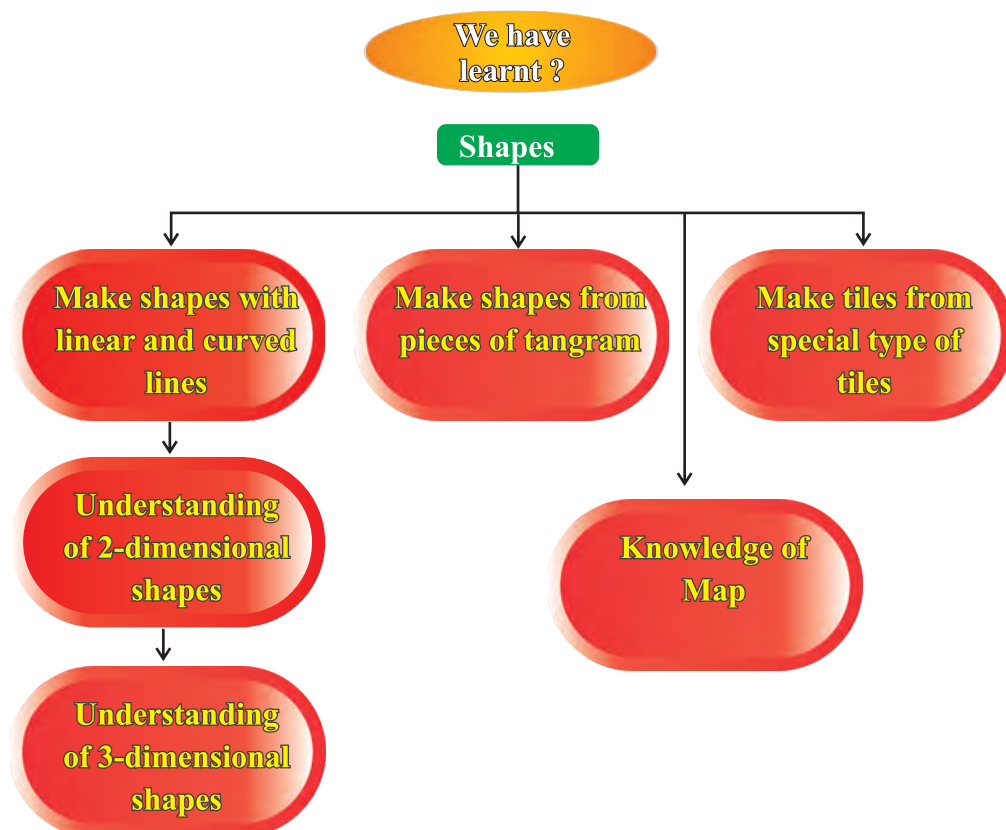


Thus, formed shape is  called cylinder.



Tips for teacher :

The teacher will make more 3-dimensional shapes like cube, cuboid with paper activity method.



Objectives

- Identify the same shape, number patterns and develop the patterns further.
- Identify the even and odd numbers with the help of patterns and add them.
- Recognise the patterns of numbers from daily life and help to develop patterns by using multiplication and division.
- Learn to make secret messages which will help children in pattern recognition.

Do you remember ?

See carefully and fill in the blanks :

3	6	9					
---	---	---	--	--	--	--	--

8	18	28					
---	----	----	--	--	--	--	--

AB	CD	EF					
----	----	----	--	--	--	--	--



Pictures of patterns

Introduction

Study of patterns helps students to achieve results with simplicity and pre-assumption. Understanding of patterns those help the students to develop the skill of problem solving.



I have drawn some picture patterns, a rule has been followed in these patterns.



Look, In this pattern two books have been placed after placing a pencil.



In this pattern a bucket has been placed after placing a glass. This method has been repeated again and again.



Tips for teacher :

The teacher will give explanations by quoting examples from around the classroom like grills of windows, floor tiles and patterns in clothes to make them understanding the concept of patterns.

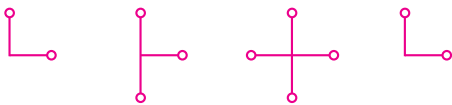


Let's do

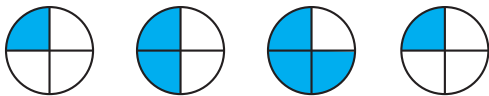
Observe the patterns and complete them :







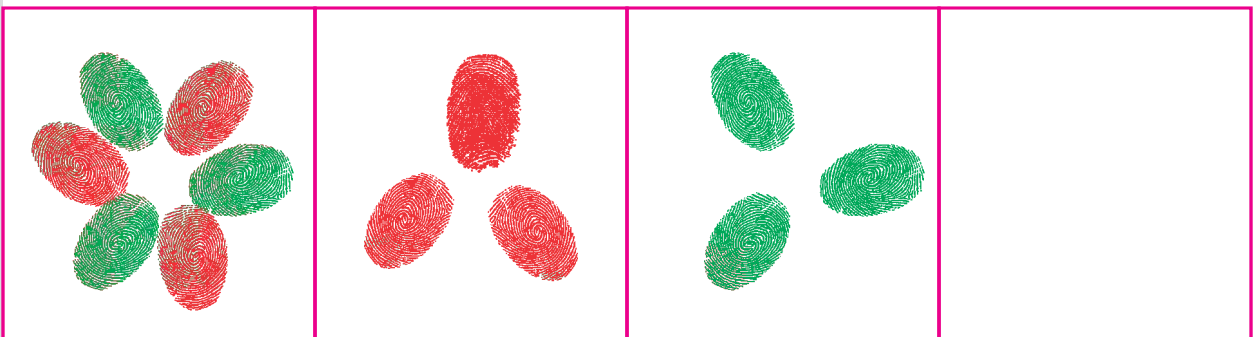




Make some beautiful patterns with your thumb :



As first Pattern is given below, make the next patterns.





Patterns of even and odd numbers :

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

On the basis of above pattern we have observed that the numbers those ends with 1, 3, 5, 7 or 9 are called odd numbers and numbers those ends with 2, 4, 6, 8 or 0 are called even numbers.

Complete the following blank spaces on the basis of above pattern.

Write all the odd numbers from 1 to 20 :

1, 3, 5, 7, --, --, --, --, --, --, --

Write all the even numbers from 21 to 40 :

22, 24, 26, 28, --, --, --, --, --, --, --

Sum of the odd numbers :

1	=	1	=	1	×	1
1+3	=	4	=	2	×	2
1+3+5	=	9	=	3	×	3
1+3+5+7	=	16	=	4	×	4
1+3+5+7+9	=	25	=	5	×	5
⋮		⋮		⋮		⋮

Sum of the even numbers

$$\begin{array}{rclclcl}
 2 & = & 2 & = & 1 & \times & 2 \\
 2 + 4 & = & 6 & = & 2 & \times & 3 \\
 2 + 4 + 6 & = & 12 & = & 3 & \times & 4 \\
 2 + 4 + 6 + 8 & = & 20 & = & 4 & \times & 5 \\
 \vdots & & \vdots & & \vdots & & \vdots
 \end{array}$$

These patterns further grow in this manner.



Some patterns add one
 Some patterns add two
 Some pattern add three, four and five
 Some add six, seven, eight and nine
 Some patterns also follow multiplication
 and Some to do subtraction
 Some pattern also follow division
 Think understand, and learn.

Let's do

1. Observe the patterns and complete the following :

(a) $51 \xrightarrow{+2} 53 \xrightarrow{+2} 55 \xrightarrow{+2} 57$ _____

(b) $90 \xrightarrow{-2} 88 \xrightarrow{-2} 86 \xrightarrow{-2} 84$ _____

(c) $61 \xrightarrow{+3} 64 \xrightarrow{+3} 67 \xrightarrow{+3} 70$ _____

2. Add the odd numbers and complete the following patterns :

$$(a) 1 + 3 + 5 + 7 + 9 + 11 = 6 \times 6$$

$$(b) 1 + 3 + 5 + 7 + 9 + 11 + 13 = 7 \times 7$$

$$(c) 1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 = \underline{\hspace{2cm}}$$

$$(d) 1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 = \underline{\hspace{2cm}}$$

3. Add the even numbers and complete the following patterns :

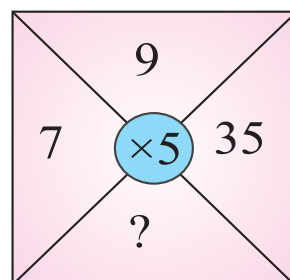
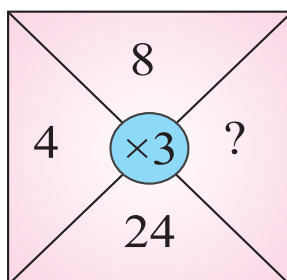
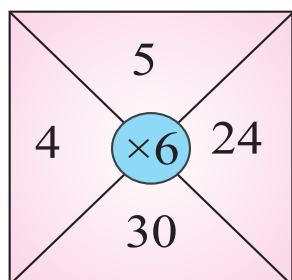
$$(a) 2 + 4 + 6 + 8 + 10 = 5 \times 6$$

$$(b) 2 + 4 + 6 + 8 + 10 + 12 = 6 \times 7$$

$$(c) 2 + 4 + 6 + 8 + 10 + 12 + 14 = \underline{\hspace{2cm}}$$

$$(d) 2 + 4 + 6 + 8 + 10 + 12 + 14 + 16 = \underline{\hspace{2cm}}$$

4. Observe the pattern carefully and complete it :



Activity

Secret messages

Harman and Adab are trying to tell each other something through secret messages, can you tell what they are trying to say ?



1W2H3A4T5A6R7E8Y9O1U2D3O4I5N6G

1I2A3M4S5T6U7D8Y1I2N3G



What are you
doing ?
I am studying.

Some more patterns :

1W2E3L4 C5O6M7E8

1L2E3T4U5S6F7U8N9

Now, you can also try to make more such messages :



Tips for teacher :

The teacher will tell the students to read only English alphabets and leave all Mathematical digits. He will ask the students to make sentence of it.

We have
learnt

Patterns

Understanding of
even and odd
numbers patterns

Understanding of
patterns by using
addition, subtraction
and multiplication

To write secret messages
by using patterns

Objectives

- To recognise standard units of measurement.
- Relationship of smaller and larger standard units.
- Knowledge of addition and subtraction using standard units.
- To compare.
- Think in a sequence.



Do you remember?

1. How many hand spans wide is the table of your class ?
.....
2. How many hand spans wide is the blackboard ?
.....
3. How many steps is the classroom away from the school gate ?
.....



- The answers of above questions will be different.
- It is because all the students have unequal length of hand spans and footsteps.

In our daily life



Children, the cloth merchant uses a metre rod to measure a piece of cloth.



Metre rod



Does the tailor also use a metre rod to measure a piece of cloth? Does he use metre rod to take your measurement?



No, the tailor uses inches tape for measuring.



Now, children tell me, what does a mason use to measure the length?

Mason uses a measuring tape to take the measurement.



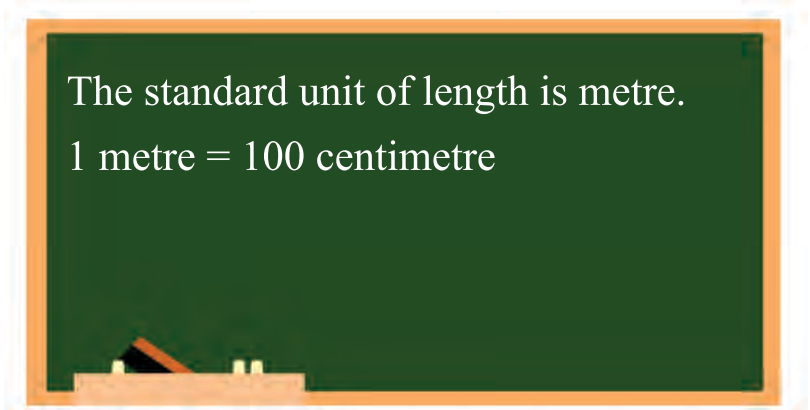
Activity

- Material** – Stick or rope, measuring tape, marker.
- Procedure** – Take a stick and mark a point on it. Measure 1 metre, with the help of a measuring tape. Now every student has its own marked metre rod.



Tips for teacher :

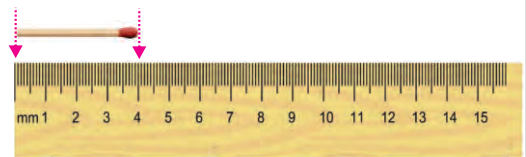
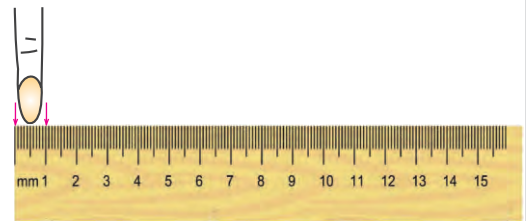
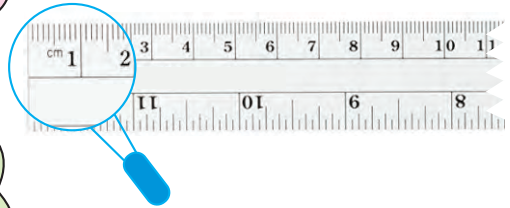
The teacher will help the students in preparing a metre rod.



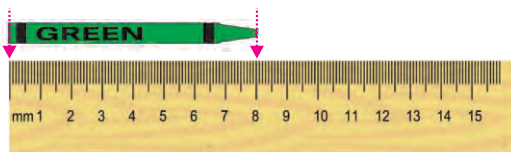
Children, you must be thinking, How Long will be 1cm. ?

Children, this is called a scale. The points marked on it are centimetres.

One centimetre is approximately equal to the width of your finger.



Matchstick is 4 cm long.



The wax colour is.....centimetre long.



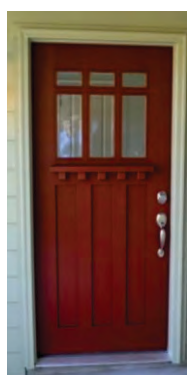
Tips for teacher :

The teacher will call students and ask them to measure length of different things with the help of scale/ruler.

Activity

Fill the following chart with the height of your class mates.

Student Name	Estimated height (cm)	Actual height (cm)



Estimate the height of door (in metres).

Then the teacher will measure it and will tell it is.....metre.

Let's do

1. Measure the length :



.....



.....



.....



.....



Tips for teacher

The teachers will help the students to measure length.

2. Complete the following table by choosing some articles (things) :

Things	Estimated length	Actual length
Chalk	7 cm	7 cm

3. Measure and write the length of the line segment in centimetres.

..... cm

..... cm

..... cm

..... cm



Draw a line segment of given length.

To draw a line segment of (suppose the length is 5 cm) the given length. We follow as given below :

Mark a point A. Place the 0 mark of the scale on point A as shown in the figure.



Now mark another point B at 5 cm mark.



Join A and B with the help of pencil and scale. AB is the required line segment.





Let's do

1. Draw the line segments of given length :

- (a) 5 cm. (b) 8 cm. (c) 6 cm. (d) 10 cm.
 (e) 2 cm. (f) 7 cm. (g) 9 cm. (h) 12 cm.

2. Measure and write the length and breadth of real ₹ 100 currency note.

Length of real ₹ 100 currency note.....cm.

Breadth of real ₹ 100 currency note.....cm.



Let's learn

1. Add

$$\begin{array}{r} 44 \text{ cm} \\ + 16 \text{ cm} \\ \hline 60 \text{ cm} \end{array}$$

$$\begin{array}{r} 55 \text{ cm} \\ + 24 \text{ cm} \\ \hline 79 \text{ cm} \end{array}$$

2. Subtract

$$\begin{array}{r} 85 \text{ cm} \\ - 24 \text{ cm} \\ \hline 61 \text{ cm} \end{array}$$

$$\begin{array}{r} 510 \\ 60 \text{ cm} \\ - 28 \text{ cm} \\ \hline 32 \text{ cm} \end{array}$$

3. Suman has 80 cm long ribbon. Meena has 75 cm long ribbon. Find the total length of ribbon if both ribbons join together.

Sol.

Length of Suman's ribbon = 80 cm.

length to meena's ribbon = 75 cm.

Total length of both ribbons = 80 cm.

$$\begin{array}{r} / \\ + 75 \text{ cm.} \\ \hline 155 \text{ cm.} \end{array}$$

Thus, total length of both ribbons is 155 cm.



Let's do

1. Add

$\begin{array}{r} 8 \text{ cm} \\ + 6 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 12 \text{ cm} \\ + 18 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 45 \text{ cm} \\ + 26 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 80 \text{ cm} \\ + 25 \text{ cm} \\ \hline \end{array}$
$\begin{array}{r} 9 \text{ cm} \\ + 4 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 82 \text{ cm} \\ + 64 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 67 \text{ cm} \\ + 57 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 30 \text{ cm} \\ + 18 \text{ cm} \\ \hline \end{array}$

2. Subtract

$\begin{array}{r} 9 \text{ cm} \\ - 4 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 74 \text{ cm} \\ - 15 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 42 \text{ cm} \\ - 16 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 70 \text{ cm} \\ - 35 \text{ cm} \\ \hline \end{array}$
$\begin{array}{r} 41 \text{ cm} \\ - 25 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 42 \text{ cm} \\ - 30 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 60 \text{ cm} \\ - 28 \text{ cm} \\ \hline \end{array}$	$\begin{array}{r} 95 \text{ cm} \\ - 40 \text{ cm} \\ \hline \end{array}$

3. In a school cloth will be given to girl students. 2 metre cloth will be given to Simran for shirt and 3 metre will be given for salwar. Find how much cloth in total Simran requires for uniform.
4. Satveer's school is 175 m away from her house. Find the distance which she covers from her house to her school and from her school to her house?
5. Saroj used 60 cm long red ribbon and 75 cm long green ribbon to make a flower. What is the total length of ribbon used by Saroj?



Do you remember ?

- 1) There is a bag in your one hand while a pencil in your other hand, which thing is heavier ?
- 2) There is a pappaya in your one hand while there is a apple in the other, which of these is heavier ?
- 3) There are 20 mangoes in one basket while another basket has 20 berries. Which basket is heavier ?



In our daily life



Dear students,
If there is less salt in the
vegetable curry, will
you like it ?

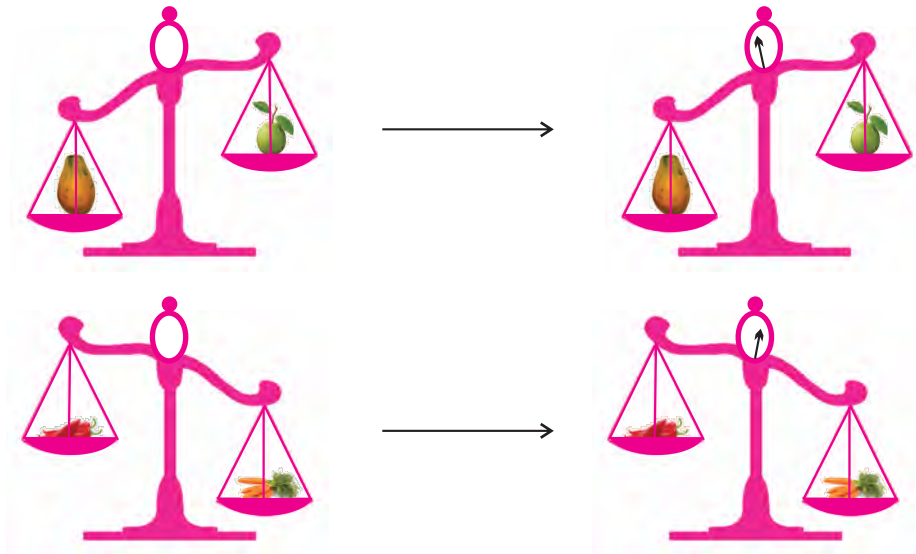
So dear students,
if quantity of
things is not
measured properly
the things will be
tasteless and you will
not like it.



Measure each item
properly for preparing
a dish delicious : be it
curry, kheer, or poori.



To show the position of the weighing machine according to the weight of things.



Practical activity

Objective : Make your own weighing Machine/balance scale.

Material Required : Two plastic lids, rope, stick of same size.

Procedure : 1. The teacher will help the students to punch the holes in these lids.



Put the rope through these holes and tie it on both ends of the stick as shown in the picture.



Tie small portion of rope in the centre of the stick. Your balance machine is ready now.



Let's do

1. Show the position of the pointer according to the weight of the objects.



2. Find heavier, lighter or equal.



(a) Cauliflower is.....than apple. (b) Both of the oranges are..... in weight.



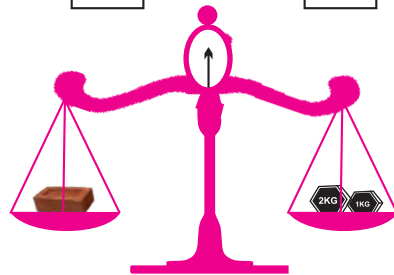
(c) Muskmelon is.....than watermelon.

(d) Book is.....than geometry box.

3. Write the following things in light weight to heavy weight order (1 to 5) based on their weight.



4. One brick weighs 3 kg. Write the things in following table those are heavier or lighter than the brick.



Things heavier than the brick	Things lighter than the brick
1. Chair	1. Plate
2.	2.
3.	3.
4.	4.
5.	5.

Activity



Students, bring some empty packets from your house and note the weight written on them and cut them and paste them below :

Name of thing	Weight	Place to paste



Let's learn

1. Addition and subtraction of units of weight.

76 kg	28 kg	^{4 10} 50 kg	80 kg
+ 54 kg	+ 74 kg	- 26 kg	- 37 kg
130 kg	102 kg	24 kg	43 kg

2. The weight of Raman is 30 kg. The weight of Jot is 25 kg. Whose weight is more and how much ?

Weight of Raman = 30 kilogram

Weight of Jot = 25 kilogram

$$\begin{array}{r} \text{More weight} = 30 \text{ kilogram} \\ - 25 \text{ kilogram} \\ \hline 5 \text{ kilogram} \end{array}$$

Raman's weight is 5 kg more than Jot's weight.

Let's do



1. Add

$$\begin{array}{r} 82 \text{ Kg} \\ + 65 \text{ Kg} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 50 \text{ Kg} \\ + 94 \text{ Kg} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 48 \text{ Kg} \\ + 75 \text{ Kg} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 85 \text{ Kg} \\ + 55 \text{ Kg} \\ \hline \\ \hline \end{array}$$

2. Subtract

$$\begin{array}{r} 87 \text{ Kg} \\ - 50 \text{ Kg} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 71 \text{ Kg} \\ - 51 \text{ Kg} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 90 \text{ Kg} \\ - 76 \text{ Kg} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 42 \text{ Kg} \\ - 25 \text{ Kg} \\ \hline \\ \hline \end{array}$$

3. Amrik Singh bought 25 kg flour and 8 kg sugar. He bought how many kg of grocery ?
4. Vegetable seller Shanker bought 90 kg potatoes from vegetable market. He sold 42 kg potatoes. How much potatoes left with him ?
5. In a Govt. school 103 kg wheat and 98 kg rice are used in mid-day meal during one month. How much grains is used in school during one month ?



Do you remember ?

The capacity of a bottle is equal to the 3 glasses of water then

- (a) Capacity of 2 bottles will be equal to the.....glasses of water.
- (b) Capacity of 3 bottles will be equal to the.....glasses of water.
- (c) Capacity of 4 bottles will be equal to the.....glasses of water.
- (d) Capacity of 5 bottles will be equal to the.....glasses of water.
- (e) Capacity of 6 bottles will be equal to the.....glasses of water.

Activity

Fill the water in different shaped vessels and see.

You will see that water will take the shape of that vessel.





Children, Raman has filled the jug with 6 glasses of water.



Raman

It means capacity of jug is equal to the capacity of 6 glasses of water.



See here ! Meenu has filled the same jug with only 4 glasses of water.



Meenu



Children, can you tell why it has happened ?

Yes, the size of Meenu's glass is bigger than Raman's glass

It happened because Meenu's glass is bigger in size



Students, you must have seen that a milkman does not use any ordinary mug to measure the quantity of milk. He has a measuring mug generally of 1 litre. With the help of it, he measures the milk correctly.



Let's do

Write the following objects as 1 to 5 as per their capacity.

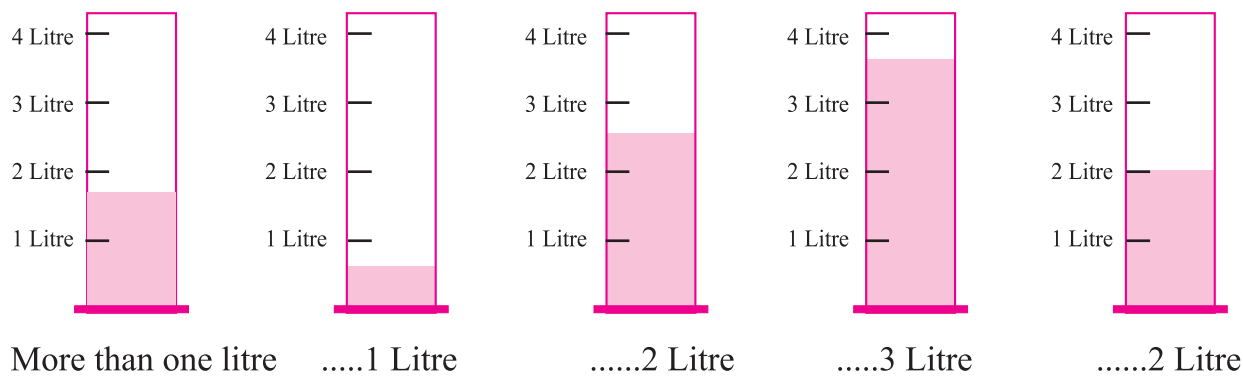


The capacity of this mug is 1 litre. Classify the things given below, more or less in capacity as compared to mug.

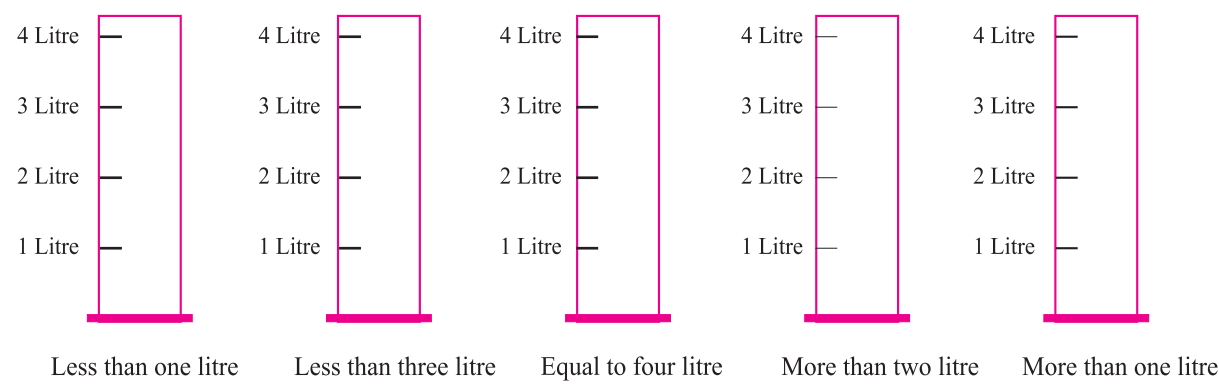


Things having more quantity than mug	Things having less quantity than mug
1. Jug	1. Spoon
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.

Find less, more or equal.



Colour the vessels according to given capacity.



5.  Fill some vessels with the help of a glass and find out how many glasses are needed to fill each of them.

Things	Estimated number of glasses 	Actual number of glasses 
1. Jug		
2. Mug		
3. Bucket		
4. Tub		

5. Find the capacity of above vessels with the help of  and  .



1. Addition/subtraction of units of capacity.

$$\begin{array}{r} 49\text{ l.} \\ + 72\text{ l.} \\ \hline 121\text{ l.} \end{array}$$

$$\begin{array}{r} 94\text{ l.} \\ + 26\text{ l.} \\ \hline 120\text{ l.} \end{array}$$

$$\begin{array}{r} 413 \\ 53\text{ l.} \\ - 26\text{ l.} \\ \hline 27\text{ l.} \end{array}$$

$$\begin{array}{r} 410 \\ 50\text{ l.} \\ - 16\text{ l.} \\ \hline 34\text{ l.} \end{array}$$

2. Harjot's water tank has 500 litre capacity. His father filled the tank in the morning with the help of motor pump. They used 350 litre of water during the day. How much water is left in the tank ?

Sol.

Water in the tank = 500 l.

Water used = 350 l.

Water left in the tank = 500 l.

- 350 l.

150 l.

Thus, 150 litre water is now in the tank.

Let's do



1. Add

$$\begin{array}{r} 59\text{ l.} \\ + 91\text{ l.} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 36\text{ l.} \\ + 90\text{ l.} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 40\text{ l.} \\ + 25\text{ l.} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 84\text{ l.} \\ + 56\text{ l.} \\ \hline \\ \hline \end{array}$$

2. Subtract

$$\begin{array}{r} 49\text{ l.} \\ - 25\text{ l.} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 58\text{ l.} \\ - 10\text{ l.} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 20\text{ l.} \\ - 13\text{ l.} \\ \hline \\ \hline \end{array}$$

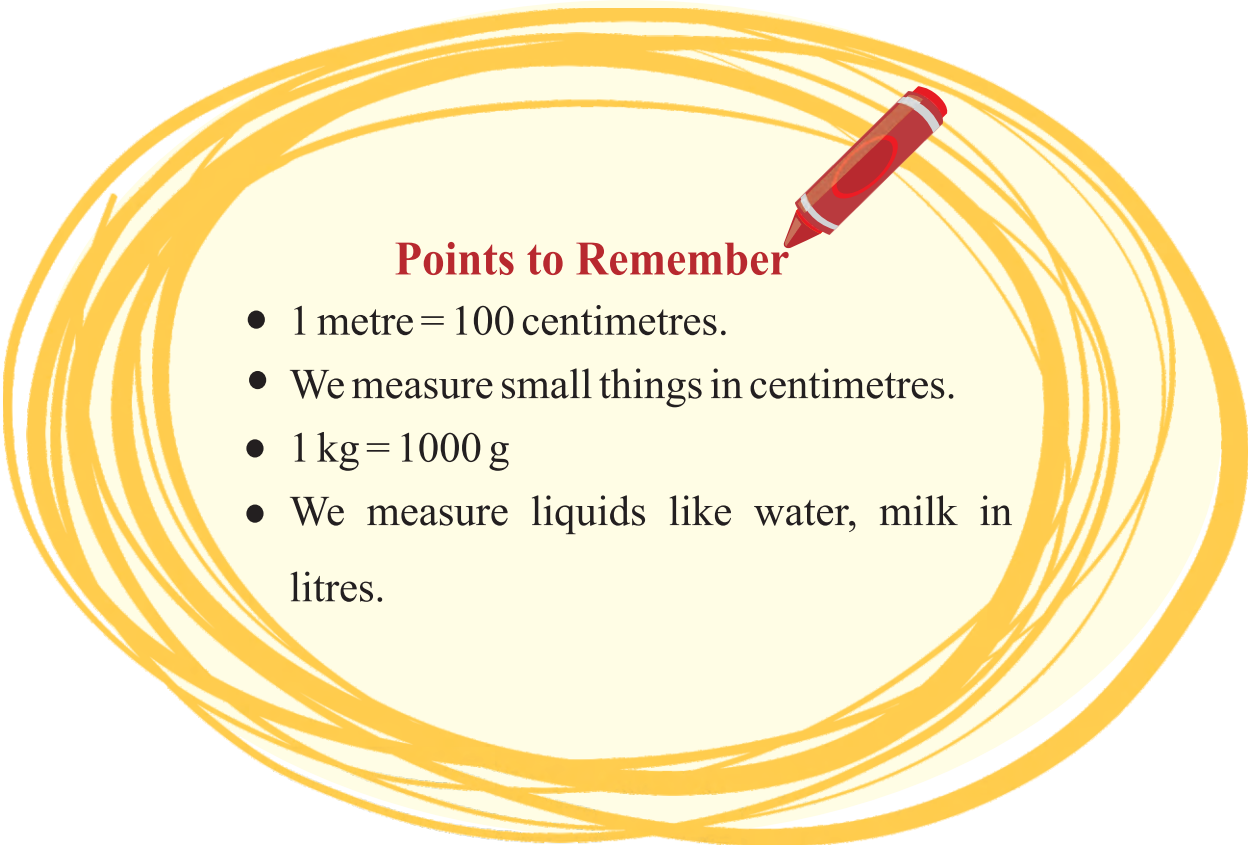
$$\begin{array}{r} 78\text{ l.} \\ - 49\text{ l.} \\ \hline \\ \hline \end{array}$$

3. Smt Devki Rani bought 5 litre of refined oil and 2 litre of mustard oil for her house. How much oil did she buy ?
4. One family consumes 375 l of water in a day. If the capacity of water tank is 500 l then how much water is left in the tank ?

Worksheet

Tick (✓) the correct answer :

1. How many centimeters are there in one meter ?
(a) 10 cm. (b) 100 cm. (c) 1000 cm. (d) 10,000 cm.
2. How many centimeter are there in 4 metres ?
(a) 300 cm. (b) 4000 cm. (c) 400 cm. (d) 40 cm.
3. The length of pencil is 18 cm and a length of piece of chalk is 6 cm.
How much is the pencil longer than the piece of a chalk ?
(a) 18 cm (b) 16 cm (c) 12 cm (d) 14 cm
4. The length of pen is 12 cm and sharpner's length is 2 cm. How much is the pen longer than the sharpner ?
(a) 8 cm (b) 6 cm (c) 9 cm (d) 10 cm
5. Raman's mother bought 5 kg potatos and 4 kg onions from a vegetable shop. What is total quantity she bought ?
(a) 7 kg (b) 9 kg (c) 12 kg (d) 8 kg
6. A sweet seller made 20 kg laddoo's in one day and sold 10 kg of ladoos out of it. How much quantity of laddoos was left with him ?
(a) 7 kg (b) 10 kg (c) 20 kg (d) 25 kg
7. A vessel contains 10 litres of milk and another vessel contains 15 litres of milk. What is total quantity of milk in both the vessels.
(a) 25 l (b) 15 l (c) 10 l (d) 35 l



Points to Remember

- 1 metre = 100 centimetres.
- We measure small things in centimetres.
- 1 kg = 1000 g
- We measure liquids like water, milk in litres.

We have
learnt

Measurement

Length

Weight

Capacity

Understanding of standard
units of measurement

Understanding of the sums
of addition/subtraction using
standard units

Use of standard units in
daily life

Objectives

- To develop the understanding about different units of time.
- To develop the understanding to read clock and calender so that students make the best use of time in their daily life.

Do you remember ?

- (1) When does the sun rise ?
- (2) When do we come back to home from school ?
- (3) In which month summer vacations start ?
- (4) How many days are there in a week ?

Calender

The calender is a chart that tells us about days, weeks, months and years.

- There are 365 days in an ordinary year.
- There are 12 months in a year.
- There are 52 weeks in a year.

- First month of the year is January and twelfth month is December.
- The year is said to be a leap year, if year number is exactly divisible by 4.
- There are 29 days in the month of February in leap year.
- There are 7 days in a week.

1 year = 365 days

Leap year = 366 days

1 year = 12 months

1 week = 7 days



April 2018						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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					

(1) How many days are there in the month of April ?

28 ☐ 29 ☐ 30 ☒ 31 ☐

(2) What day was it on 2nd April ?

Monday ☒ Tuesday ☐ Wednesday ☐ Thursday ☐



Let's do

May 2018						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		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		

(1) How many days are there in the month of May ?

(a) 28 ☐ (b) 29 ☐ (c) 30 ☐ (d) 31 ☐

(2) Which day falls on 5th May ?

(a) Monday ☐ (b) Tuesday ☐ (c) Saturday ☐ (d) Friday ☐

(3) Which day falls on 28th May ?

(a) Sunday ☐ (b) Monday ☐ (c) Thursday ☐ (d) Saturday ☐

(4) What date is on the first Sunday of the month of May ?

(a) 1 ☐ (b) 2 ☐ (c) 5 ☐ (d) 6 ☐

(5) What date is it on the first day in May ?

(a) 1 ☐ (b) 2 ☐ (c) 3 ☐ (d) 7 ☐

(6) Which day is on 31 May ?

(a) Sunday ☐ (b) Monday ☐ (c) Thursday ☐ (d) Saturday ☐

Calender 2018

January

S	M	T	W	T	F	S
	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			

February

S	M	T	W	T	F	S
				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			

March

S	M	T	W	T	F	S
				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

April

S	M	T	W	T	F	S
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					

May

S	M	T	W	T	F	S
	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		

June

S	M	T	W	T	F	S
				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

July

S	M	T	W	T	F	S
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				

August

S	M	T	W	T	F	S
			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	

September

S	M	T	W	T	F	S
						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						

October

S	M	T	W	T	F	S
	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			

November

S	M	T	W	T	F	S
				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	

December

S	M	T	W	T	F	S
						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					

(1) See calender and Fill the dates in these blanks :

(a) 3 days after 12th June

4 days after 24th May

2 days after 29th April

10 days after 25th January

(b) Five days before 20th July

2 days before 12th June

3 days before 6th March

7 days before 5th May

(2) See the calender and Fill in the blanks

- (1) How many Sundays are there in month of October ?
- (2) What day of week is on 6th September
- (3) What day of week is on 25th October
- (4) In which month you were born ?
- (5) What day of the week is 18th May ?
- (6) How many Sundays are there in the month of May ?
- (7) How many Thursdays are there in the month of August ?
- (8) What day of the week is on 1st May ?
- (9) What is the last day of May ?
- (10) How many days are in the month of February ?

Wall Clock

Walks in tune,
Never returns,
Small hand says hours
Divide and spread equal showers
Middle hand is for minutes
All can run for infinite
Second hand says rhymes
Moves in a hour 60 times
Equal time can everyone found
All clock needles move round
and round





The teacher will show the wall clock in the classroom.
He will discuss the basics of wall clock to the students.

Dear students, this is a wall clock. It has counting from 1-12 on its face that makes it easier to read. These numbers will help us to understand about seconds, minutes and hours.



Dear students a wall clock commonly has two or three hands.

1. The long hand, that moves fast is the seconds hand and thinner than the minute hand. It tells us about seconds.
2. Second long hand is the minute hand. It tells us about minutes.
3. The smaller hand which moves slower than others is the hour hand. It tells us about hours.

In this way we understand about hours, minutes and seconds from the wall clock.

1 Hour = 60 minutes

1 minute = 60 seconds

1 day = 24 hours

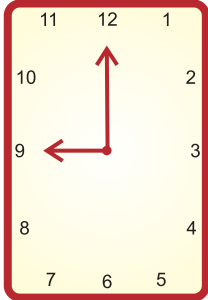


Let's do

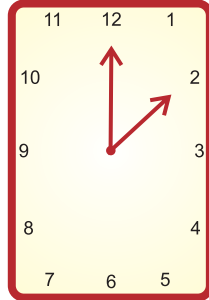
- (1) What does the long hand on the clock tells us ?
- (2) What does the smallest hand of the clock tells us ?
- (3) What does the hand which moves fast tells us ?



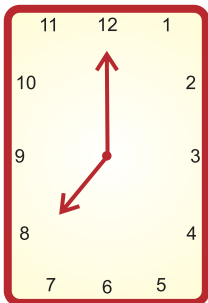
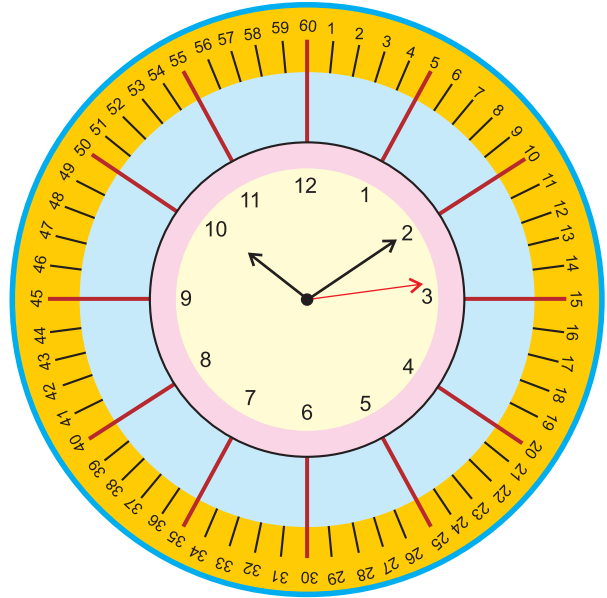
To read the time on clock



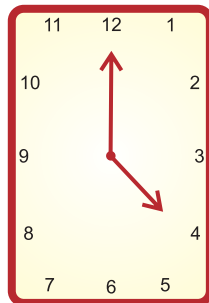
9:00 O'clock



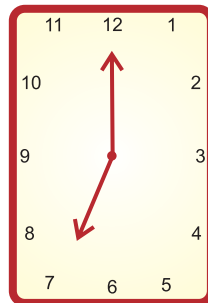
2:00 O'clock



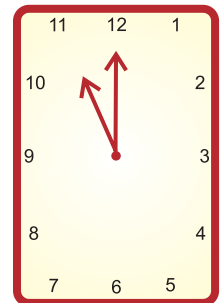
8:00 O'clock



4:00 O'clock



7:00 O'clock

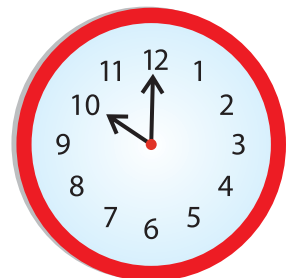
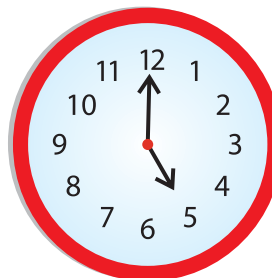


11:00 O'clock

Let's do

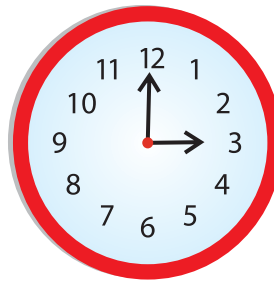


1. Write the time shown on each clock.



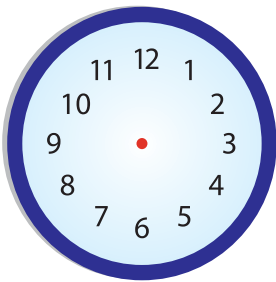




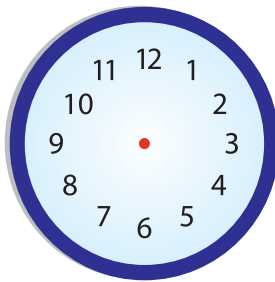




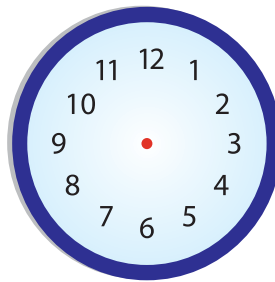
2. Draw the hour and minute hand to show the given time.



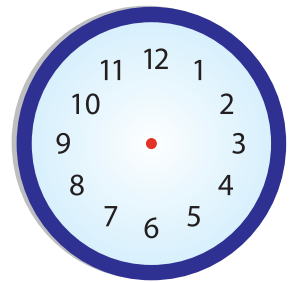
7:00 O'clock



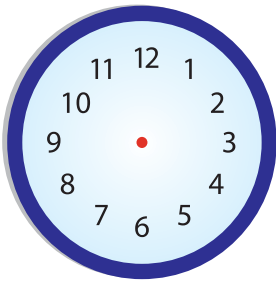
3:00 O'clock



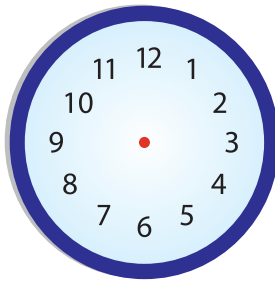
11:00 O'clock



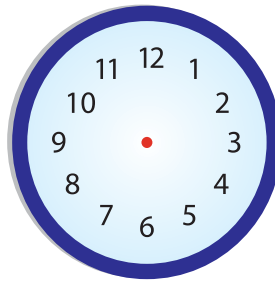
6:00 O'clock



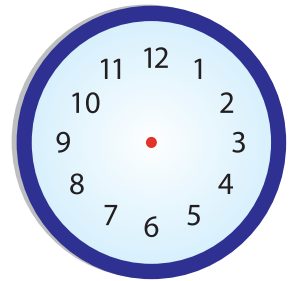
5:00 O'clock



8:00 O'clock

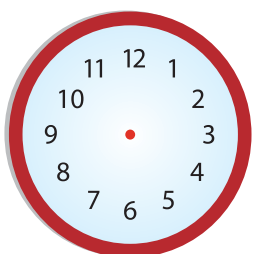


4:00 O'clock



12:00 O'clock

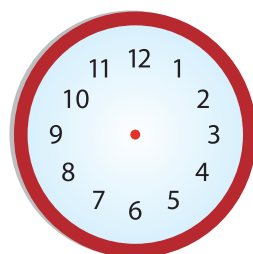
3. Read the time shown in the central clock and write the correct time on the left and the right hand clocks.



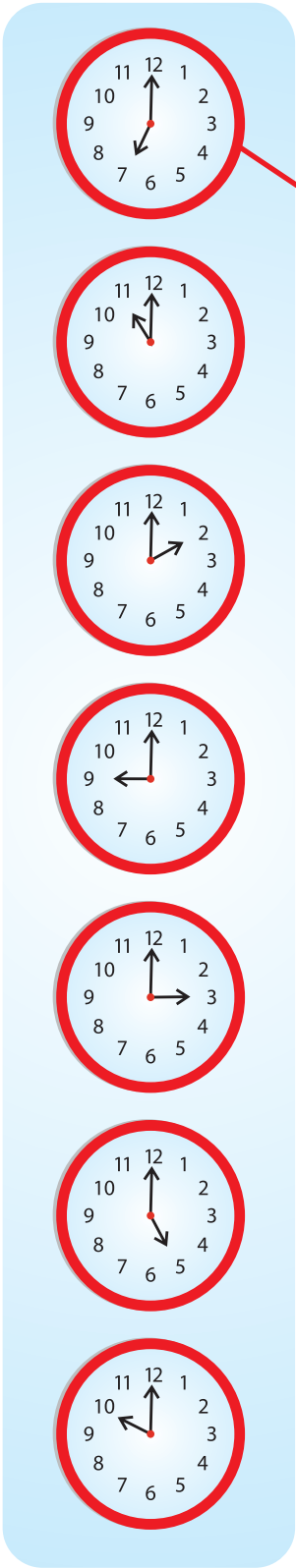
One hour
before



One hour
after



4. Match the columns with time shown on the clocks.



5.00 O' Clock

2.00 O' Clock

7.00 O' Clock

11.00 O' Clock

10.00 O' Clock

9.00 O' Clock

3.00 O' Clock

Worksheet

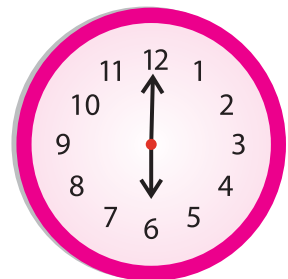
1. Fill in the blanks :

- (a) There are.....days in an ordinary year.
- (b) There are.....months in a year.
- (c) There are.....days in a week.

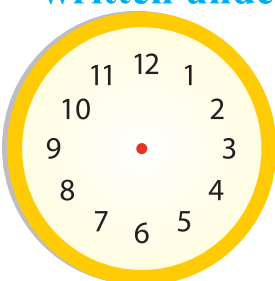
2. Answer the following questions :

- (a) How many days are there in the month of April ?
- (b) How many days are there in the month of May ?
- (c) In which month you were born ?

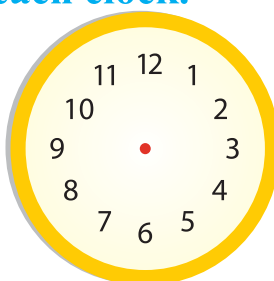
3. Write the time shown on each clock.



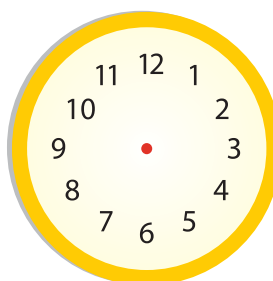
4. Draw the hour and the minute hand in the clock as per the time written under each clock.



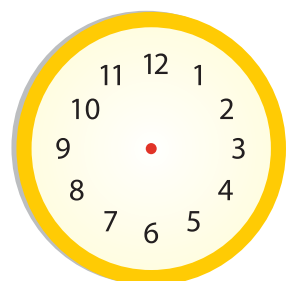
7: 00



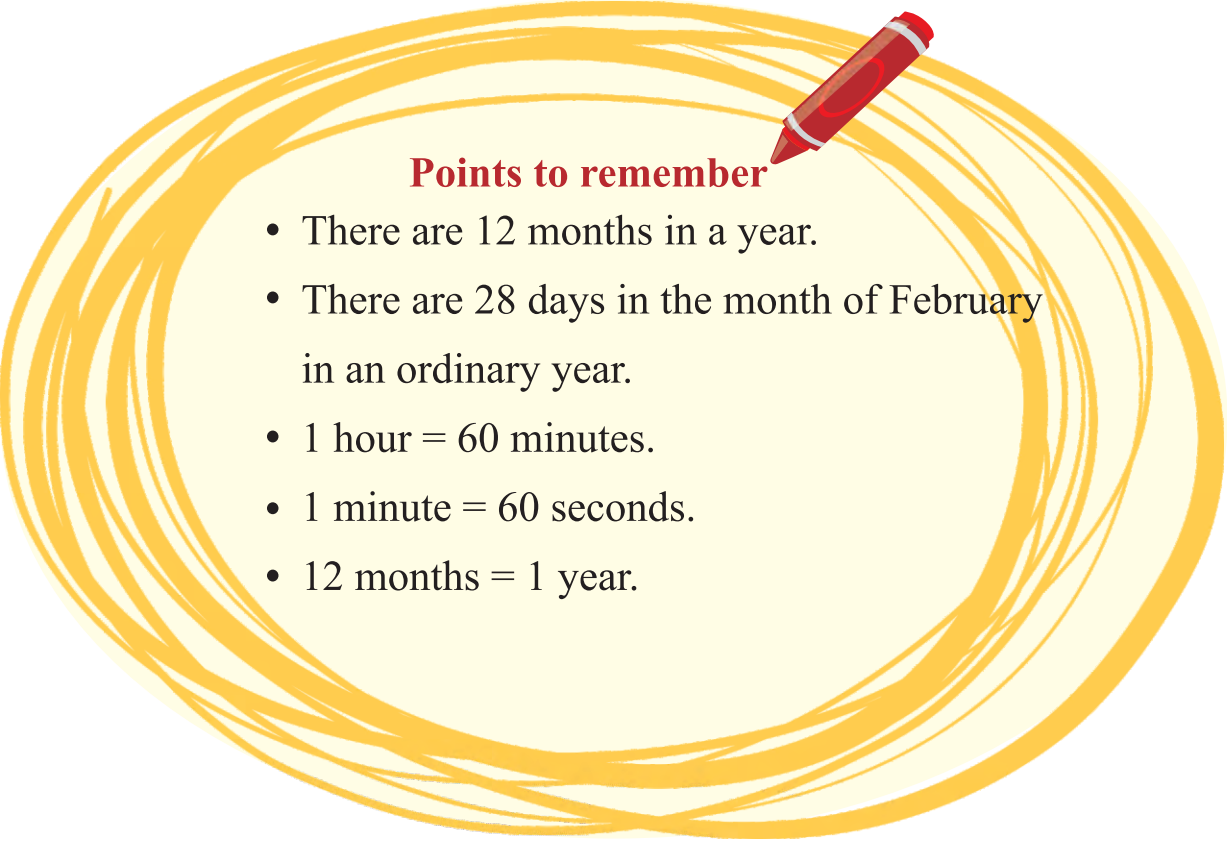
9: 00



5: 00



3: 00



Points to remember

- There are 12 months in a year.
- There are 28 days in the month of February in an ordinary year.
- 1 hour = 60 minutes.
- 1 minute = 60 seconds.
- 12 months = 1 year.

We have learnt

Time

Calender

Understanding the concept of days, weeks and months

Clock

Understanding the concept of looking and reading time on clock

Relationship of seconds, minutes and hours

Objectives

- To collect data and represent it on bar graph.
- To represent data in tabular form.
- To understand the pictograph.
- To represent the data in tally marks and find the result.

Activity

The teacher will discuss about the beautiful school garden with students in the classroom. They discuss about flowers in the garden. The teacher ask them about their favourite flowers.

Teacher : Students, Do you like your school garden ?

Students : Yes teacher, we really like flowers of different colours in our school garden.

Now the teacher takes the students out in the school garden.



Children are very happy to see their favourite flowers in the garden. They sit in a circle in the garden.

Teacher : Students, which colour of flowers are there in the garden ?

Students : Blue, Yellow, Red, Orange, White.

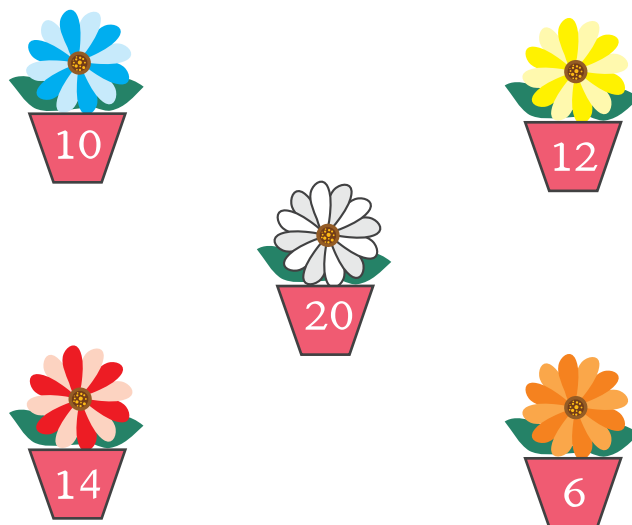
Teacher divides the students in groups according to the colour of flowers. Teacher tells the students to count the number of flowers according to the colour of their group.



Tips for teacher

If there is no garden in the school campus then the teacher can take the students to any other garden out side the school.

When they count all flowers in their groups then the teacher asks them to tell the number of flowers. All the children of each group will tell the number of flowers of their colour.



The teacher will ask students to make a table in their note book and write the counting of colourful flowers.

Sumandeep: Teacher, there are so many flowers. How can we represent them in a tabular form.

Teacher: Well, we can use symbols for it. When the things are in large number we use symbols for them. These symbols are called pictorial representation of the data or pictograph.

The teacher asks the students to use this symbol  for two flowers and completes the table like this.

Colour of flowers	Number of flowers
	10
	12
	14
	6
	20



When the numerical data is shown through pictures it is called pictograph. In pictograph we use same picture or symbols to represent particular number of objects. One symbol may represent 1, 5, 10 or 20 or more numbers of like objects. They are simple, easy, clear and complete in the form to answer the questions. Each symbol clearly represents the number of objects.



Representing data with the help of pictograph

1. Look at the Attendance board of your school showing today's attendance

Attendance Board			Dated
Class	Number of student	Students present	Students absent
Class I	20	17	3
Class II	18	18	0
Class III	23	22	1
Class IV	22	20	2
Class V	17	15	2
Total	100	92	8

This board shows the number of students in each class. It also shows the number of students present and absent.

(a) How many total students are there in the school ?

Ans : 100

(b) How many students are present according to the attendance board ?

Ans : 92

(c) According to attendance board Which class has highest number of absent students ?

Ans : Class I

Make a pictograph of absent students by using above attendance board.

Symbol used

 = 1 absent student

Class	Absent students
Class I	  
Class II	
Class III	
Class IV	 
Class V	 

2. The school celebrated the tree plantation day and each class planted trees as given below :

1 plant represents

 = 5 plants

Class	Number of trees planted
I	
II	
III	
IV	
V	

(a) How many plants were planted by

Ans : Class I = $3 \times 5 = 15$

Class II = $5 \times 5 = 25$

Class III = $4 \times 5 = 20$

Class IV = $2 \times 5 = 10$

Class V = $10 \times 5 = 50$

(b) Which class planted less number of trees and how many ?

Ans. Class IV ; 10 trees

(c) Which class planted more number of trees and how many ?

Ans : Class V ; 50 trees

3. The following table shows the number of students of Class III those like to eat vegetables.

Vegetable's Name	Cauliflower	Bottle gourd	Brinjal	Capsicum
No. of students	8	6	14	10

Represent the above information with the help of pictograph.

Sol.

 = 2 students

Vegetable's Name	Number of students who like that vegetable
Cauliflower	   
Bottle gourd	  
Brinjal	      
Capsicum	    



Let's do

1. Following pictograph shows cartoon programme liked by students of school.

 = 10 students

Name of cartoon	Number of students
Chhota Bhim	  
Motu Patlu	 
Tom and Jerry	    
Doremon	   
Dora	      
Krishna	    

Answer the questions on the basis of above pictograph.

- (i) Which cartoon is most popular among students ?
- (ii) Which cartoon is least popular among students ?
- (iii) How many student like the cartoon of Doremon ?
- (iv) Which of the two cartoons are equally popular among students ?
- (v) How many students like Chota Bheem and Motu Patlu ?
- (vi) Is there any other way to represent the above data ?

2. Look at the pictograph given below and answer the questions :

 = 3 runs

Name of Player	Runs scored by the player
Rohit Sharma	
Mohinder Singh Dhoni	
Virat Kohli	
Yuvraj Singh	
Shikhar Dhawan	

- (i) Who scored maximum number of runs and how many ?
- (ii) Who scored minimum number of runs and how many ?
- (iii) Which two players scored same number of runs and how many ?
- (iv) Total runs scored by Shikhar Dhawan and Virat Kohli ?

3. The following table shows the marks obtained by a IIIrd class student Gurjot in her exams :

Subject	Mathematics	Punjabi	English	Environment Studies
Marks obtained	60	80	70	50

Represent the above information with the help of a pictograph (Assume one picture = 10 marks]

4. In a school, Five classes have been given the responsibility to take care of 5 flower beds. The following table shows the number of flowers in each bed, allotted to the different classes.

Class	I	II	III	IV	V
Number of flowers	20	8	16	12	24

Represent the above information with the help of a pictograph

Assume  = 2 flowers



So far, we have used pictographs to represent the data. But when the data is more complicated or is in mixed form we use tally marks to represent data instead of pictograph.

We can classify the given data in set of five's by using tally marks. We use tally marks in this manner.

Number	Tally Marks
1	
2	
3	
4	
5	
6	I
7	II
.....	
.....	
and so on	

 Tips for teacher

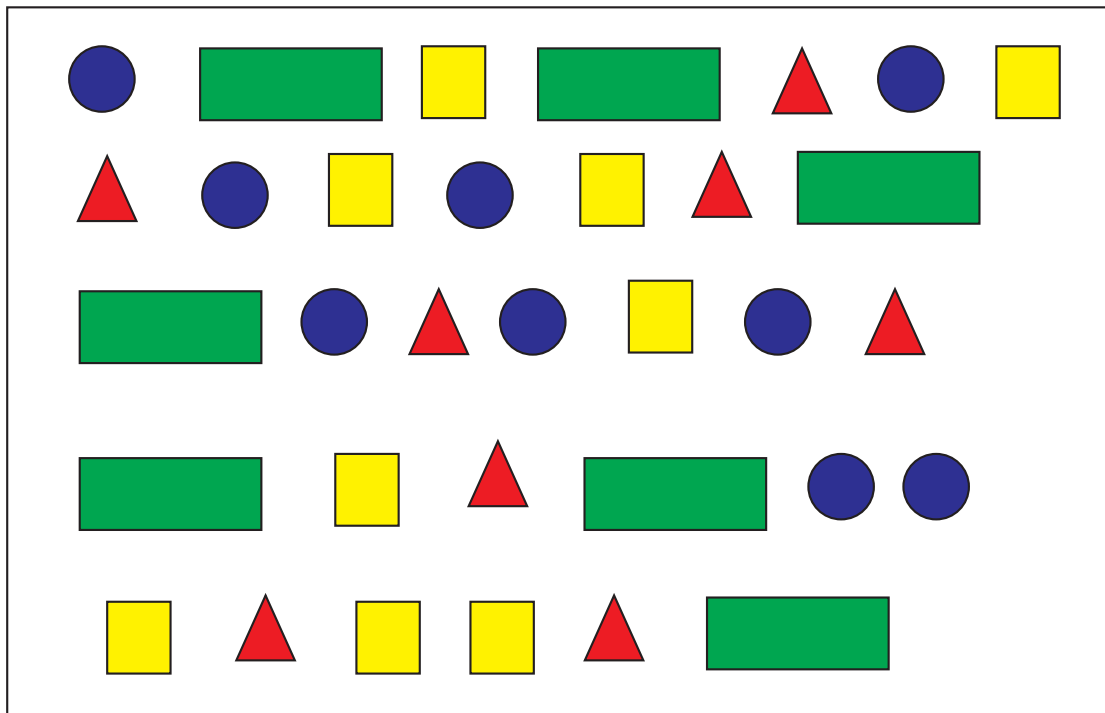
Motivate the students to look for the pictographs that appear in different magazines and newspapers and paste them on chart papers to display in the classroom.



Find tally marks carefully
don't leave a mistake
Fifth one is slanting line on four
learn it for right answer's sake



1. The different figures/shapes of maths kit are shown in the following box :



1. Represent the above data by using tally marks.

Shape	Tally Mark	Number
		9
		7
		9
		8

2. Today is Manjit Singh's birthday. He is the student of 3rd class. His classmates have decorated a wall of the classroom with some colourful balloons.



Represent the information given at previous page with the help of tally marks.

Colours of baloon	Tally marks	Number
		
		
		
		
		

Find :

- (i) Which colour has maximum number of balloons ?
- (ii) How many yellow balloons are there ?
- (iii) How many balloons are there in total ?

3. Third class student were asked about their favourite fruits. Their choices are given below :

Represent the information given at previous page with the help of tally marks.

Fruit	Tally Marks	Numbers
		
		
		
		
		

Find :

- (i) Which fruit is the choice of maximum students ?
- (ii) Which fruit is the choice of least number of students ?
- (iii) How many students opt for Banana ?
- (iv) How many students like Apples ?

4. The following table shows the favourite games of Third class students :

Names of game	Tally Marks
Kabbadi	
Kho-Kho	
Football	
Cricket	

Answer the following questions :

- (i) Which is the most favourite game of students ?
- (ii) Which is the least favourite game of students ?
- (iii) How many students like to play Kho-Kho ?
- (iv) How many students in total like to play Football and Cricket ?
- (v) How many students are studying in class III ?

5. The table given below shows the favourite colours of 3rd class students :

Colour	Tally Marks
	
	
	
	
	

Answer these questions :

- (i) Which is the most favourite colour of the students ?
- (ii) Which is the least favourite colour of students ?
- (iii) How many students like red colour ?
- (iv) Which two colours are equally liked by the students ?
- (v) How many students study in class III ?

Practical Activity

Objectives :

- 1) To represent data in tally marks.
- 2) To use tally marks by playway method.
- 3) To give the chance for counting.
- 4) To understand less/more quantity.

Material : Pencil, Note book, dice, black board, chalk.

Procedure :

- 1) Divide the students in groups and show them the dice. Show the number of dots on the different faces of dice.
- 2) The teacher draws a table on the blackboard.
- 3) Dice is thrown by a student.
- 4) On throwing the dice, the dots are counted on the face which comes up.



- 5) For each throw a mark ' | ' is drawn in the table against the number appeared on the dice.
- 6) The dice is thrown 30 times and each time the number shown by dice is noted in the table and a symbol (Tally mark) is marked against that number.

- 7) Students also make table in their notebooks and they mark tally marks against the number shown by the dice.

Face of dice	Number of times/For each throw
	
	
	
	
	
	

To find result

- (1) Which face of dice appeared maximum number of time and how many times ?
- (2) Which face of dice appeared minimum number of times and how many times ?
- (3) How many times did  appear ?.....
- (4) How many times did  appear ?.....
- (5) How many faces does a dice has ?

Worksheet

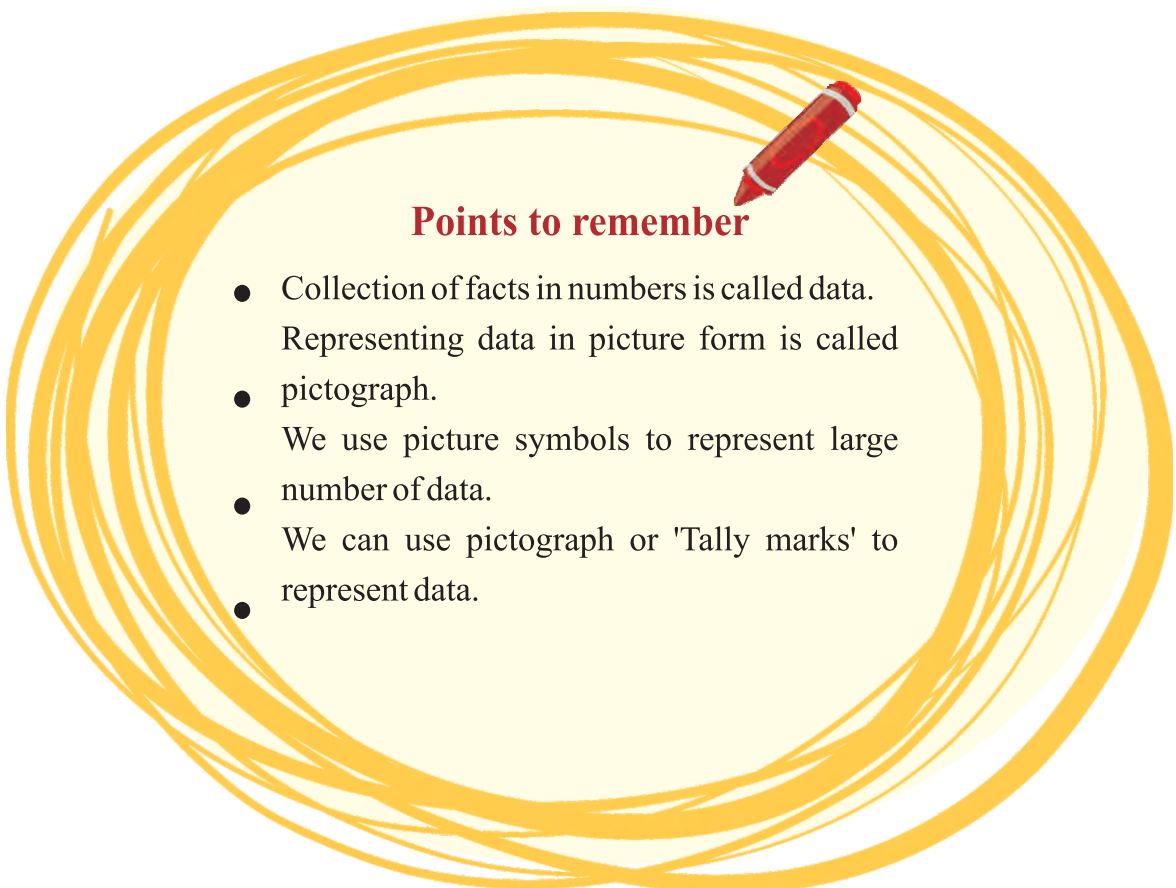
- (1) If 😊 = 5 students then 😊😊😊😊😊 = students.
- (2) In a school's annual day function four students of class III made bouquets that are shown in the pictograph as below.

Name	Flowers to be used
Jaspreet Singh	
Harpreet Singh	    
Amandeep Kaur	    
Sandeep	   

 = 5 Flowers

- (i) Jaspreet Singh used one flower to make a bouquet. (✓ Or ×)
- (ii) Sandeep used 20 flowers to make a bouquet. (✓ Or ×)
- (iii) Sandeep used maximum number of flowers to make a bouquet. (✓ Or ×)

- (iv) Which of the student used 5 flowers to make a bouquet ?
- (a) Jaspreet Singh (b) Harpreet Singh
(c) Amandeep Kaur (d) Sandeep
- (v) All students used flowers to make a bouquet.
- (vi) Which of the two students used same number of flowers to make bouquets ?
- (a) Jaspreet Singh and Harpreet Singh
(b) Harpreet Singh and Amandeep Kaur
(c) Amandeep Kaur and Sandeep
(d) Harpreet Singh and Sandeep
- (vii) Which tally marks is used to show the flowers used by Amandeep Kaur ?
- (a)  (b)  
- (c)     (d)     
- (viii) Which student used     for the number of flowers shown in the tally marks ?
- (a) Amandeep Kaur (b) Jaspreet Singh
(c) Sandeep (d) Harpreet Singh
- (ix) In the above table stands for  5 flowers. (✓ Or ×)



Points to remember

- Collection of facts in numbers is called data.
Representing data in picture form is called
- pictograph.
We use picture symbols to represent large
- number of data.
We can use pictograph or 'Tally marks' to
- represent data.

We have learnt

Data

To collect data and
represent by pictograph

To collect data and
represent in table

Understanding of pictograph

To draw tally marks and
pictograph of data and
draw conclusion





200



300



400



500



600



700



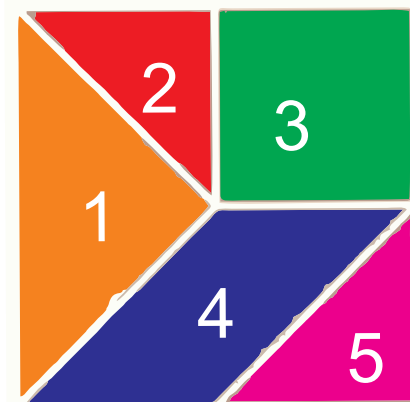
800



900



1000



Maan Card



1

10

6

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50

80

60

100

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70





200



300



400



500



600



700



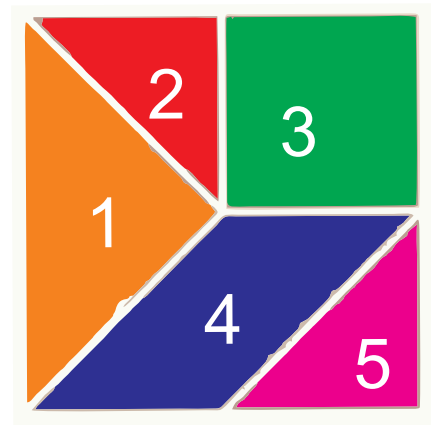
800



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Maan Card



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