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START UP MATHEMATICS

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Selected
NCERT
Questions
Included



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Preface

Start Up Mathematics is a sincere effort to fulfill the requirements and meet the expectations of students and teachers. Children should learn to enjoy Mathematics rather than fear it. They should pose and solve meaningful problems with ease. The content of the series has been designed keeping this in mind.

The series conforms to the latest NCF guidelines with careful grading of interdisciplinary and thematic linkages. The books are carefully planned to give comprehensive coverage to all the topics through clear explanations and sound supporting examples. There is ample focus on activities and exercises to develop logical thinking and reasoning.

The contents flow from known to unknown, simple to complex and concrete to abstract. Continuity from one level to another is maintained. A recall section is given at the beginning of every concept already taught because revision is a must before starting a new concept, particularly in Mathematics.

Vision of Start Up Mathematics

- To develop numerical ability in a child
- To make a child capable of deciding which approach is best for problem solving
- To pursue assumption to a child's logical conclusion
- To equip a child to co-relate the four fundamental operations in everyday life
- To allow a child to articulate reasons behind doing a particular exercise
- To nurture a child's mathematical thinking and systematic reasoning
- To help a child to observe relationships and to find connections
- To help a child to use the concepts confidently in day-to-day life
- To arouse a child's interest and curiosity in geometrical facts and figures
- To inspire critical thinking and widen a child's scope in problem solving

It is our belief that regular practice will not only inculcate interest in students, but also lay a strong foundation at an early stage.

A feedback from students and teachers for further improvement of the books will be highly appreciated.

Detailed Contents

Chapter	Content	Activity/Worksheet
1. Numbers 100 to 200	<ul style="list-style-type: none"> Number Names Face Value and Place Value Expanded Form Short Form Before, After and Between Comparing Numbers Ordering of Numbers Ordinal Numbers Even and Odd Numbers Word Problems 	<ul style="list-style-type: none"> Worksheet—Observation Skills, Conceptual Understanding
2. Numbers 201 to 1000	<ul style="list-style-type: none"> Numbers from 201 to 1000 Counting on the Abacus Face Value and Place Value Short Form and Expanded Form Comparing Numbers Before, After and Between Ordering of Numbers Forming Numbers 	<ul style="list-style-type: none"> Individual Activity—Conceptual Understanding, Thinking Skills
3. Addition	<ul style="list-style-type: none"> Addition Facts Addition of 2-Digit and 3-Digit Numbers Addition of Two 3-Digit Numbers Addition of Three 3-Digit Numbers Addition Using Expanded Form Addition Using Carry Over Method Skip Counting Word Problems 	<ul style="list-style-type: none"> Group Activity—Team Spirit, Conceptual Understanding
4. Subtraction	<ul style="list-style-type: none"> Subtraction Facts Subtracting 2-Digit Number From 3-Digit Number Subtracting 3-Digit Numbers Subtraction by Borrowing Checking Subtraction Finding the Missing Digits Word Problems 	<ul style="list-style-type: none"> Individual Activity—Application of Concepts, Observation Skills
5. Multiplication	<ul style="list-style-type: none"> Multiplication Facts Multiplication Tables Multiplication on a Number Line Multiplication Methods Multiplication of a 2-Digit Number by a 1-Digit Number Multiplication of a 3-Digit Number by a 1-Digit Number Multiplication by Carrying Over Multiplication by 10, 20, 30, 40, . . . Word Problems 	<ul style="list-style-type: none"> Group Activity—Team Spirit, Application of Concepts Worksheet—Observation Skills
6. Division	<ul style="list-style-type: none"> Division as Repeated Subtraction Relation between Multiplication and Division 	<ul style="list-style-type: none"> Group Activity—Team Spirit, Application of Concepts

contd...

contd...

Chapter	Content	Activity/Worksheet
	<ul style="list-style-type: none">• Division Facts• Long Division Method• Concept of Remainder• Word Problems	
7. Basic Geometry	<ul style="list-style-type: none">• Solid Shapes• Straight and Curved Lines• Vertical and Horizontal Lines• Drawing lines• Tracing Shapes	<ul style="list-style-type: none">• Individual Activity—Observation Skills, Thinking Skills
8. Time	<ul style="list-style-type: none">• Reading the Minute Hand• Quarter Past• Half Past• Quarter To• Calendar• Year and Leap Year• Word Problems	<ul style="list-style-type: none">• Worksheet—Thinking Skills, Application of Concepts
9. Money	<ul style="list-style-type: none">• Currency• Addition and Subtraction of Paise• Addition and Subtraction of Rupees• Writing Rupees and Paise• Addition of Rupees and Paise• Subtraction of Rupees and Paise• Word Problems	<ul style="list-style-type: none">• Worksheet—Application of Concepts, Observation Skills
10. Measurement	<ul style="list-style-type: none">• Measuring Length• Addition and Subtraction of Length• Measuring Weight• Addition and Subtraction of Weight• Measuring Capacity• Addition and Subtraction of Capacity	<ul style="list-style-type: none">• Individual Activity—Observation Skills, Thinking Skills
11. Data Handling	<ul style="list-style-type: none">• Data Handling	<ul style="list-style-type: none">• Individual Activity—Observation Skills, Interpretation
12. Patterns	<ul style="list-style-type: none">• Figure Patterns• Number Patterns• Letter Patterns	<ul style="list-style-type: none">• Individual Activity—Creativity• Worksheet—Observation Skills, Thinking Skills

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Special Features of Start Up Mathematics 2

Story-based
Introduction

Let's Recall
Revision Exercises

Remember and
Quick Tip
Important points and
tips

Little Genius! and
Scratch Your Brain
Questions based on
thinking skills

How Much Do You
Know?
Chapter-end exercises

Questions based on
Values and Life Skills

Concept-based
Activities and
Worksheet

Let's Review
Termwise assessment
sheets

Some NCERT textbook questions given

1



Numbers 100 To 200



Let's Recall ...

Help Aman and Ria to count and write the numbers in the correct box. Strike out the numbers as you write them.

1		21	31		51			81	
2	12			42		62		92	
3		23			53		73		93
			34			64	74	84	
5	15		35				75		
		26		46		66		86	96
8		28			57	67		87	
		19	29		58			88	
		20		40	49		69		99
14	38	13	83	59	30	43	6	24	45



14	38	13	83	59	30	43	6	24	45	33
54	52	76	4	32	18	82	25	47	89	91
63	97	55	77	10	16	39	17	68	9	78
56	65	85	36	48	37	72	7	41	95	50
										44
										98
										71

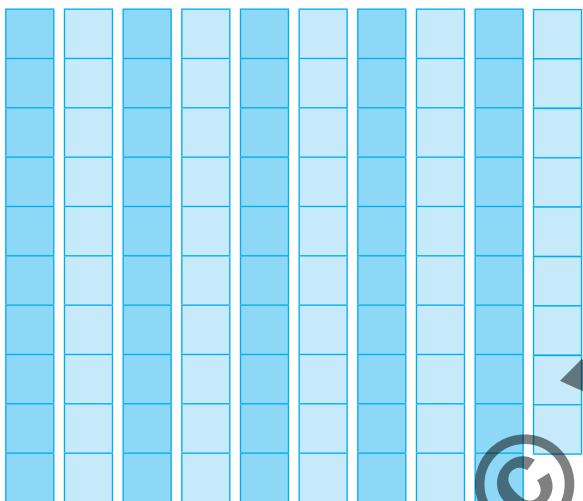




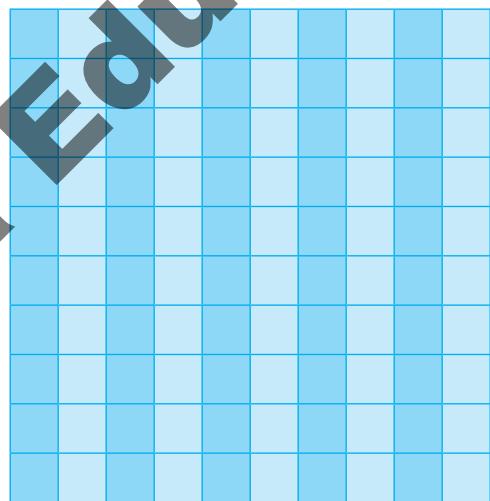
We have already filled numbers till 99. But there is one more box left.



One more than 99 is one hundred.
This box is for hundred.

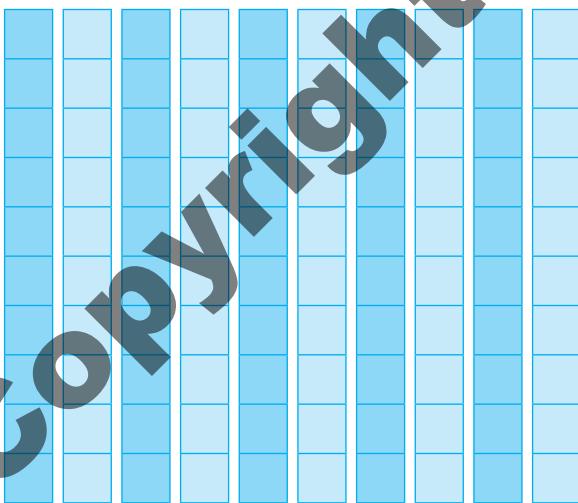


+ 1 =



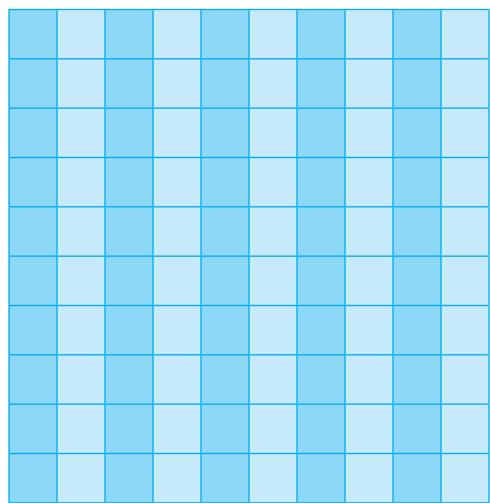
99

One hundred (100)



10 tens

=



One hundred (100)

100 is the smallest 3-digit number.



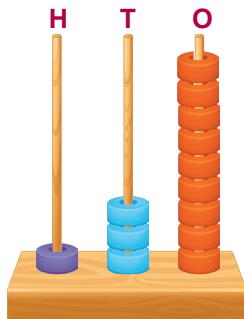
We use any three digits from 0 to 9 to write a 3-digit number. These digits are written under H (Hundreds), T (Tens) and O (Ones) as shown. For example,

H T O

$$1 \ 3 \ 9 = 1 \text{ hundred} + 3 \text{ tens} + 9 \text{ ones}$$

$$1 \ 0 \ 6 = 1 \text{ hundred} + 0 \text{ tens} + 6 \text{ ones}$$

On an abacus, 139 is shown as:



Rod **H** reads in hundreds.

Rod **T** reads in tens.

Rod **O** reads in ones.

Remember

We cannot write 0 at the hundreds place as it will then become a 2-digit number.



Number Names

We already know how to write number names of numbers from 1 to 99.

Recall

Write the number names.



(a) 8 _____

(b) 34 _____

(c) 96 _____

(d) 72 _____



To write the number name of a 3-digit number, we always write the hundreds place first, then the tens and ones places together. Look at the given examples.

We form a 3-digit number



139 is written as one hundred thirty-nine

180 is written as one hundred eighty

- 1 Read aloud and complete counting from 101 to 200.

101		121		141		161		181	
	112		132		152		172		192
103								183	
			134			164			
	115				155		175		
		126		146					
107					158		178		197
		129		149					199
	120		140		170			190	

- 2 Fill in the blank boxes.



(a) $100 = \boxed{1}$ hundred + $\boxed{0}$ tens + $\boxed{0}$ ones

One hundred

(b) $129 = \boxed{1}$ hundred + $\boxed{2}$ tens + $\boxed{9}$ ones

One hundred twenty-nine

(c) $159 = \boxed{}$ hundred + $\boxed{}$ tens + $\boxed{}$ ones

(d) $185 = \boxed{}$ hundred + $\boxed{}$ tens + $\boxed{}$ ones

(e) = hundred + tens + ones

(f) = hundred + tens + ones

(g) 172 = hundred + tens + ones

(h) = hundred + tens + ones

(i) 200 = hundreds + tens + ones

(j) = hundred + tens + ones

3 Match the columns.

Column A

(a) 147

(b) 163

(c) 198

(d) 175

(e) 186

(f) 139

Column B

(i) One hundred seventy-five

(ii) One hundred ninety-eight

(iii) One hundred forty-seven

(iv) One hundred eighty-six

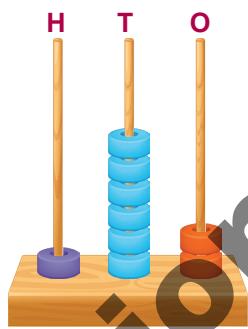
(v) One hundred thirty-nine

(vi) One hundred sixty-three

4 Look at the abacus and fill in the boxes.

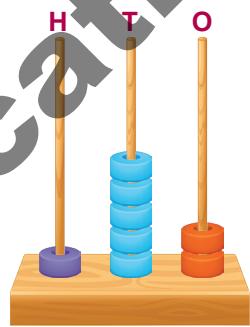
(a) $162 =$ One hundred sixty-two

hundred + tens + ones



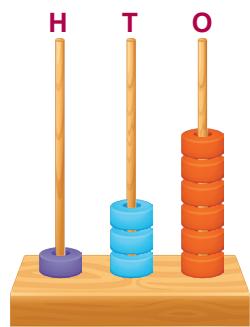
(b) $\square =$

hundred + tens + ones



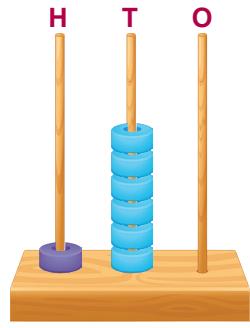
(c) $\square =$

hundred + tens + ones



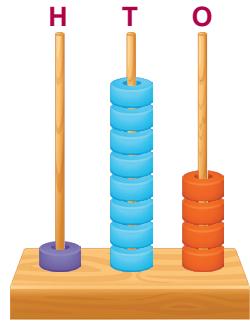
(d) $\square =$

hundred + tens + ones



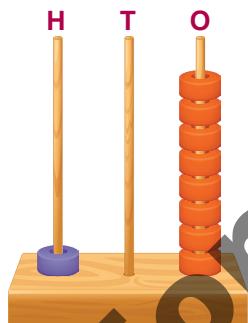
(e) $\square =$

hundred + tens + ones

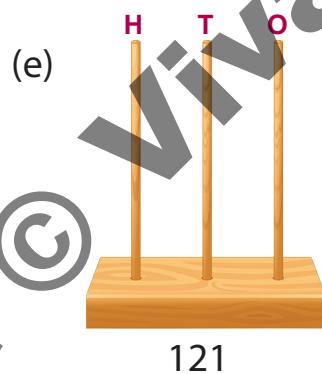
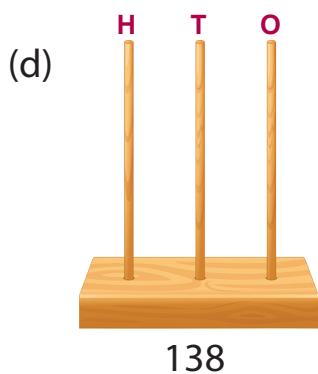
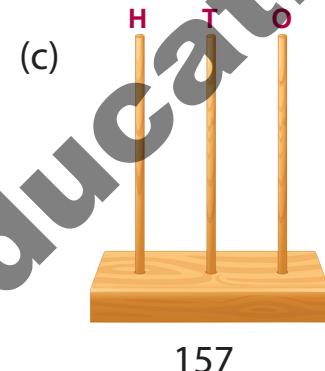
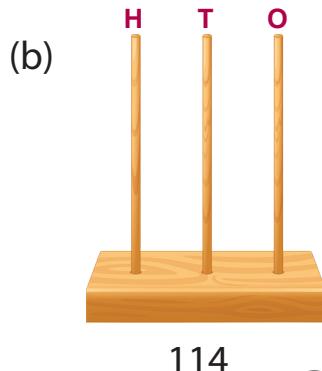
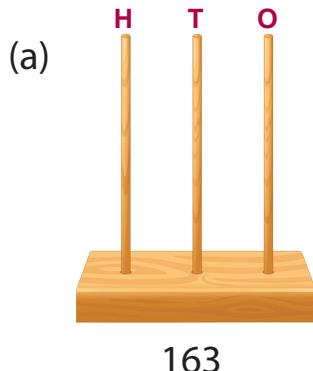


(f) =

hundred + tens + ones



- 5 Draw beads on the abacus to represent the numbers.



Face Value and Place Value

We know that digits make numbers. For example, 1, 3 and 7 are digits of the number 137.

Every digit in a number has a face value and a place value.

Face Value	Place Value
<ul style="list-style-type: none"> The face value of a digit is the digit itself. The face value of a digit never changes. 	<ul style="list-style-type: none"> The place value of a digit depends on its face value and its place in a number. The place value of a digit changes with the change in place.

Look at the given example.

H T O

1 5 6

The face value of 6 is 6.

The place value of 6 is 6 ones or 6.

The face value of 5 is 5.

The place value of 5 is 5 tens or 50.

The face value of 1 is 1.

The place value of 1 is 1 hundred or 100.

Remember

A digit in a number can have more than one place value but only one face value. For example, in 121, the face value of 1 is 1 and its place values are 100 and 1.



6

Write the place value of each digit in the boxes.

(a)

H T O

1 2 4

100

20

4

(b)

H T O

1 5 6

(c)

H T O

1 4 9



(d)

H T O

1 8 3

(e)

H T O

1 7 1

(f)

H T O

1 9 2

7

Write the face value and the place value of the circled digit.

(a)

1 8

face value

6

place value

60

(b)

1 2

face value

place value



(c) 1 6 4	face value <input type="text"/>	place value <input type="text"/>
(d) 1 3 1	face value <input type="text"/>	place value <input type="text"/>
(e) 1 9 7	face value <input type="text"/>	place value <input type="text"/>
(f) 1 4 2	face value <input type="text"/>	place value <input type="text"/>

Expanded Form

Expanded form of a number is the sum of the place values of its digits.

Look at the given examples.

$$145 = 1 \text{ hundred} + 4 \text{ tens} + 5 \text{ ones} = 100 + 40 + 5$$

$$182 = 1 \text{ hundred} + 8 \text{ tens} + 2 \text{ ones} = 100 + 80 + 2$$

$$105 = 1 \text{ hundred} + 5 \text{ ones} = 100 + 5$$

$$193 = 1 \text{ hundred} + 9 \text{ tens} + 3 \text{ ones} = 100 + 90 + 3$$

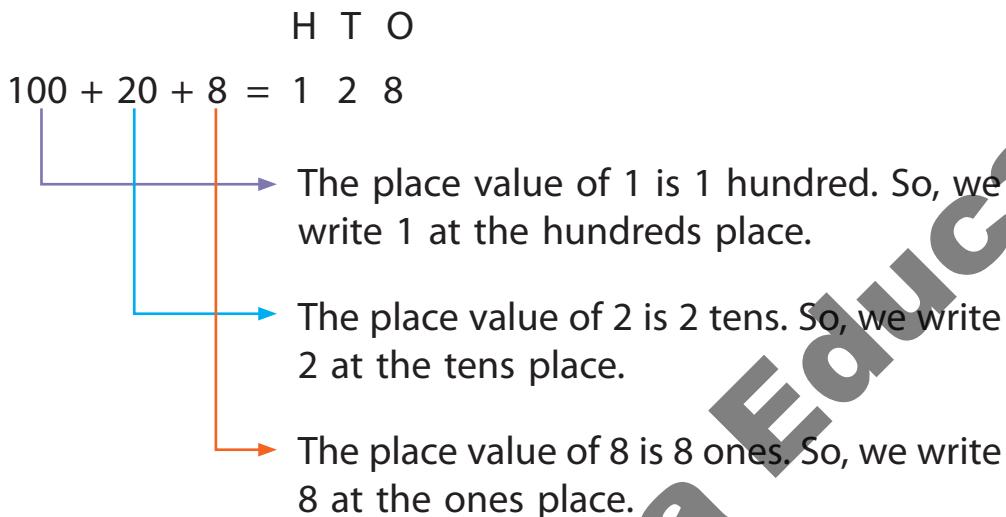
8 Write the expanded form of the following numbers.

- (a) $167 = 1$ hundred + 6 tens + 7 ones = + +
- (b) $118 = 1$ hundred + 1 ten + 8 ones = + +
- (c) $125 =$ hundred + tens + ones = $100 + 20 + 5$
- (d) $156 =$ hundred + tens + ones = $100 + 50 + 6$
- (e) $= 1$ hundred + 4 tens + 4 ones = $100 + 40 + 4$

Short Form

To write the short form of an expanded number, we write the face value of each digit in the correct place.

Look at the given example.



Similarly,

$$100 + 6 = 106$$

$$100 + 80 + 6 = 186$$

Quick Tip



We can write a number in three different forms.

Short form

174

Word form/Number name

One hundred seventy-four

Expanded form

$100 + 70 + 4$



9

Write the short form of the following numbers.

(a) $100 + 6 =$ _____

(b) $100 + 20 + 9 =$ _____

(c) $100 + 40 + 4 =$ _____

(d) $100 + 80 + 7 =$ _____

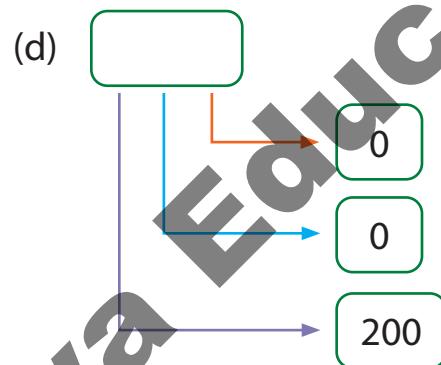
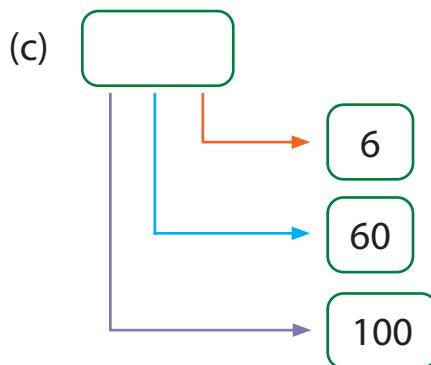
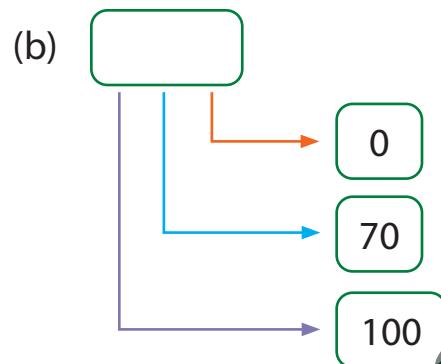
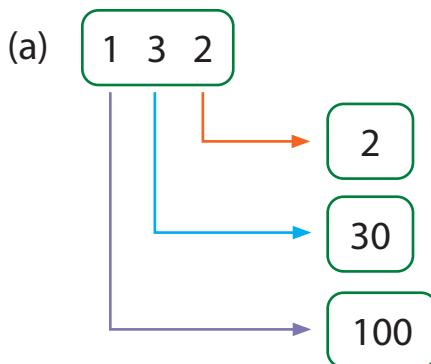
(e) $100 + 90 =$ _____

(f) $100 + 10 + 1 =$ _____

(g) $100 + 30 + 9 =$ _____

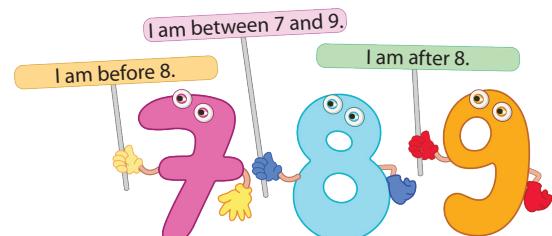
(h) $100 + 50 + 4 =$ _____

10 Form the numbers and write in the boxes.



Before, After and Between

- A number just before any number is one less than it.
- A number just after any number is one more than it.
- A number between two numbers is in their middle.



Recall

Fill in the blank boxes.

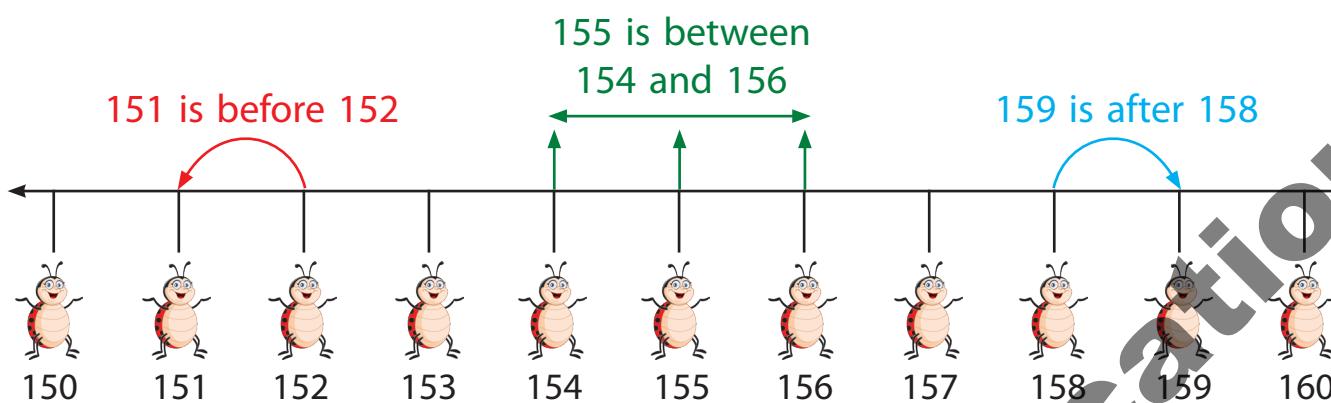
Before	
	33
	67
	9
	98

Between		
9	10	11
33		35
41		43
97		99

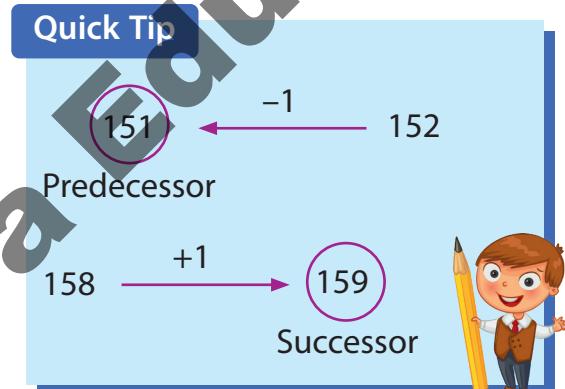
After	
39	
91	
57	
12	



Look at the number line.



- 151 is before 152. It is called the predecessor of 152. To find the predecessor, we subtract 1 from a number ($152 - 1 = 151$).
- 159 is after 158. It is called the successor of 158. To find the successor, we add 1 to a number ($158 + 1 = 159$).
- 155 is between 154 and 156.



- 11 Write the number that comes before the given number.

- (a) 123 (b) 140 (c) 131
(d) 186 (e) 190 (f) 155

- 12 Write the number that comes after the given number.

- (a) 179 (b) 111 (c) 120
(d) 198 (e) 152 (f) 149
(g) 166 (h) 185 (i) 197

13

Colour the box that has the number which comes between the two given numbers. Then write the number.

- (a) 108 110
 (b) 162 164
 (c) 189 191
 (d) 156 158
 (e) 170 172
 (f) 123 125

- | | | |
|-----|-----|-----|
| 107 | 109 | 110 |
| 163 | 161 | 165 |
| 188 | 192 | 190 |
| 155 | 157 | 159 |
| 171 | 169 | 173 |
| 122 | 126 | 124 |

Comparing Numbers

- A number that is closer to zero is the smaller number.
- A number that is farther from zero is the bigger number.
- A 2-digit number is always bigger than a 1-digit number.
- To compare 2-digit numbers compare the tens place first. If the tens place is the same, compare the ones place.

Recall

1. Find the bigger and smaller number in each of these boxes. Write S for smaller number and B for bigger number in the empty boxes.

15	18

71	8

67	39

99	9

2. Count the marbles and put < or > in the circles.



(a)





(b)





Let's learn how to compare bigger numbers.

Different number of digits	Same number of digits
The number with more digits is always greater.	When the number of digits is same, start comparing the digits from the leftmost digit.

Look at the given examples.

1. Compare 190 and 99.

$$\begin{array}{ccc} 190 & > & 99 \\ (3 \text{ digits}) & & (2 \text{ digits}) \end{array}$$

3. Compare 125 and 200.

$$\begin{array}{ccc} 1 & 2 & 5 \\ & \swarrow & \\ & 1 & \text{at the hundreds place} \end{array}$$

Since $2 > 1$, $200 > 125$.

4. Compare 198 and 189.

$$\begin{array}{ccc} 1 & 9 & 8 \\ & \swarrow & \\ & 1 & \text{at the hundreds place} \end{array}$$

The digit at the hundreds place is same in both the numbers. Thus, compare the digits at the tens place.

$$\begin{array}{ccc} 1 & 9 & 8 \\ & \swarrow & \\ & 9 & \text{at the tens place} \end{array}$$

Since $9 > 8$, $198 > 189$.

5. Compare 125 and 127.

$$\begin{array}{ccc} 1 & 2 & 5 \\ & \swarrow & \\ & 1 & \text{at the hundreds place} \\ & \swarrow & \\ & 2 & \text{at the tens place} \end{array}$$

The digits at the hundreds and tens places are same in both the numbers. Thus, compare the digits at the ones place.

Since $7 > 5$, $125 < 127$.

2. Compare 89 and 101.

$$\begin{array}{ccc} 89 & < & 101 \\ (2 \text{ digits}) & & (3 \text{ digits}) \end{array}$$

$$\begin{array}{ccc} 2 & 0 & 0 \\ & \swarrow & \\ & 2 & \text{at the hundreds place} \end{array}$$

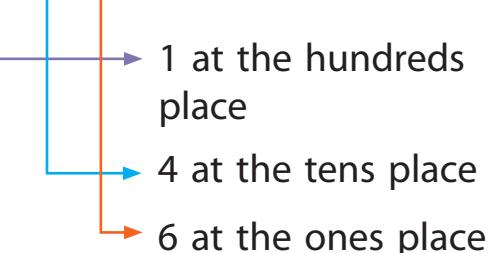
$$\begin{array}{ccc} 1 & 8 & 9 \\ & \swarrow & \\ & 1 & \text{at the hundreds place} \end{array}$$

$$\begin{array}{ccc} 1 & 8 & 9 \\ & \swarrow & \\ & 8 & \text{at the tens place} \end{array}$$

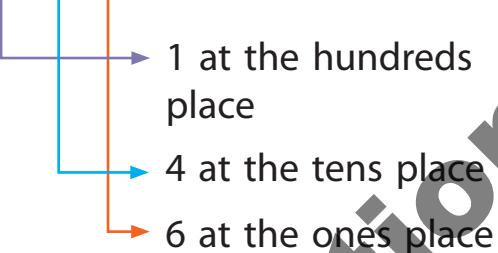
$$\begin{array}{ccc} 1 & 2 & 7 \\ & \swarrow & \\ & 1 & \text{at the hundreds place} \\ & \swarrow & \\ & 2 & \text{at the tens place} \end{array}$$

6. Compare 146 and 146.

1 4 6



1 4 6



The digits at the hundreds place, tens place and ones place are the same.
Thus, 146 $=$ 146.

14

Write greater or smaller in the blanks. Also, put the correct symbol $>$ or $<$ in the boxes.

- (a) 148 is _____ than 132 or 148 132.
- (b) 123 is _____ than 128 or 123 128.
- (c) 182 is _____ than 192 or 182 192.
- (d) 176 is _____ than 166 or 176 166.

15

Put the correct sign $>$, $<$ or $=$.

- | | | | |
|----------------------------------|-----|----------------------------------|----------------------------------|
| (a) 149 <input type="text"/> | 150 | (b) 166 <input type="text"/> 106 | (c) 153 <input type="text"/> 135 |
| (d) 118 <input type="text"/> 181 | | (e) 129 <input type="text"/> 129 | (f) 136 <input type="text"/> 119 |
| (g) 179 <input type="text"/> 197 | | (h) 188 <input type="text"/> 188 | (i) 160 <input type="text"/> 106 |

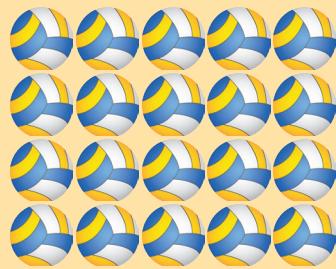
Ordering of Numbers

- Ascending order means to write given numbers from the smallest to the greatest.
- Descending order means to write given numbers from the greatest to the smallest.



Recall

Count the balls and write their numbers.



Now write the numbers in increasing and decreasing orders.

Increasing:

Decreasing:

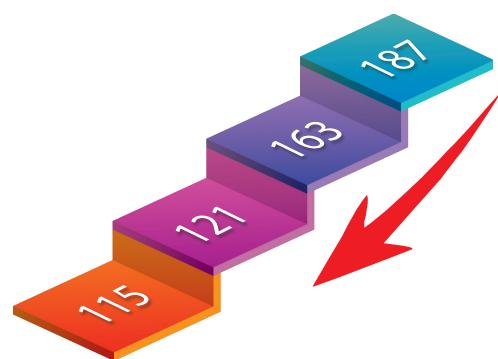
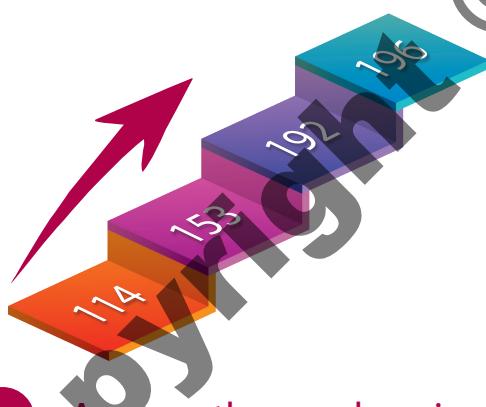


Now, let's arrange bigger numbers in ascending and descending orders.

Look at the given examples.

1. $114 < 153 < 192 < 196$ are in ascending order.

2. $187 > 163 > 121 > 115$ are in descending order.



16

Arrange the numbers in ascending order.

- (a) 149, 121, 153, 130, 185

121	130	149	153	185
-----	-----	-----	-----	-----

- (b) 110, 136, 175, 101, 192

--	--	--	--	--

- (c) 198, 127, 156, 168, 132

--	--	--	--	--

(d) 171, 106, 122, 184, 143

--	--	--	--	--

(e) 113, 129, 149, 160, 151

--	--	--	--	--

17 Arrange the numbers in descending order.

(a) 135, 163, 144, 182, 110

182	163	144	135	110
-----	-----	-----	-----	-----

(b) 121, 108, 132, 101, 140

--	--	--	--	--

(c) 189, 148, 121, 182, 139

--	--	--	--	--

(d) 190, 188, 193, 171, 189

--	--	--	--	--

(e) 101, 105, 128, 119, 134

--	--	--	--	--

Ordinal Numbers

Ordinal numbers are a kind of number names. They show the positions of things that are placed in a fixed order.

Look at the given picture to see the position of each child in the clown show.



Read and understand how to form ordinal numbers beyond 10.

Eleven – Eleventh (add th)

Twenty – Twentieth (change y to ie and add th)

Twenty-one – Twenty first (change the second number to an ordinal number)

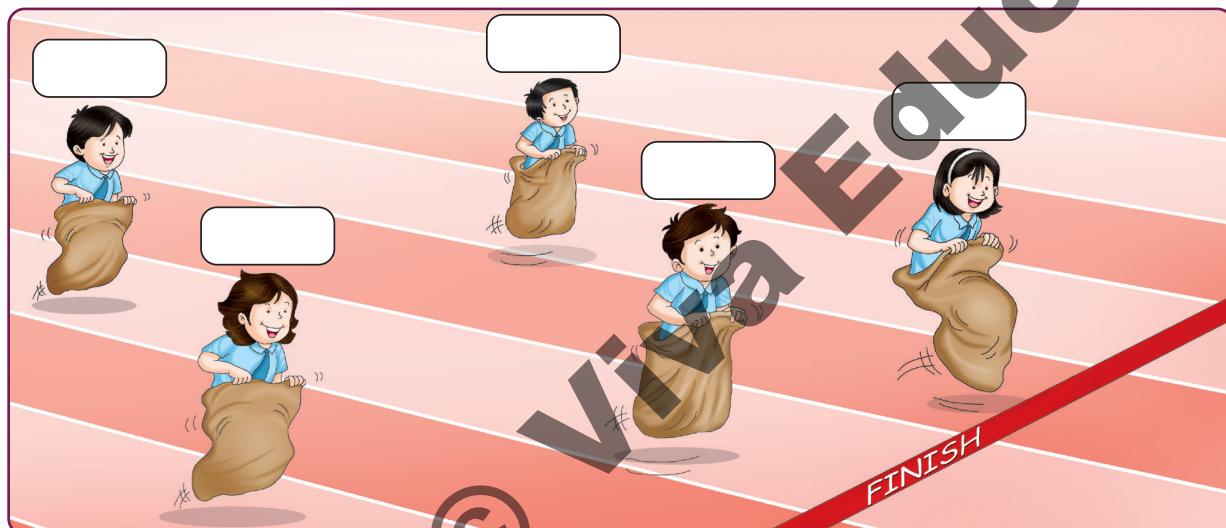
Remember

Number 12 is an exception as it is written as twelfth.



18 Answer the following questions.

- (a) Write the position of each child in the sack race held at school.



- (b) In the class exam, Akriti's rank was 12, Pallavi's was 21, Arushi's was 27 and Kinjal's was 31. Write their ranks in ordinal numbers.

Akriti

Pallavi

Arushi

Kinjal

Even and Odd Numbers

The objects that are in twos form a pair.

Look at these examples.



a pair of gloves



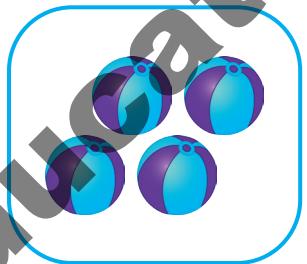
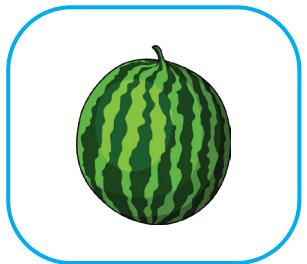
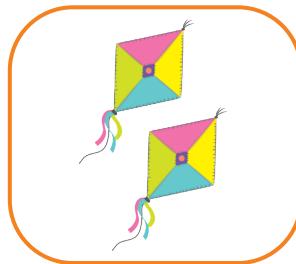
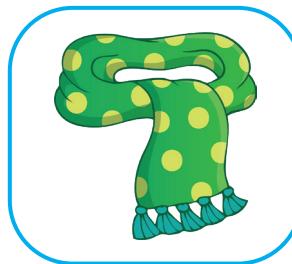
a pair of shoes



a pair of socks

19

Circle the objects that are in pairs.



Numbers which can be formed into pairs are called even numbers.

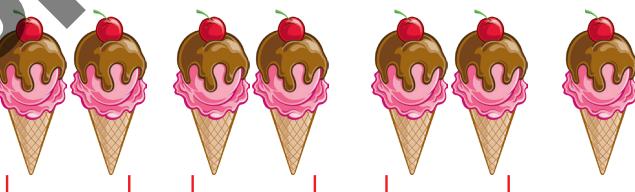
For example, we can form 4 pairs with 8 ice creams.



Thus, 8 is an even number.

Numbers which cannot be formed into pairs are called odd numbers.

For example, if we try to form pairs with 7 ice creams, we will get 3 pairs and 1 ice cream will be left.



Thus, 7 is an odd number.

Little Genius!

Name five parts of our body that are in pairs.



Remember

- Start with an even number and skip count in twos to get the next even number.

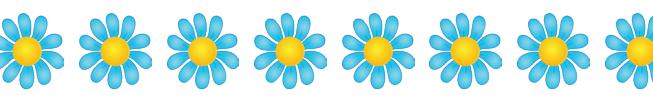
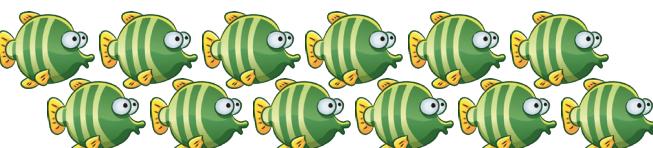
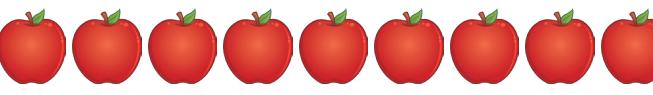
4, 5, 6, 7, 8, ...

- Start with an odd number and skip count in twos to get the next odd number.

3, 4, 5, 6, 7, ...



20 Write even or odd by pairing.

- (a)  = teddy bears
- (b)  = flowers
- (c)  = fish
- (d)  = apples
- (e)  = birds

There is an easy way to find even or odd for big numbers.

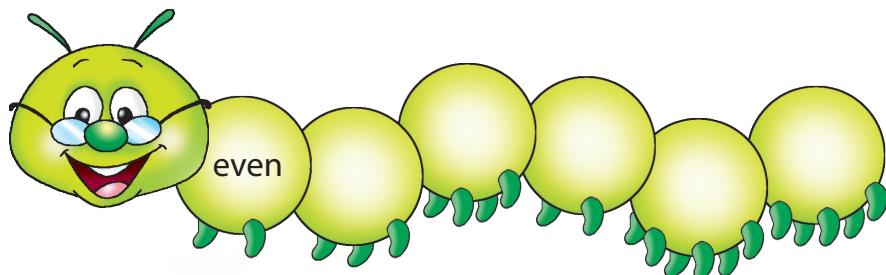
Even Numbers	Odd Numbers
Numbers ending in      are even numbers.	Numbers ending in      are odd numbers.

Look at the given examples.

110 ends with 0. So, it is an even number.

185 ends with 5. So, it is an odd number.

21 Tripti has drawn a caterpillar. Count the number of legs of the caterpillar and write even or odd.



22 Write even or odd.

(a) 108

(b) 83

(c) 134

(d) 60

(e) 112

(f) 35

(g) 129

(h) 70

(i) 161

23 Fill in the even numbers.

(a) 110 112 118

(b) 144 148 152

24 Fill in the odd numbers.

(a) 131 141

(b) 185 191 195

Word Problems

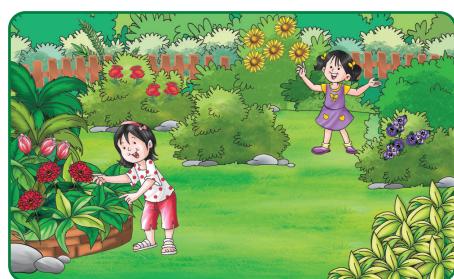
Let's see how we use Mathematics to solve daily-life problems.

1. In a park, Simmi counted 132 red flowers and Aarohi counted 128 yellow flowers. Who counted more flowers?

Simmi counted 132 flowers.

Aarohi counted 128 flowers.

Since $132 > 128$, Simmi counted more flowers.



2. Honey has 23 marbles. How many more marbles does she need to make 12 pairs?

Honey has 23 marbles.



On pairing, there are 11 pairs and 1 extra marble.

To make 12 pairs, she needs 1 more marble.

Little Genius!

Kriti has 23 coins. She gave 3 coins to her brother. How many pairs of coins are left with Kriti?



25

Solve these word problems.

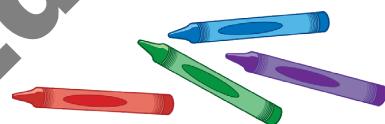
- (a) Ashu and Mishu were counting cars on their way to school. The number of cars they counted was more than 135 but less than 140. The number was an odd number ending with 7. How many cars did they count?

Ashu and Mishu counted cars.



- (b) Sam had even number of crayons. Amanpreet had odd number of crayons. Who out of the two can form pairs?

can form pairs.



- (c) Soni had 11 toffees. How many more toffees does she need to make 7 pairs?

Soni needs toffee.



- (d) Prachi has 165 stamps. Sonam has 178 stamps. Shonali has 139 stamps. Who among the three has more stamps? Who out of the three can form pairs?

Prachi has stamps.



Sonam has stamps.



Shonali has stamps.



> >

has more stamps.

can form pairs.



HOW MUCH DO YOU KNOW?



1 Fill in the blank boxes.

(a) $163 = \boxed{\quad}$ hundred + $\boxed{\quad}$ tens + $\boxed{\quad}$ ones

(b) $\boxed{\quad} = 1 \text{ hundred} + 2 \text{ tens} + 7 \text{ ones}$

(c) $196 = \boxed{\quad}$ hundred + $\boxed{\quad}$ tens + $\boxed{\quad}$ ones

2 Write the number names.

(a) $138 =$

(b) $147 =$

(c) $199 =$

(d) $164 =$

3 Write the short form.

(a) $100 + 4 =$

(b) $100 + 60 + 3 =$

(c) $80 + 7 =$

(d) $100 + 20 + 9 =$

(e) $100 + 10 =$

(f) $100 + 30 + 5 =$

4 Write in expanded form.

(a) $192 =$ + +

(b) $118 =$ + +

(c) $154 =$ + +

(d) $105 =$ + +

5 Fill in the blanks.

- (a) The place value of 6 in 164 is _____ and its face value is _____.
- (b) In the number 197, 7 is at the _____ place.
- (c) The number after 125 is _____.
- (d) The number between 173 and 175 is _____.

6 Write any six even numbers between 130 and 150 in ascending order.

7 Write any six odd numbers between 170 and 190 in descending order.

8 Tick (✓) the correct answer.

- (a) The even number between 150 and 153 is:
- (i) 150 (ii) 151 (iii) 152 (iv) 153
- (b) The short form of $100 + 8$ is:
- (i) 18 (ii) 108 (iii) 180 (iv) 118
- (c) The place value of 7 in 178 is:
- (i) 7 (ii) 70 (iii) 700 (iv) none of these

9 Fill in the boxes to find the name of a very nutritious vegetable.

Hint



I—third box, H—seventh box, S—first box,
C—sixth box, A—fifth box, P—second box,
N—fourth box





VALUES AND LIFE SKILLS



Nikki and Mikki got some coins from their mother to put in their coin boxes. Nikki got 4 more than 20 and Mikki got 1 less than 30. How many coins do they have?

Nikki had coins.

Mikki had coins.



Is it a good habit to save money? Do you save your money and how?



SCRATCH YOUR BRAIN



- Suyash counted 24 positions ahead of 124. Then he counted 6 positions more. What number did he reach?
- Shivani counted 25 notes the first time. Second time she counted 1 more. To check, she counted again and found 1 note less than the second count. How many currency notes were there?
- In the class roll number list, Muskan is 3 positions behind Honey. Honey's roll number is fifth. Write Muskan's roll number as an ordinal number?

Worksheet

Numbers



Twinkle wants to find out the number of books in different racks of her school library. The librarian has given her some hints. Help Twinkle to match the number with the correct rack.

This rack has even number of books.



199

This rack has $100 + 63$ books.

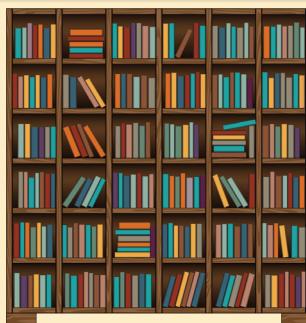


This rack has the lowest number of books.



153

This rack has the highest number of books.



Number of books in this rack has 5 at the tens place.



127

88

This rack has odd number of books ending in 7.

163

79

2



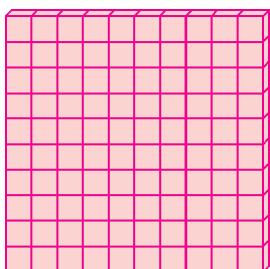
Numbers 201 To 1000



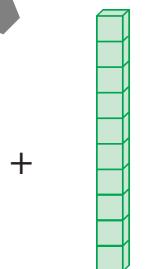
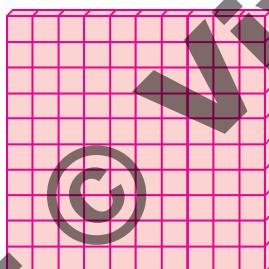
I know numbers till 200 now. Can you help me to count numbers more than 200?



It's very easy, Aman. I will help you to count numbers beyond 200 using blocks of hundreds, tens and ones.



2 hundreds



1 ten



3 ones

$$+ \quad + \quad = \quad 213$$

Similarly, 3 hundreds + 9 tens + 4 ones = 394

7 hundreds + 2 tens + 9 ones = 729

We already know that to write the number name of a 3-digit number, we always write the hundreds place first, then the tens and ones places together. Let's see how to write number names of numbers more than 200.

213 is written as two hundred thirteen.

394 is written as three hundred ninety-four.

729 is written as seven hundred twenty-nine.

908 is written as nine hundred eight.

Numbers from 201 to 300

- 1 Fill in the missing numbers and read them aloud.

201		221		241		261			291
	212				252			282	
		223		243			273		
204			234						294
	215				255				
				246		266		286	
			237				277		
208		228				268			298
	219				259				
210		230					280		300

Now, write the number names.

209

265

299

240

300

272

Numbers from 301 to 400

- 2 Fill in the missing numbers and read them aloud.

301		321			351		371		
	312			342		362			392
			333				373		
304		324			354			384	
	315			345					395
			337		357		366		
		328		348				387	
	319					369		389	
310		330	340		360		380		400

Now, write the number names.

333

357

369

398

372

345

Numbers from 401 to 500

- 3 Fill in the missing numbers and read them aloud.

401		421			451			481	
	412			442		462			492
			433				473		
		424		444					494
					455				
406						466			
	417		437				477		
408		428						488	
			439		459		479		499
	420			450		470		490	

Now, write the number names.

420

444

499

500

452

465

Numbers from 501 to 600

- 4 Fill in the missing numbers and read them aloud.

501			531			561			591
	512			542			572		
		523				563		583	
505		525			555		575		
	516					567			596
			537				587		
				548					
	519				559		579		
510		530		550					600

Now, write the number names.

515

543

555

567

509

524

Numbers from 601 to 700

- 5 Fill in the missing numbers and read them aloud.

601				641			671		
		622				662			692
	613		633		653			683	
604				644			674		
					655				695
			636			666			
	617						677		
			638			668		688	
609				649					
		630			660				700

Now, write the number names.

616

636

666

699

622

647

Numbers from 701 to 800

- 6 Fill in the missing numbers and read them aloud.

701			731		751		771		791
	712							782	
		723		743		763			
			734						
	715				755				
							776		
707		727		747		767		787	
									798
	719		739		759			789	
710				750		770			800

Now, write the number names.

707

755

767

798

735

782

Numbers from 801 to 900

7

Fill in the missing numbers and read them aloud.

801				841				881	
		822			852		872		
			833			863		883	
	814			844					894
					855				
806			836			866			
		827					877		
	818			848				888	
			839			869			
		830			860				900

Now, write the number names.

809

818

888

899

845

873

Numbers from 901 to 999

- 8 Fill in the missing numbers and read them aloud.

901		921			951			981	
							972		
	913			943		963			993
			934						
	915				955		975		
				946					996
907		927					977		
								988	
	919		939		959				999
910		930		950					★

Now, write the number names.

909

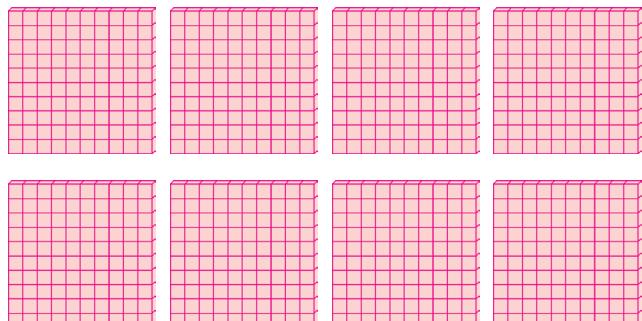
939

967

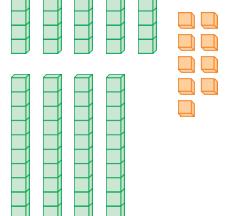
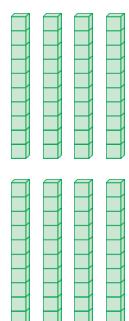
999

914

999 is the greatest 3-digit number. When we add 1 to it, we get 1 thousand (1000). It is the smallest 4-digit number.



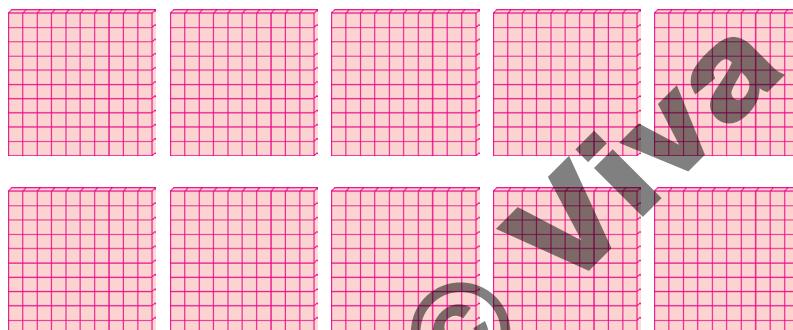
999



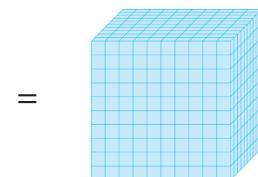
$$+ \square =$$
$$+ 1 = 1000$$

(1 thousand)

So, 10 hundreds make 1 thousand.



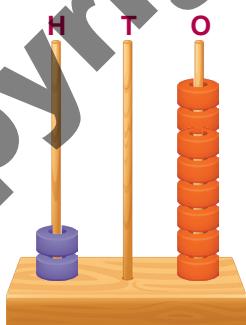
10 hundreds



1 thousand (1000)

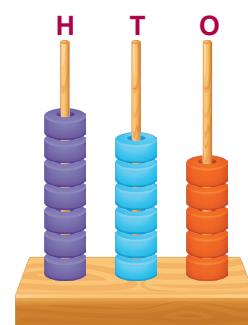
Counting on the Abacus

Look at the given examples.



$$2 \text{ hundreds} + 0 \text{ tens} + 8 \text{ ones} = 208$$

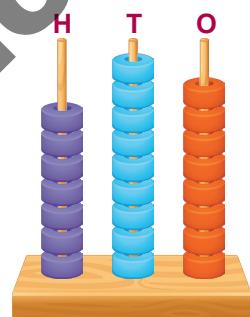
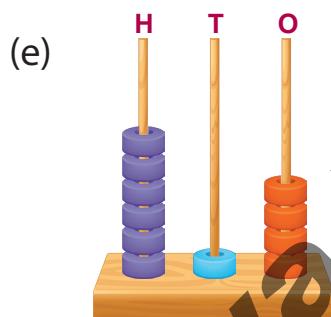
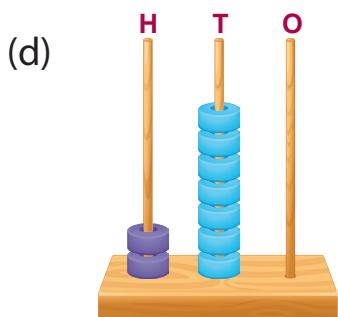
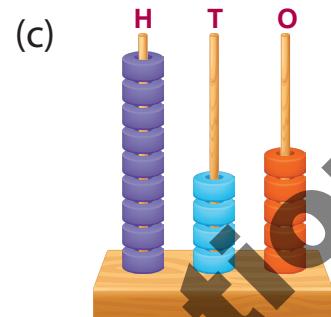
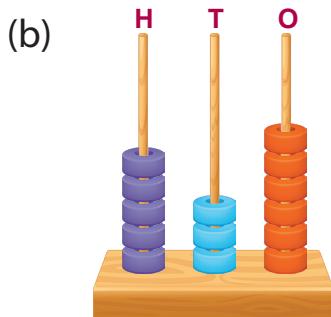
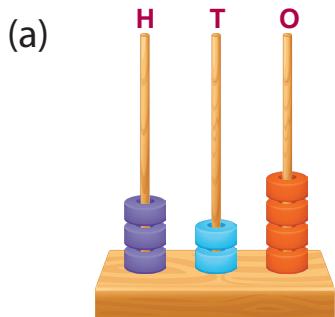
Two hundred eight



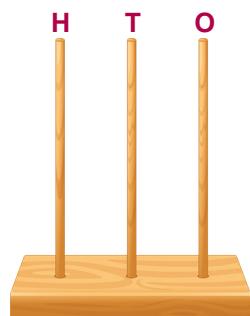
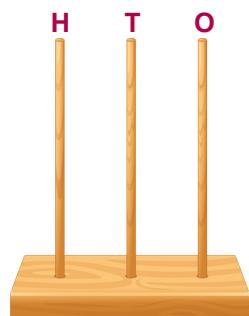
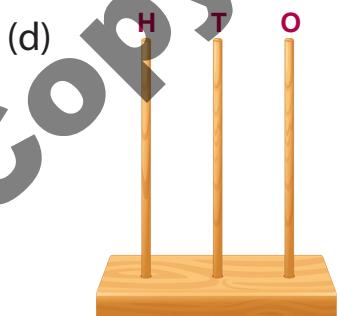
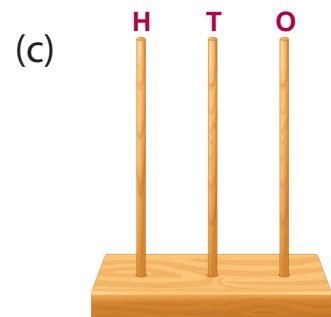
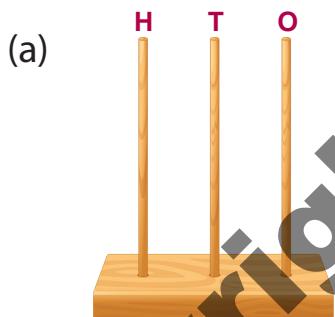
$$7 \text{ hundreds} + 6 \text{ tens} + 5 \text{ ones} = 765$$

Seven hundred sixty-five

9 Look at the abacus and write the number.



10 Draw beads on the abacus to represent the numbers.



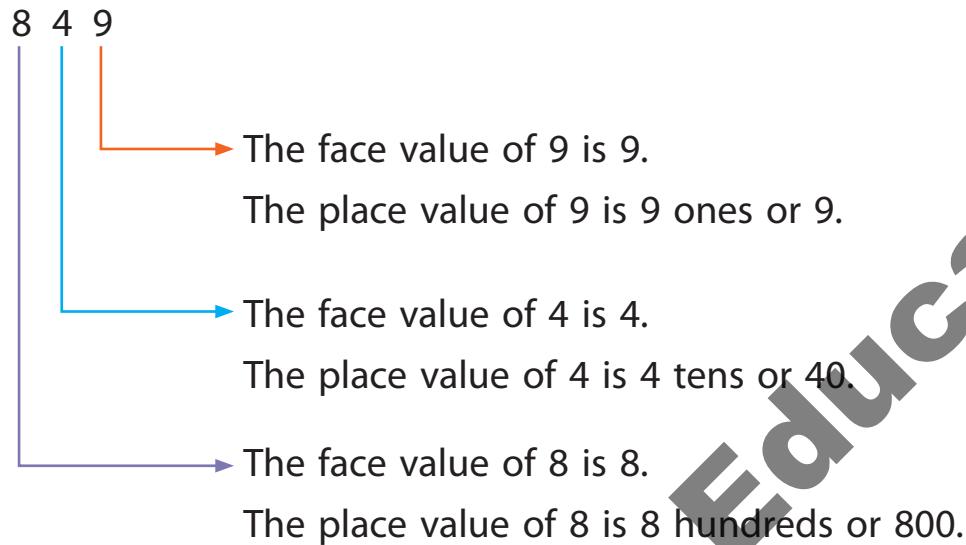
942

380

829

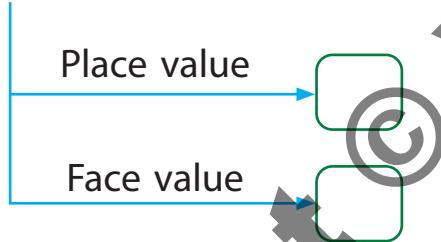
Face Value and Place Value

We already know how to find the face value and place value of a digit in a given number. Let's revise it with the help of an example.

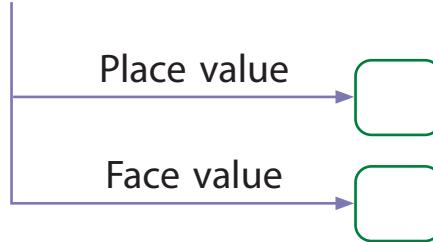


- 11 Fill in the blank boxes.

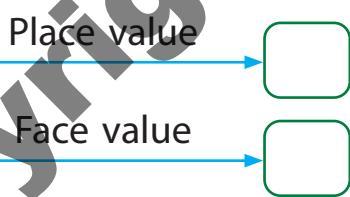
(a) 2 6 3



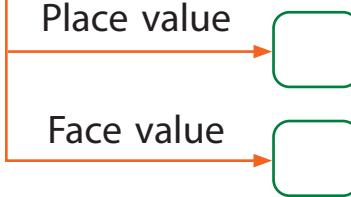
(b) 9 2 8



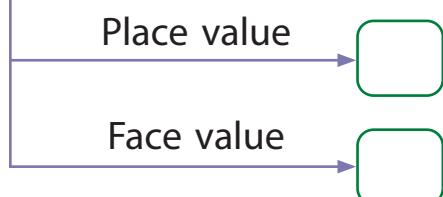
(c) 7 0 1



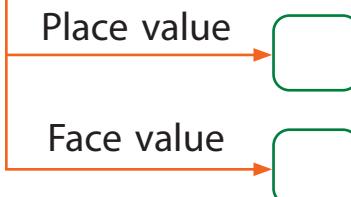
(d) 5 4 7



(e) 4 9 9



(f) 8 2 5



Short Form and Expanded Form

Look at the given examples.

Short form Expanded form

1. $498 = 4 \text{ hundreds} + 9 \text{ tens} + 8 \text{ ones}$
 $= 400 + 90 + 8$
2. $607 = 6 \text{ hundreds} + 0 \text{ tens} + 7 \text{ ones}$
 $= 600 + 0 + 7$

Little Genius!

Tick (✓) the correct expanded form of the successor of 459.

- (a) $400 + 50 + 0$
- (b) $400 + 50 + 8$
- (c) $400 + 60 + 0$



- 12 Write in expanded form.

(a) $792 = \boxed{} + \boxed{} + \boxed{}$

(b) $864 = \boxed{} + \boxed{} + \boxed{}$

(c) $247 = \boxed{} + \boxed{} + \boxed{}$

(d) $395 = \boxed{} + \boxed{} + \boxed{}$

(e) $618 = \boxed{} + \boxed{} + \boxed{}$

(f) $503 = \boxed{} + \boxed{} + \boxed{}$

- 13 Write the short form.

(a) $400 + 10 + 9 = \boxed{}$

(b) $200 + 20 + 2 = \boxed{}$

(c) $900 + 80 + 9 = \boxed{}$

(d) $600 + 50 + 4 = \boxed{}$

(e) $500 + 90 + 0 = \boxed{}$

(f) $800 + 70 + 3 = \boxed{}$

- 14 Fill in the blank boxes.

(a) $\boxed{3} \text{ hundreds} + \boxed{4} \text{ tens} + \boxed{1} \text{ one} = \boxed{300} + \boxed{40} + \boxed{1} = \boxed{}$

(b) $\boxed{6} \text{ hundreds} + \boxed{2} \text{ tens} + \boxed{5} \text{ ones} = \boxed{} + \boxed{} + \boxed{} = \boxed{}$

(c) $\boxed{} \text{ hundreds} + \boxed{} \text{ tens} + \boxed{} \text{ ones} = \boxed{} + \boxed{} + \boxed{} = \boxed{438}$

(d) $\boxed{} \text{ hundreds} + \boxed{} \text{ tens} + \boxed{} \text{ ones} = \boxed{200} + \boxed{90} + \boxed{7} = \boxed{}$

(e) 5 hundreds + 7 tens + 0 ones = + + =

(f) hundreds + tens + ones = + + = 906

Comparing Numbers

Let's revise the rules we follow to compare 3-digit numbers.

- First compare the digits in the hundreds place.

876, 765 Since $8 > 7$, $876 > 765$.

- If the digits in the hundreds place are the same, compare the digits in the tens place.

876, 895 Since $7 < 9$, $876 < 895$.

- If the digits in the hundreds and tens places are the same, compare the digits in the ones place.

876, 875 Since $6 > 5$, $876 > 875$.

15 Write the smallest number.

(a) 242, 369, 179, 745



(b) 564, 82, 179, 803



(c) 902, 920, 912, 921



(d) 356, 415, 201, 636



(e) 221, 624, 89, 372



(f) 653, 356, 536, 65



16 Circle the greatest number.

(a) 635, 543, 298, 736

(b) 758, 752, 756, 721

(c) 420, 451, 475, 374

(d) 206, 234, 219, 201

(e) 325, 256, 410, 561

(f) 998, 996, 990, 991

(g) 456, 789, 901, 951

(h) 305, 503, 619, 196

17 Put the correct sign $>$, $<$ or $=$.

(a) 457 377

377

(b) 832 328

328

(c) 622 632

632

(d) 899 989

989

(e) 241 226

226

(f) 708 708

708

(g) 524 425

425

(h) 809 908

908

(i) 496 391

391

Before, After and Between

Look at the given example.

453
↓
before

454
↓
between

455
↓
after

18 Write what comes before, after or between.

(a) 989

(b) 399 401

(c) 540

(d) 734

(e) 793

(f) 620 622

(g) 248 250

(h) 900

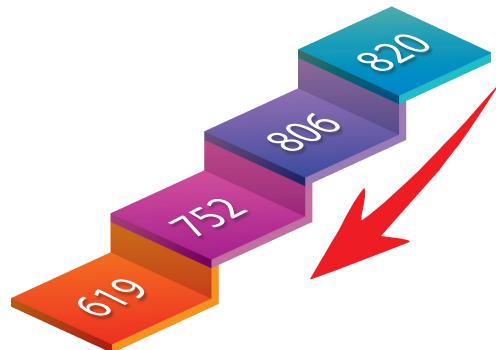
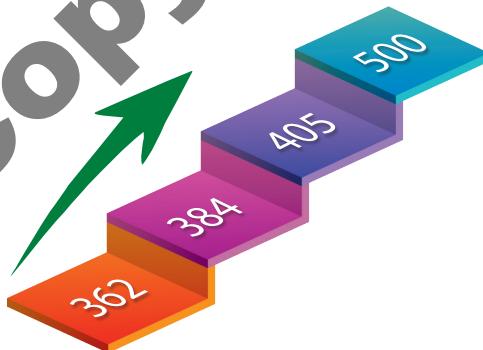
(i) 850

Ordering of Numbers

Look at the given examples.

1. 362, 384, 405, 500 are in ascending order.

2. 820, 806, 752, 619 are in descending order.



19 Arrange in ascending order.

- (a) 301, 298, 442, 332

--	--	--	--

- (b) 768, 760, 762, 765

--	--	--	--

- (c) 549, 560, 517, 599

--	--	--	--

- (d) 810, 832, 715, 428

--	--	--	--

- (e) 499, 491, 496, 494

--	--	--	--

20 Arrange in descending order.

- (a) 518, 609, 204, 722

--	--	--	--

- (b) 391, 398, 390, 396

--	--	--	--

- (c) 987, 897, 978, 798

--	--	--	--

- (d) 263, 236, 623, 362

--	--	--	--

- (e) 714, 417, 741, 471

--	--	--	--

Forming Numbers

We can form numbers with the given digits by arranging them in different order.

- To form the greatest number, arrange the given digits in descending order.
- To form the smallest number, arrange the given digits in ascending order.



Look at the given examples.

1. Using the digits 2 and 9, the greatest number formed is 92 and the smallest number formed is 29.
2. Using the digits 3, 9 and 1, the greatest number formed is 931 and the smallest number formed is 139.
3. Using the digits 2, 5 and 0, the greatest number formed is 520 and the smallest number formed is 205.

Quick Tip

While forming the smallest 3-digit number, never place 0 at the hundreds place as it will then become a 2-digit number. So place 0 at the tens place.



- 21 Form the greatest and the smallest 2-digit number with the digits 1 and 4.

Greatest number:

Smallest number:

- 22 Fill in the blank boxes with digits 2, 6 and 0 to form the greatest and the smallest 3-digit number.

Greatest number:

	<input type="text"/>	<input type="text"/>
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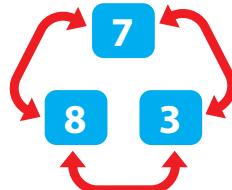
Smallest number:

	<input type="text"/>	<input type="text"/>
--	----------------------	----------------------

- 23 Form the greatest and the smallest 3-digit number with the digits 7, 3 and 8.

Greatest number:

Smallest number:



Little Genius!

Form the greatest 3-digit number using the digits 6, 2, 5.

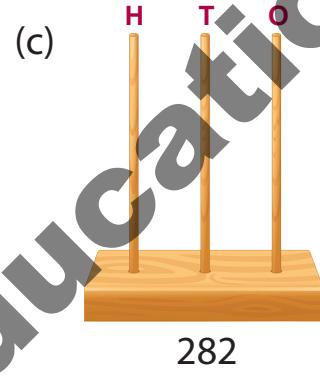
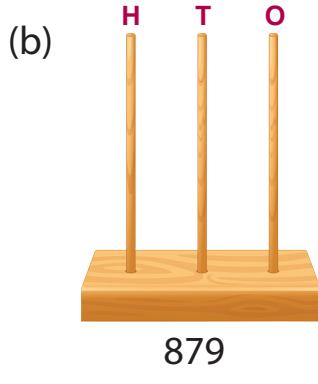
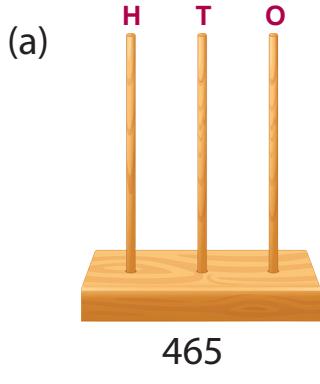
Now form three more numbers using the same digits.





HOW MUCH DO YOU KNOW?

- 1 Draw beads on the abacus to represent the given numbers.



- 2 Fill in the blank boxes.

- (a) $287 = \boxed{} \text{ hundreds} + \boxed{} \text{ tens} + \boxed{} \text{ ones}$
- (b) $542 = \boxed{} \text{ hundreds} + \boxed{} \text{ tens} + \boxed{} \text{ ones}$
- (c) $\boxed{} = 9 \text{ hundreds} + 0 \text{ tens} + 6 \text{ ones}$
- (d) $\boxed{} = 6 \text{ hundreds} + 3 \text{ tens} + 1 \text{ one}$

- 3 Fill in the blanks.

- (a) The place value of 8 in 382 is _____.
- (b) The number 806 is _____ than 916.
- (c) The short form of $500 + 20 + 1$ is _____.
- (d) The face value of 6 in 617 is _____.
- (e) The numbers 296, 299, 341, 423 are in _____ order.
- (f) The number name for 937 is _____.
- (g) The greatest 3-digit number formed with 3, 7 and 5 is _____.

4 Write True or False.

- (a) 728 is less than 725.
- (b) The place value of 5 in 507 is 500.
- (c) The expanded form of 651 is $600 + 50 + 1$.
- (d) The face value of 7 in 375 is 70.
- (e) The numbers 301, 300, 296, 201 are in ascending order.
- (f) 329 is the smallest 3-digit number formed with the digits 9, 3 and 2.



VALUES AND LIFE SKILLS

- (a) In a fair, a football is for ₹ 345 in shop A and for ₹ 350 in shop B. From which shop should Rohnit buy his football?

Shop A ₹

Shop B ₹

<



Rohnit should buy the football from _____.

Is it good to argue with your parents for buying costly toys?

- (b) Rajneesh has a collection of 249 buttons. Anandita has a collection of 309 buttons and Sunanda has a collection of 199 buttons. Who out of the three has more buttons?

Rajneesh

Anandita

Sunanda

> >



_____ has more buttons.

Do you collect things as a hobby? What do you collect?

(c) Five friends got the following marks in their annual examination.

Vishal — 175

Dhruv — 191

Surbhi — 192

Manmeet — 200

Harshita — 169

Arrange the marks obtained in the decreasing order. Who got the highest marks?

<input type="text"/>	>	<input type="text"/>						
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_____ got the highest marks.

Do you make fun of your friends if they get less marks than you? Is it good to do so?



Observe the values of the letters of the alphabet. Then answer the questions that follow.

A → 0	G → 6	M → 2	S → 8	Y → 4
B → 1	H → 7	N → 3	T → 9	Z → 5
C → 2	I → 8	O → 4	U → 0	
D → 3	J → 9	P → 5	V → 1	
E → 4	K → 0	Q → 6	W → 2	
F → 5	L → 1	R → 7	X → 3	

1. What numbers do the following words represent?

(i) RUN

(ii) DAD

(iii) BAT

(iv) JOY

(v) FEW

(vi) ZOO

2. Place the correct sign >, < or =.

(i) BAT

RAT

(ii) TWO

YOU

(iii) TOY

BOY

(iv) FLY

PLY

(v) RUN

SUN

(vi) FIX

MIX



INDIVIDUAL ACTIVITY

To understand the concept of forming and comparing numbers

Things We Need: A dice and a pencil

How To Do:

1. Take a dice and throw it.
2. Note down the digit from the top face of the dice in the table given below.
3. Throw the dice two more times and note down the digits in the table.
4. From the digits obtained, form the greatest and the smallest 3-digit numbers.
5. Repeat the above steps twice.

Round	Digit obtained in first throw	Digit obtained in second throw	Digit obtained in third throw	Greatest 3-digit number	Smallest 3-digit number
1					
2					
3					

From the numbers formed, the greatest 3-digit number is _____
and the smallest 3-digit number is _____.



3



Addition



Let's Recall ...

Sum means ADDITION. Addition is counting forward. In addition of two 2-digit numbers, first add the numbers given in the ones place, then add the tens.

Add all the numbers to find their sums. Help Sahir to get his book by moving to the sums which are more than 50.

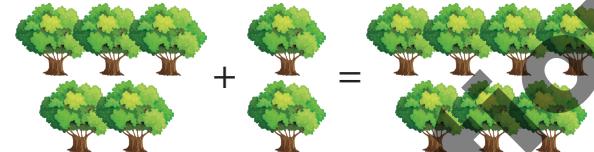
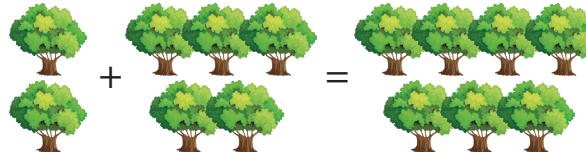
The diagram shows a path from a boy on the left to a book on the right, connected by a series of addition problems. Each problem is a 2x2 grid with 'T' (Tens) and 'O' (Ones) labels. The steps are outlined in purple, and the book is at the top right.

- Step 1:** $20 + 13 = 33$
- Step 2:** $33 + 27 = 60$
- Step 3:** $60 + 14 = 74$
- Step 4:** $74 + 42 = 116$
- Step 5:** $116 + 29 = 145$
- Step 6:** $145 + 46 = 191$
- Step 7:** $191 + 21 = 212$
- Step 8:** $212 + 31 = 243$
- Step 9:** $243 + 44 = 287$
- Step 10:** $287 + 33 = 320$

Addition Facts

1. We can add two numbers in any order. The answer will be the same.

$$2 + 5 = 7 = 5 + 2$$



2. On adding zero to a number, the number remains unchanged.

$$6 + 0 = 6 = 0 + 6$$



Addition of 2-Digit and 3-Digit Numbers

To add a 2-digit number with a 3-digit number, first add the ones, then the tens and finally keep the hundreds.

Common Mistake!

Always write the numbers in their correct place.

H	T	O
1	4	2
+	3	6

(✗)



Look at the given example.

H	T	O
1	4	2
+	3	6

H	T	O
1	4	2
+	3	6

H	T	O
1	4	2
↓	3	6
1	7	8

Step 1: Add the ones.

$$2 + 6 = 8$$

Step 2: Add the tens.

$$4 + 3 = 7$$

Step 3: Keep the hundreds.

1 Find the sum.

(a)

H	T	O
1	2	3
+	5	4

(b)

H	T	O
2	5	4
+	2	1

(c)

H	T	O
9	8	0
+	1	6

(d)

H	T	O
5	6	2
+	2	5

(e)

H	T	O
6	7	5
+	1	4

(f)

H	T	O
8	4	3
+	3	6

(g) $174 + 12$

H	T	O
+		

(h) $349 + 20$

H	T	O
+		

(i) $462 + 17$

H	T	O
+		

2 Match the sum with its number name.

Sum

(a) $53 + 21$

(b) $62 + 13$

(c) $45 + 20$

(d) $130 + 16$

(e) $107 + 22$

(f) $24 + 15$

Number name

(i) One hundred forty-six

(ii) One hundred twenty-nine

(iii) Seventy-four

(iv) Seventy-five

(v) Thirty-nine

(vi) Sixty-five

Addition of Two 3-Digit Numbers

To add 3-digit numbers, first add the ones, then the tens and finally the hundreds.
Look at the given example.

H	T	O
2	5	3
+	3	2
		9

Step 1: Add the ones.
 $3 + 6 = 9$

H	T	O
2	5	3
3	2	6
		7

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

H	T	O
2	5	3
3	2	6
		9

Step 3: Add the hundreds.
 $2 + 3 = 5$

3 Find the sum.

(a)

H	T	O
3	2	1
+	2	6
		8

(b)

H	T	O
6	0	7
+	2	8
		1

(c)

H	T	O
7	2	3
2	5	6

(d)

H	T	O
5	1	6
+	3	0
		2

(e)

H	T	O
4	0	0
+	3	9
		5

(f)

H	T	O
2	8	4
5	0	3

(g) $635 + 264$

H	T	O
6	3	5
+	2	6
		4

(h) $410 + 409$

H	T	O
4	1	0
+	4	0
		9

(i) $815 + 183$

H	T	O
8	1	5
+	1	8
		3

Addition of Three 3-Digit Numbers

Add three 3-digit numbers by following the same steps that we follow to add two 3-digit numbers.

Look at the given example.

H	T	O
1	2	3
3	1	2
+	4	4
		8

Step 1: Add the ones of the first two numbers.

$$3 + 2 = 5$$

Add the sum 5 to the ones of the third number.

$$5 + 3 = 8$$

H	T	O
1	2	3
3	1	2
+	4	4
	7	8

Step 2: Add the tens of the first two numbers.

$$2 + 1 = 3$$

Add the sum 3 to the tens of the third number.

$$3 + 4 = 7$$

H	T	O
1	2	3
3	1	2
+	4	4
8	7	8

Step 3: Add the hundreds of the first two numbers.

$$1 + 3 = 4$$

Add the sum 4 to the hundreds of the third number.

$$4 + 4 = 8$$

4

Find the sum.

(a)

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

(b)

H	T	O
3	1	2
1	0	5
+	2	6
		1

(c)

H	T	O
2	0	5
3	5	0
+	1	2
		3



(d)

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

(e)

H	T	O
5	1	3
1	4	0
+	2	3
		6

(f)	H	T	O
	1	7	3
	4	0	5
+	2	1	1

(g)	H	T	O
	3	6	2
	2	1	4
+	2	0	3

(h)	H	T	O
	1	3	4
	4	0	2
+	3	5	3

(i)

H	T	O
1	2	4
3	0	1
4	5	2
+		

$$(j) \quad 432 + 206 + 161$$

H	T	O
+		

(k) 302 + 253 + 132

	H	T	O
+			

$$(I) \quad 522 + 141 + 231$$

Little Genius!

Add mentally and write the answer.

(a) $300 + 215 + 122 =$

(b) $132 + 403 + 200 =$

(c) $251 + 111 + 500 =$

(d) $601 + 150 + 100 =$

(e) $400 + 305 + 200 =$

(f) $125 + 300 + 125 =$



Addition Using Expanded Form

To add the given numbers using the expanded form, follow these steps.

- Write each number in the expanded form.
- Add the values at each place.
- Find the sum of the added values.

Look at the given examples.

1.	T O	Expanded form	H T O																								
	<table border="1"><tr><td>5</td><td>6</td></tr><tr><td>7</td><td>8</td></tr><tr><td colspan="2">+</td></tr></table>	5	6	7	8	+		<table border="1"><tr><td>50</td><td>+</td><td>6</td></tr><tr><td>70</td><td>+</td><td>8</td></tr><tr><td colspan="3">120 + 14</td></tr></table>	50	+	6	70	+	8	120 + 14			<table border="1"><tr><td>1</td><td>2</td><td>0</td></tr><tr><td>1</td><td>1</td><td>4</td></tr><tr><td colspan="3">134</td></tr></table>	1	2	0	1	1	4	134		
5	6																										
7	8																										
+																											
50	+	6																									
70	+	8																									
120 + 14																											
1	2	0																									
1	1	4																									
134																											

$$\text{So, } 56 + 78 = 134.$$

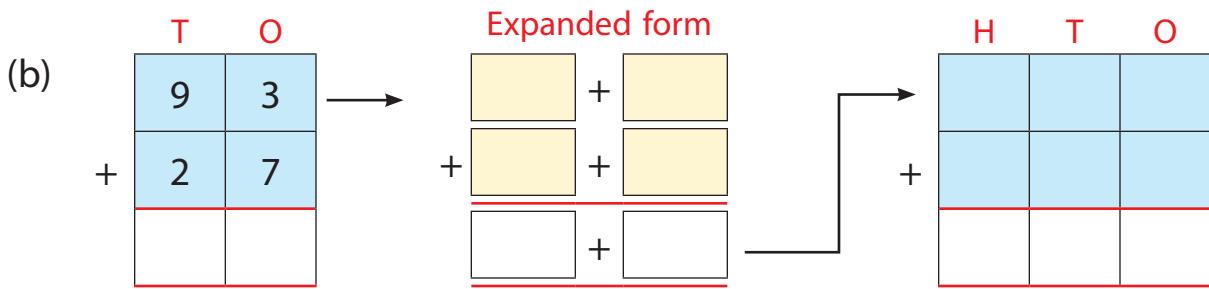
2.	H T O	Expanded form	H T O																																				
	<table border="1"><tr><td>4</td><td>3</td><td>7</td></tr><tr><td>5</td><td>4</td><td>8</td></tr><tr><td colspan="3">+</td></tr></table>	4	3	7	5	4	8	+			<table border="1"><tr><td>400</td><td>+</td><td>30</td><td>+</td><td>7</td></tr><tr><td>500</td><td>+</td><td>40</td><td>+</td><td>8</td></tr><tr><td colspan="5">900 + 70 + 15</td></tr></table>	400	+	30	+	7	500	+	40	+	8	900 + 70 + 15					<table border="1"><tr><td>9</td><td>0</td><td>0</td></tr><tr><td></td><td>7</td><td>0</td></tr><tr><td></td><td>1</td><td>5</td></tr><tr><td colspan="3">985</td></tr></table>	9	0	0		7	0		1	5	985		
4	3	7																																					
5	4	8																																					
+																																							
400	+	30	+	7																																			
500	+	40	+	8																																			
900 + 70 + 15																																							
9	0	0																																					
	7	0																																					
	1	5																																					
985																																							

$$\text{So, } 437 + 548 = 985.$$

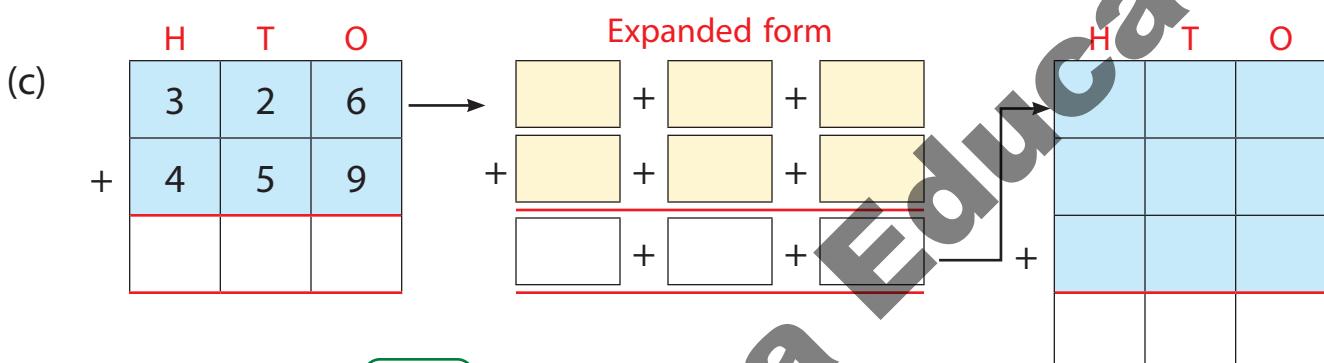
- 5 Add using the expanded form.

(a)	T O	Expanded form	H T O																								
	<table border="1"><tr><td>7</td><td>5</td></tr><tr><td>5</td><td>6</td></tr><tr><td colspan="2">+</td></tr></table>	7	5	5	6	+		<table border="1"><tr><td></td><td>+</td><td></td></tr><tr><td></td><td>+</td><td></td></tr><tr><td colspan="3">+ +</td></tr></table>		+			+		+ +			<table border="1"><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td colspan="3">+</td></tr></table>							+		
7	5																										
5	6																										
+																											
	+																										
	+																										
+ +																											
+																											

$$\text{So, } 75 + 56 = \boxed{}.$$



So, $93 + 27 = \boxed{}$.



Addition Using Carry Over Method

Look at the steps we follow to add two 3-digit numbers with carry over.

H	T	O
3	5	6
+	5	8
		13

Step 1: Add the ones.

$$6 + 7 = 13$$

Common Mistake!

H	T	O
1 3	1 5	6
+	5	8
		8 3 (x) 3



Remember to add the carried over digits.

H	T	O
3	5	6
+	5	8
	14	3

Step 2: 13 is a 2-digit number. Write 3 in the ones place and carry over 1 to the tens place. Add the tens including the 1 carried over.

$$1 + 5 + 8 = 14$$

H	T	O
1 3	1 5	6
+	5	8
	9	4

Step 3: 14 is again a 2-digit number. Write 4 in the tens place and carry over 1 to the hundreds place. Add the hundreds including the 1 carried over.

$$1 + 3 + 5 = 9$$

We can add more than two numbers also by following the same steps.

Look at the given examples.

1.

T	O
4	5
2	3
1	8
8	6

2.

H	T	O
2	6	5
3	7	4
1	2	6
7	6	5

Add the ones and carry over the tens digit of the sum.
Then add the tens.

Add the ones and carry over the tens digit of the sum. Then add the tens in the same way. Lastly, add the hundreds.

6 Add the numbers.

(a) $48 + 267$

H	T	O
+		

(b) $197 + 655$

H	T	O
+		

(c) $476 + 319$

H	T	O
+		

(d) $38 + 46 + 12$

T	O
+	

(e) $55 + 28 + 10$

T	O
+	

(f) $4 + 27 + 8$

T	O
+	

(g) $49 + 20 + 14$

T	O
+	

(h)

H	T	O
2	6	5
4	7	
1	5	2
+		

(i)

H	T	O
4	3	8
2	2	5
2	0	4
+		

(j)

H	T	O
	7	2
1	0	9
4	5	6
+		

(k) $180 + 267 + 538$

H	T	O
+		

(l) $295 + 346 + 37$

H	T	O
+		

(m) $506 + 73 + 182$

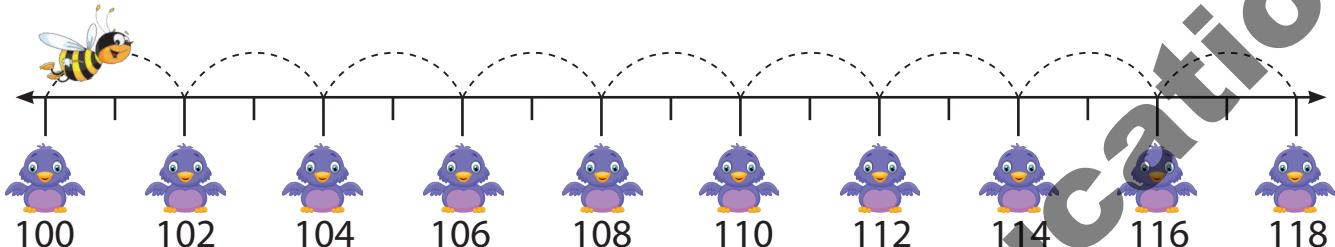
H	T	O
+		

Skip Counting

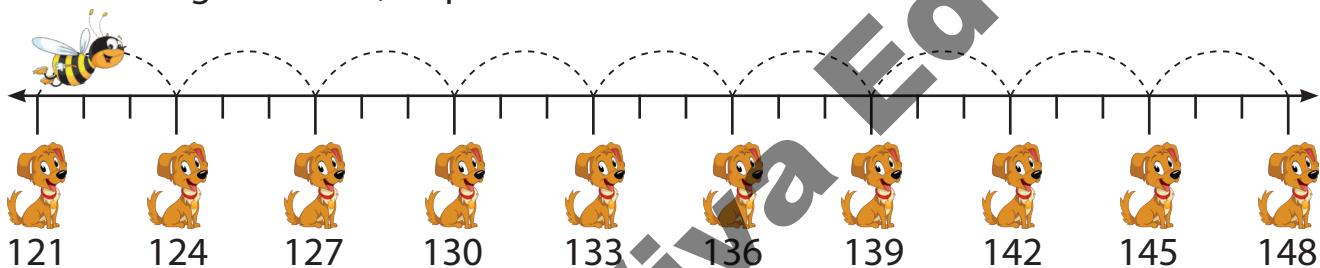
Skip counting is skip and count. Fix a number to skip. Start the count from a given number. Skip the fixed number and continue counting.

Look at the given examples.

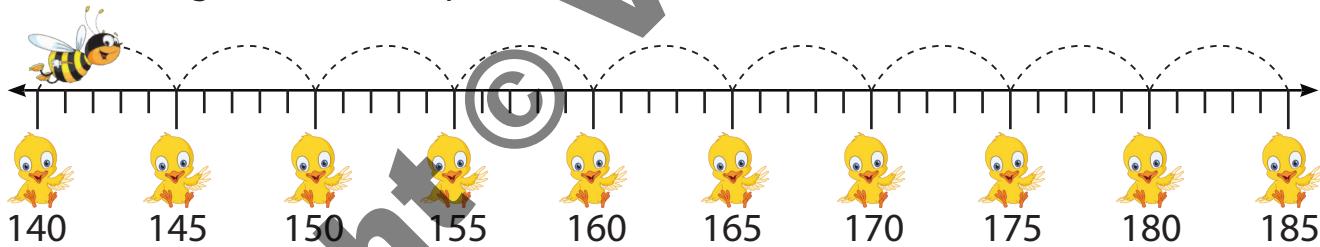
- Starting from 100, skip count in 2s.



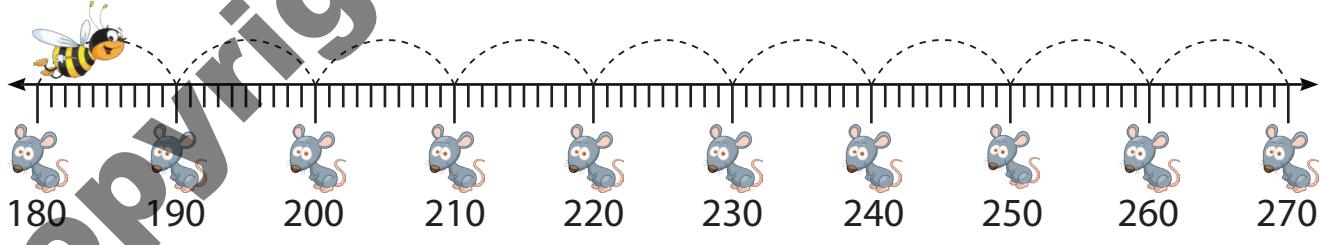
- Starting from 121, skip count in 3s.



- Starting from 140, skip count in 5s.



- Starting from 180, skip count in 10s.



7

Complete the series by skip counting in 2s.

(a)

122

124

126

(b)

153

155

157

(c)	204	206	208				
(d)	411	413	415				
(e)	615	617	619				

8 Complete the series by skip counting in 3s.

(a)	130	133	136				
(b)	212	215	218				
(c)	500	503	506				
(d)	324	327	330				
(e)	440	443	446				

9 Complete the series by skip counting in 5s.

(a)	150	155	160				
(b)	165	170	175				
(c)	500	505	510				
(d)	285	290	295				
(e)	625	630	635				

10 Complete the series by skip counting in 10s.

- (a) 250 260 270
- (b) 800 810 820
- (c) 730 740 750
- (d) 625 635 645
- (e) 412 422 432

Word Problems

Look at the given example.

Chinky has 284 beads. Kritika has 326 beads. How many beads are there in all?

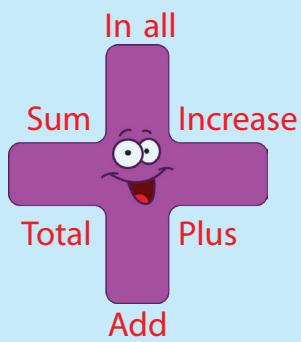
	H	T	O
Chinky has	1	8	4
Kritika has	3	2	6
Total	6	1	0



Answer: There are 610 beads.

Quick Tip

To indicate addition, following words can be used.



11 Solve these word problems.

- (a) A school has 638 students. 216 new admissions join the school. How many students are there in the school now?

	H	T	O
Students			
New admissions	+		
Students now			



Answer: Now there are students in the school.

- (b) Fishing boat A caught 173 fish. Fishing boat B caught 87 fish. Fishing boat C caught 214 fish. How many fish did the three boats catch in all?

	H	T	O
Boat A			
Boat B			
Boat C			
Total	+		



Answer: The three boats together caught fish.

- (c) The total marks scored by Nancy are 43 more than Ameesh's. If Ameesh's total marks are 367, how many marks has Nancy scored?

	H	T	O
Ameesh's marks			
Nancy's extra marks	+		
Nancy's marks			



Answer: Nancy's marks are .

- (d) In a fair, there were 228 men, 214 women and 315 children. How many people were there in the fair?

	H	T	O
Men			
Women			
Children			
+			
Total people			



Answer: There were people in the fair.

- (e) Aashima has a collection of 87 stamps. Rohit has 86 stamps and Shalu has 75 stamps. How many stamps do they have in all?

	H	T	O
Stamps with Aashima			
Stamps with Rohit			
Stamps with Shalu			
+			
Total stamps			



Answer: Aashima, Rohit and Shalu together have stamps.



HOW MUCH DO YOU KNOW?

- 1 Write the numbers in columns and add.

(a) $28 + 59 + 11$

T	O

(b) $52 + 24 + 3$

T	O

(c) $59 + 7 + 30$

T	O

(d) $17 + 8 + 25$

T	O

(e) $263 + 325 + 101$

H	T	O
+		

(f) $586 + 247 + 51$

H	T	O
+		

(g) $9 + 413 + 63$

H	T	O
+		

(h) $24 + 407 + 308$

H	T	O
+		

(i) $806 + 9 + 15$

H	T	O
+		

(j) $413 + 315 + 213$

H	T	O
+		

2 Observe the given series and complete it by skip counting.

(a) 205 207 209 [] [] [] []

(b) 150 153 156 [] [] [] []

(c) 730 735 740 [] [] [] []

(d) 825 835 845 [] [] [] []

3 Add using the expanded form.

H	T	O
5	3	6
+	2	4

Expanded form

[]	+	[]	+	[]
[]	+	[]	+	[]
[]	+	[]	+	[]

H	T	O
+		

So, $536 + 245 =$ [].



4 Choose the correct answer.

(a) $356 + 123 = \underline{\hspace{2cm}}$

(i) 479

(ii) 468

(iii) 478

(iv) 469

(b) $189 + 74 + 312 = \underline{\hspace{2cm}}$

(i) 475

(ii) 565

(iii) 575

(iv) 465

(c) The next term in the series 444, 448, 452, _____ is:

(i) 454

(ii) 456

(iii) 458

(iv) 460

(d) The next term in the series 500, 600, 700, 800, _____ is:

(i) 400

(ii) 1000

(iii) 900

(iv) 90



There were 146 passengers in a train. 93 more passengers got in at the next station. How many passengers are there in the train now?

	H	T	O
Passengers			
New passengers			
Total passengers			



Answer: Now there are passengers in the train.

While travelling in a public vehicle, do you offer your seat to elderly people? Is it good to do so?



SCRATCH YOUR BRAIN



1. Write backward counting using skip counting in 10s starting from 110.

--	--	--	--	--	--	--

2. A school bookshop has 264 Mathematics books. The number of English books is 74 more than the Mathematics books and the number of Hindi books is 25 more than the English books. How many books are there in the school bookshop?



GROUP ACTIVITY



To understand the concept of forming and adding numbers

Things We Need: 2 dice, a pencil and a sheet of paper

How To Do:

1. Divide the class into groups of three children each.
2. Each child from the group will throw both the dice and note the greatest 2-digit number formed.
3. Each group will have three 2-digit numbers.
4. Add the numbers and obtain the sum.
5. The group with the greatest sum will be the winner.



Group A

Number formed by child 1 = _____

Number formed by child 2 = _____

Number formed by child 3 = + _____

Total = _____

Addition Shortcuts

Method 1: To add 2-digit numbers, break the number to be added into tens and ones. Add the tens and ones separately.

Example: $36 + 20$

Solution:
$$\begin{aligned}36 + 20 &= 30 + 6 + 20 \\&= (30 + 20) + 6 \\&= 50 + 6 = 56\end{aligned}$$

Example: $13 + 27$

Solution:
$$\begin{aligned}13 + 27 &= 10 + 3 + 20 + 7 \\&= (10 + 20) + (3 + 7) \\&= 30 + 10 = 40\end{aligned}$$

Method 2: Add an easy number close to the actual number and then correct the answer.

Example: $23 + 47$

Solution: 47 is close to 50. ($47 + 3 = 50$)
So, add 50 to 23.

$$23 + 50 = 73$$

Now, correct the answer by subtracting 3 from 73, as we added 3 more than 47.

$$\text{So, } 73 - 3 = 70.$$

Example: $87 + 96$

Solution: 100 is close to 96. ($96 + 4 = 100$)
So, add 100 to 87.

$$87 + 100 = 187$$

Now, correct the answer by subtracting 4 from 187, as we added 4 more than 96.

$$\text{So, } 187 - 4 = 183.$$

Practise adding these numbers using both methods to see which one you find easier.

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Monicaa Abhijit, with teaching experience of over 22 years, is currently teaching in St. Thomas School, Mandir Marg, New Delhi.

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