



ACTIVITY 1



Colour the numbers with

- 3 in the hundreds place by blue.
- 9 in the tens place by green.
- 5 in the ones place by orange.
- 7 in the hundreds place by red.

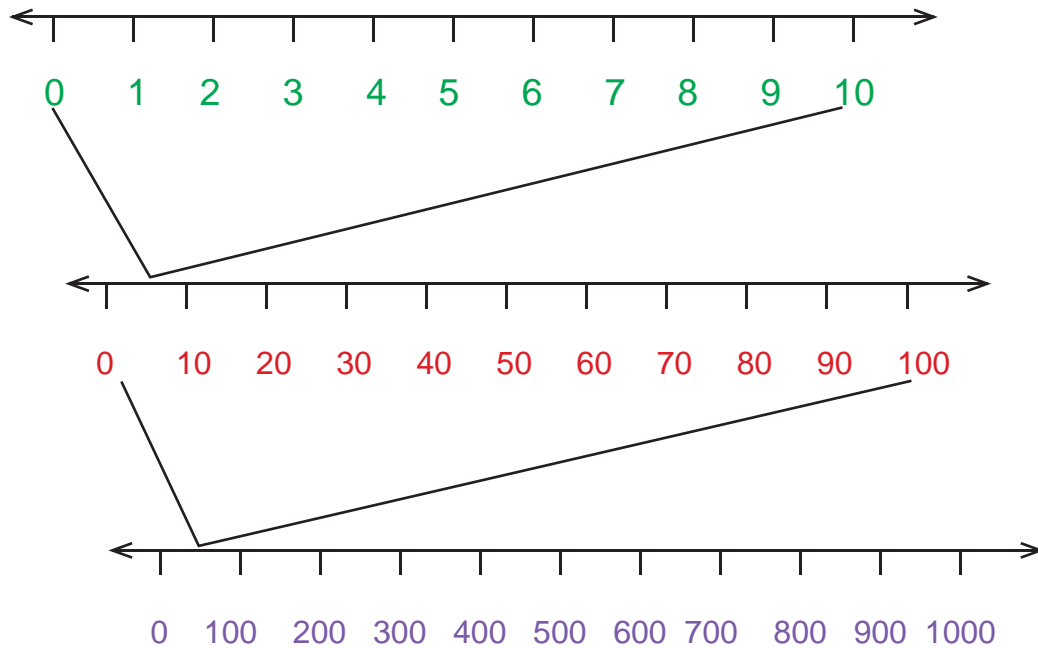
MATHEMATICS

The illustration contains the following numbers:

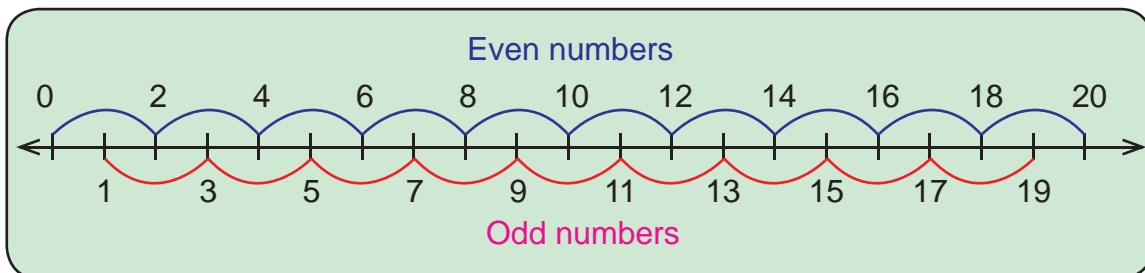
- Top left: 387
- Top middle: 309
- Top right: 341
- Left fish tail: 324
- Left fish body: 380
- Left fish tail: 555
- Left fish body: 736
- Left fish body: 105
- Left fish body: 749
- Left fish head: 728
- Right fish head: 925
- Right fish body: 712
- Right fish body: 815
- Right fish body: 768
- Right fish tail: 655
- Right fish tail: 368
- Bottom left: 352
- Bottom left: 300
- Bottom left: 891
- Bottom left: 492
- Bottom left: 97
- Bottom right: 376
- Bottom right: 308
- Bottom right: 893
- Bottom right: 598
- Bottom right: 291

Number line

We can mark the numbers in a straight line at equal distances. Number line starts at 0 and goes on endlessly.



Even numbers and Odd numbers



The numbers 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30..... are even numbers.

The numbers 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29..... are odd numbers.



Note that even numbers end with 0, 2, 4, 6, 8 and odd numbers end with 1, 3, 5, 7 and 9.

In a class if there are 24 students then we can group them into two equal groups.

$$24 = 12 + 12$$

Even numbers form two equal groups.



In a class if there are 17 students we cannot group them into two equal groups.

$$17 = 8 + 8 \text{ and balance is } 1$$

Odd numbers do not form two equal groups.



Try it !

Try the above activity for other odd and even numbers.

After every odd number there is an even number and after every even number there is an odd number.

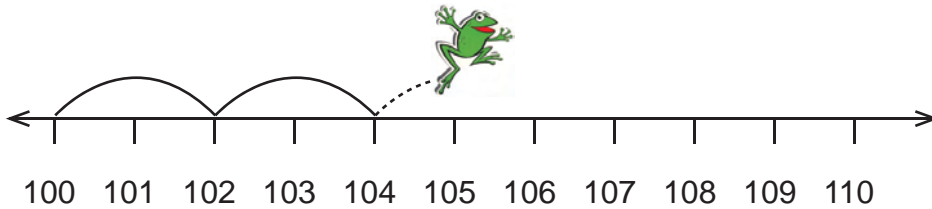


Exercise 1

Circle the even numbers	Circle the odd numbers
47, 52, 69, 70, 84	32, 41, 50, 67, 93
132, 145, 149, 174, 199	105, 116, 125, 142, 151
216, 400, 401, 432, 455	217, 232, 245, 342, 357
522, 564, 575, 587, 600	535, 540, 557, 561, 592
921, 926, 932, 938, 947	830, 841, 853, 862, 899

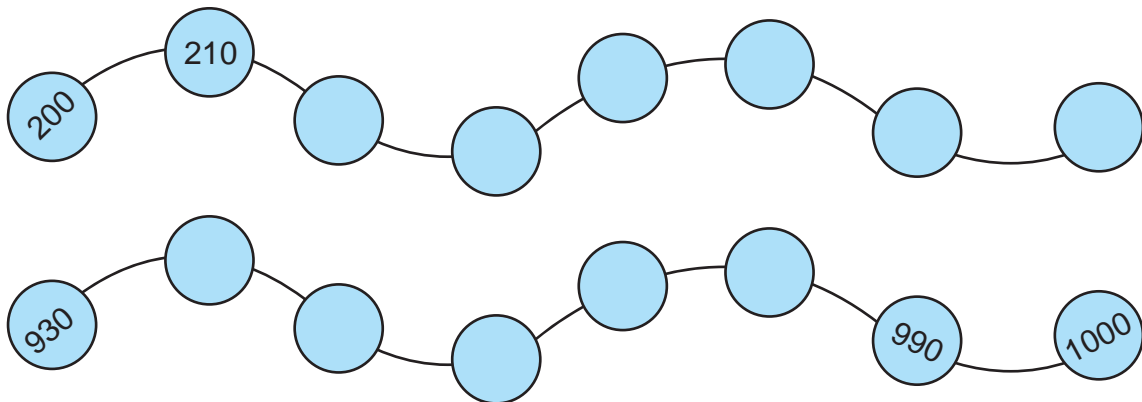
Skip counting in three digit numbers

A frog jumps on the number line in 2s.

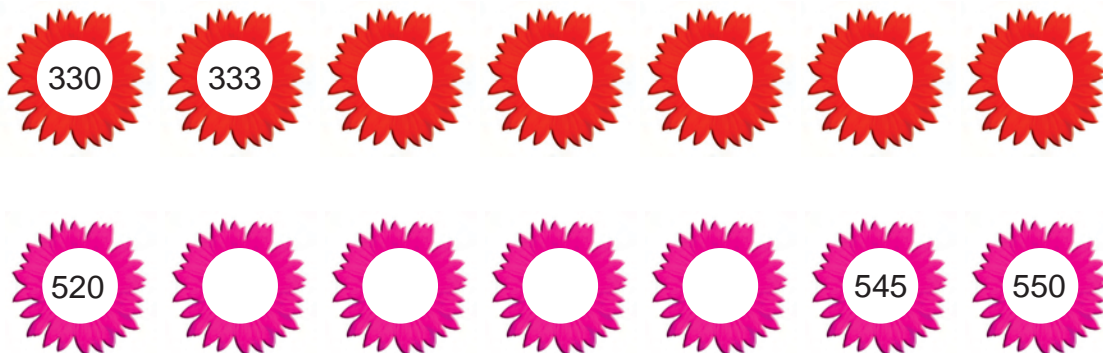


Help the frog to continue: 100, 102, 104, _____, _____, _____.

Count in 10s and complete the blanks :



Observe the patterns and complete the blanks:





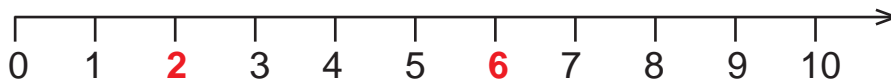
Comparison of numbers

Anitha has 2 chocolates and her sister Vanitha has 6 chocolates.



Who has more?

They compare as follows:



2 comes before 6

6 comes after 2

In a number line,

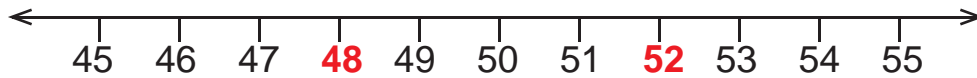
- ☉ Number that comes before is smaller.
- ☉ Number that comes after is greater.

6 is greater than 2

It is written as $6 > 2$

So Vanitha has more chocolates.

If Abinaya has collected 48 stamps and Gayathiri has collected 52 stamps. Who has collected less number of stamps?



In the number line 48 comes before 52.

Hence 48 is less than 52.

It is written as 48 < 52.

So Abinaya has collected less stamps.

Balu has 12 sketch pens. Mani also has 12 sketch pens. Who has more? and who has less?

While comparing, they have **equal** sketch pens.

It is written as 12 = 12.

Comparison of numbers with different digits.

The number which has more digits is a greater number.

Note:

All one digit numbers are smaller than any two digit number.
All two digit numbers are smaller than any three digit number.

Compare 98 and 112.

H	T	O
	9	8

H	T	O
1	1	2

The number 112 has **3** digits and 98 has only **2** digits.

So the number 112 is greater than 98.

we write 112 > 98.



Compare the following sets of numbers and circle the smaller number.

87, 145

191, 32

123, 46

29, 165

Comparison of numbers with equal digits :

If the number of digits are equal, compare the digit in the hundreds place. The number which has a greater digit in the hundreds place is greater.

Compare 123 and 200

H	T	O
1	2	3

H	T	O
2	0	0

2 is greater than **1**, so the number **200** is greater than **123**.

We write **200** $>$ **123**. We can also say **123** $<$ **200**.

If the digits in the hundreds place are same, compare the digits in the tens place. The number which has the greater digit in the tens place is the greater number.

Compare 156 and 131

H	T	O
1	5	6

H	T	O
1	3	1

The digits in the hundreds place are the same. Compare the digits in the tens place.

5 is greater than **3**. So the number **156** is greater than **131**.

We write **156** $>$ **131**. We can also say **131** $<$ **156**.

If the digits in the hundreds and the tens place are same, compare the digits in the ones place. The number which has the greater digit in the ones place is the greater number.

Compare 165 and 168

H	T	O
1	6	5

H	T	O
1	6	8

The digits in the hundreds place and tens place are the same. Compare the digits in the ones place.

8 is greater than 5. So the number 168 is greater than 165.

We write $168 > 165$. We can also say $165 < 168$.

Compare 326 and 326

H	T	O
3	2	6

H	T	O
3	2	6

The digits in the hundreds place, tens place and ones place are same.

So, $326 = 326$

Compare the numbers in each of the following sets and circle the smaller number.

173, 165

592, 595

335, 383

440, 404



Exercise 2

Write $<$, $>$ or $=$ in the boxes provided:

312	<input type="text"/>	483	761	<input type="text"/>	683
419	<input type="text"/>	547	416	<input type="text"/>	419
408	<input type="text"/>	308	394	<input type="text"/>	387
387	<input type="text"/>	487	782	<input type="text"/>	782
512	<input type="text"/>	512	983	<input type="text"/>	990

Order of numbers

When we write the numbers from smaller to greater, we call it ascending order. When we write numbers from greater to smaller, we call it descending order.

We arrange the numbers **144**, **148** and **145** in ascending order and in descending order.

Look at the number line :



144 is smaller than **145** and

145 is smaller than **148**.

Ascending order:

$$144 < 145 < 148$$

144, 145, 148

Descending order:

$$148 > 145 > 144$$

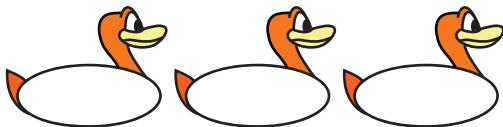
148, 145, 144



Exercise 3

1. Arrange the following numbers in ascending order :

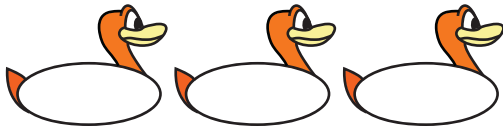
(a) 248, 253, 384



(b) 492, 499, 493



(c) 569, 539, 589



(d) 795, 759, 756



2. Arrange the following numbers in descending order :

(a) 205, 210, 290



(b) 212, 503, 369



(c) 323, 303, 332

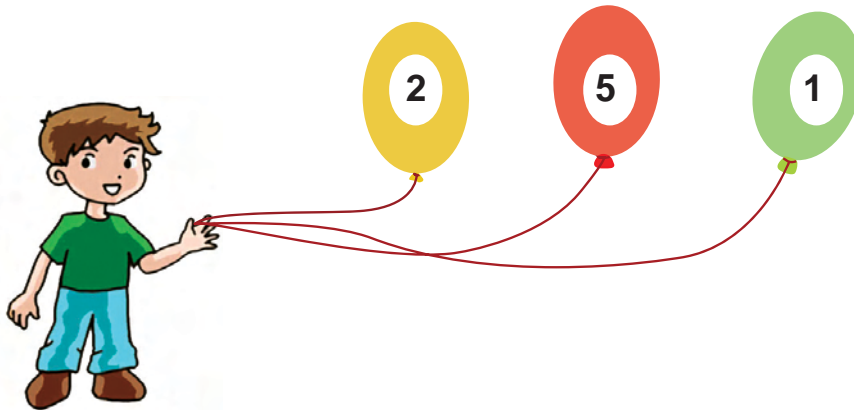


(d) 405, 407, 437





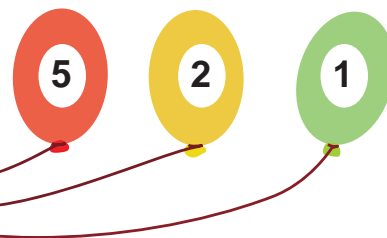
Form greatest and smallest numbers using given digits



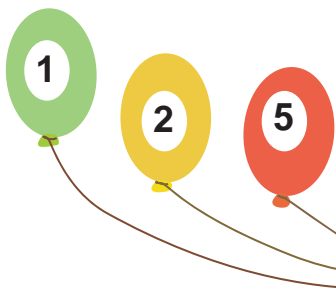
How can we form the greatest number from these given digits?

MATHEMATICS

Arrange the digits in descending order to form the greatest number.



Greatest number : 521



Arrange the digits in ascending order to form the smallest number.

Smallest number : 125

Let us see another example :



1, 0, 3 are the given numbers.



By using these numbers shall we form the greatest and the smallest 3 - digit number?



The greatest number is 310.



The smallest number is 013.



But, 013 is a two digit number.



Oh! sorry!
What to do ?



Numbers should not begin with zero.



Yes I got it.
So the smallest number is 103.



Exercise 4

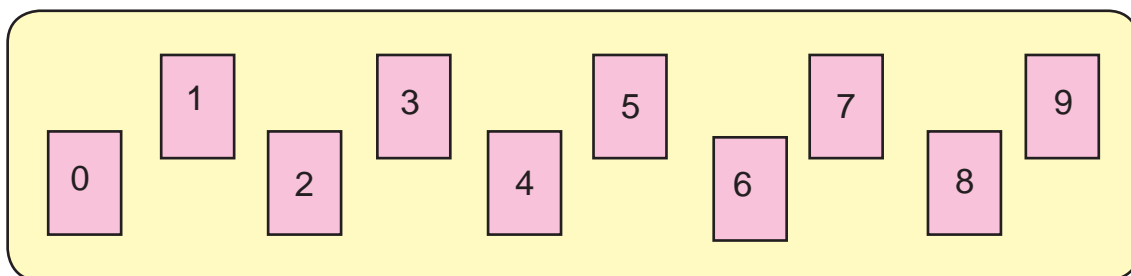
Form the greatest and the smallest 3 digit number.

Digits	Greatest number	Smallest number
5 7 4		
3 6 9		
8 0 1		



ACTIVITY 2

- Make 10 number cards from 0 to 9 .
- Put the cards downward.
- Turn any three cards and make all possible three digit numbers.
- Ask the students to form the greatest number.
- Ask the students to form the smallest number.





Date:.....

1) Fill in the missing numbers.

551		561							596
552									
553									
			570						600

2) Write the number names.



3. Fill in the blanks.

- a) 266 has _____ Hundreds _____ Tens _____ Ones
- b) 405 has _____ Hundreds _____ Tens _____ Ones
- c) 574 has _____ Hundreds _____ Tens _____ Ones
- d) 896 has _____ Hundreds _____ Tens _____ Ones
- e) 999 has _____ Hundreds _____ Tens _____ Ones



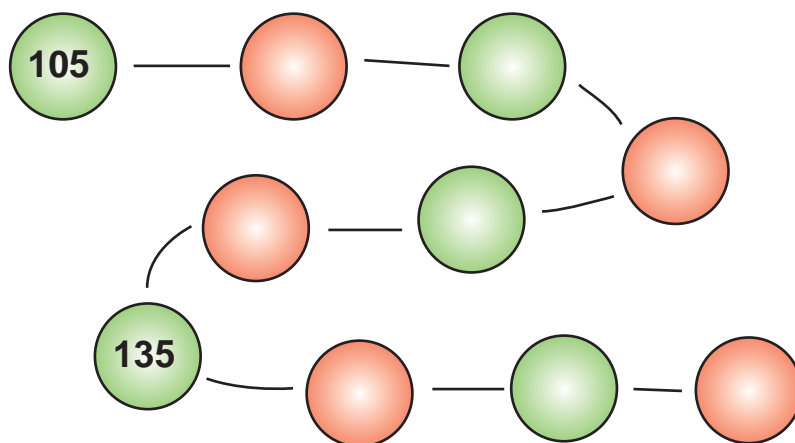
4. Put a box around the correct number.

- a) 3 Hundreds 9 Tens 0 Ones 309, 390, 903
 b) 5 Hundreds 2 Tens 2 Ones 522, 225, 520
 c) 6 Hundreds 5 Tens 1 Ones 156, 651, 516
 d) 9 Hundreds 0 Tens 9 Ones 990, 909, 900

5. Write the place value for the circled digits.

- a) (7) 2 5 b) 9 (4) 7 c) 1 4 (5)

6. Skip count by fives.



7. Find out the odd and the even numbers.

133, 146, 327, 548, 575, 932, 601, 99, 74, 500.

Odd numbers :

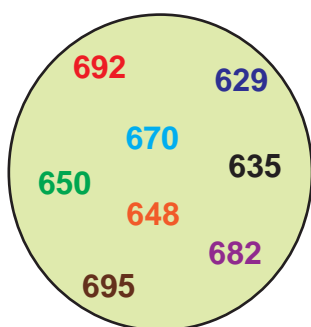
Even numbers :

8. Compare the numbers and write $<$, $>$, or $=$ in the box.

118	<input type="text"/>	340
225	<input type="text"/>	176
347	<input type="text"/>	325

875	<input type="text"/>	600
500	<input type="text"/>	500
925	<input type="text"/>	928

9. Write the numbers in ascending and descending order.



Ascending order :

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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Descending order :

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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10. Using the numerals 7, 4, and 5, write the greatest and the smallest 3 digit number.

Greatest number :

Smallest number :

Comments

<input type="text"/>

Teacher's signature

4

ADDITION

Recall

Complete the table:

+	11	12	13	14	15	16	17	18	19	20
0										
1										
2										
3			16							
4										
5										
6										
7						23				
8										
9										
10										30

MATHEMATICS

Fill in the blanks using the above table :

$3 + 15 = \square$

$\square + 14 = 20$

$4 + 19 = \square$

$13 + \square = 22$

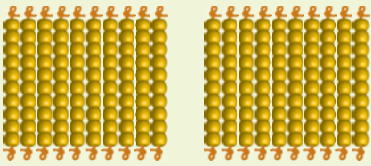

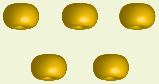
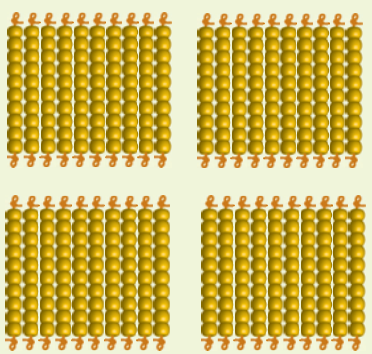
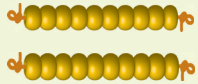

$16 + 3 = \square$

$\square + \square = 28$

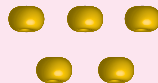

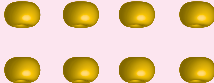
Addition of three digit numbers (without regrouping)

Add :

$$\begin{array}{r} 215 \\ + 423 \\ \hline \hline \end{array}$$

H		T		O	
					
2		1		5	
					
4		2		3	

First add ones:

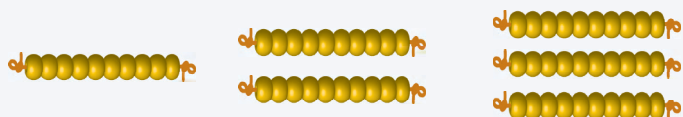
		+			=		
5	+	3	=	8			

H	T	O
2	1	5
4	2	3
		8

We write 8 in ones place.



Next add tens :

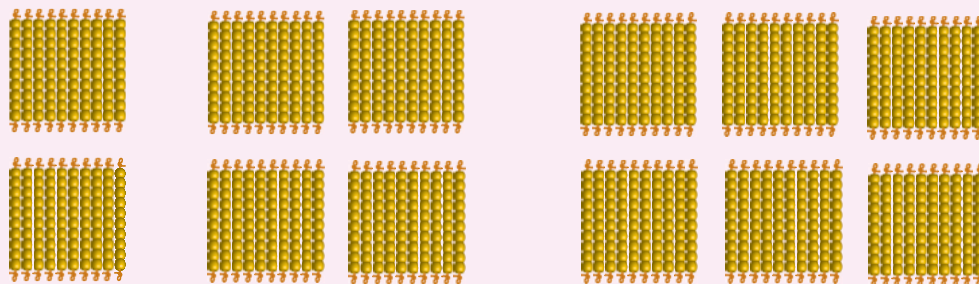


$$1 + 2 = 3$$

H	T	O
2	1	5
4	2	3
	3	8

Write 3 in tens place.

Finally add hundreds :



$$2 + 4 = 6$$

Write 6 in hundreds place

H	T	O
2	1	5
4	2	3
6	3	8

2	1	5
+	4	2
		3
6	3	8

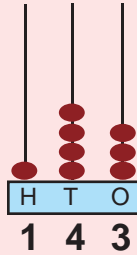


Keep in mind:
In addition, first we add ones then tens and hundreds in order.

Addition through spike abacus.

Add

$$\begin{array}{r} 143 \\ + 512 \\ \hline \\ \hline \end{array}$$



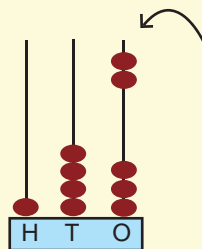
Now we have to add 512 with 143.

Step 1 :

Add ones:

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 4 \quad 3 \\ + 5 \quad 1 \quad 2 \\ \hline \\ \hline \end{array}$$

5



Put **2** beads in ones place

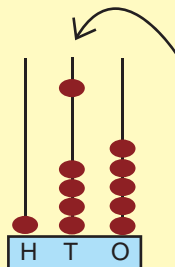
$$3 + 2 = 5$$

Step 2 :

Add tens

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 4 \quad 3 \\ + 5 \quad 1 \quad 2 \\ \hline \\ \hline \end{array}$$

5 5



Put **1** bead in tens place

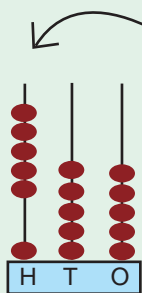
$$4 + 1 = 5$$



Step 3 :

Add hundreds :

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



Put 5 beads in hundreds place

$1 + 5 = 6$

So the sum is 655

Example

Add:

	5	2	2
+	4	5	3

Add ones

Step 1 :

H	T	O
5	2	2
+	4	3
		5

Add tens

Step 2 :

H	T	O
5	2	2
+	4	3
7		5

Step 3 :

Add hundreds

	H	T	O
	5	2	2
+	4	5	3
<hr/>			
	9	7	5
<hr/>			

	5	2	2
+	4	5	3
<hr/>			
	9	7	5
<hr/>			

 Exercise 1

Add the following numbers :

	5	4	3
+	4	2	1
<hr/>			
<input type="text"/>			

	2	3	8
+	6	3	1
<hr/>			
<input type="text"/>			

	5	2	2
+	4	2	6
<hr/>			
<input type="text"/>			

	1	0	1
	1	2	1
+	7	0	3
<hr/>			
<input type="text"/>			

	6	3	0
	2	5	4
+	1	1	3
<hr/>			
<input type="text"/>			

	2	3	4
	1	0	3
+	3	1	1
<hr/>			
<input type="text"/>			

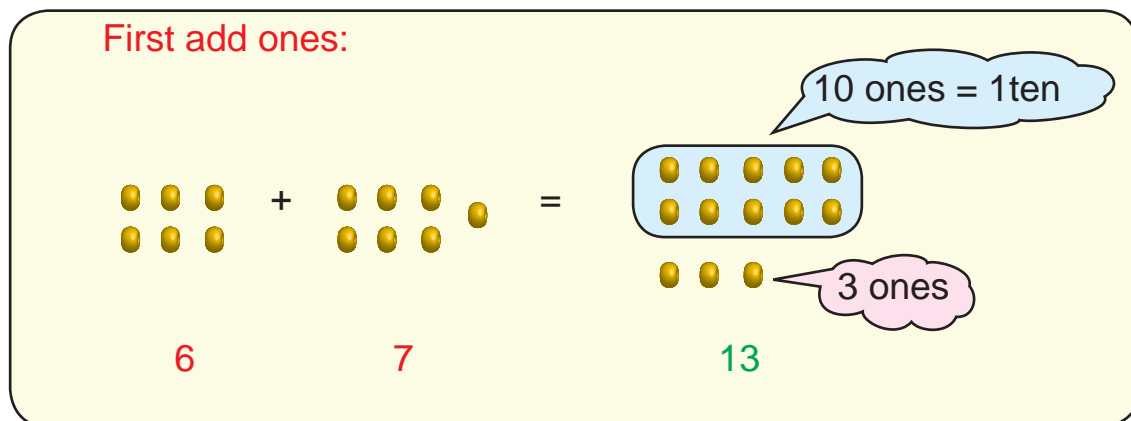
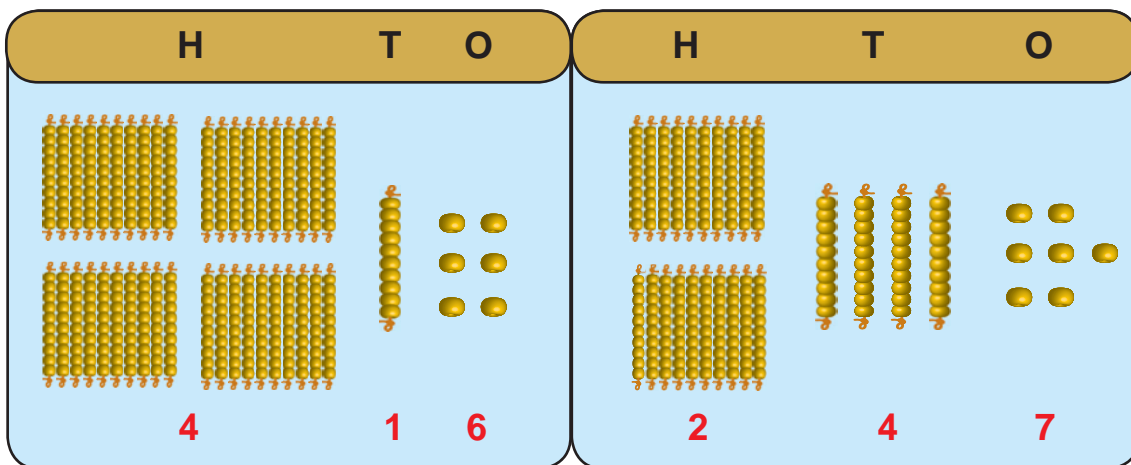


Addition of three digit numbers (with regrouping)

Example

Add :

4	1	6	
+	2	4	7
—			
—			



13 ones = 1 ten + 3 ones

So, we put **3** in ones place and carry over **1 ten** to tens place.

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

$6 + 7 = 13$ ones
 13 ones = 1 ten + 3 ones

Next add tens:

1 + 1 + 4 = 6

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

$1 + 1 + 4 = 6$ tens

Finally add hundreds:

4 + 2 = 6





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

1
4 1 6
+ 2 4 7

6 6 3

Note to the teacher

**Demonstrate
addition with regrouping through
Spike abacus.**

MATHEMATICS

Example

Add:

2 5 8
+ 1 9 4

Add ones :

H	T	O
	1	
2	5	8
+ 1	9	4
		2

$8 + 4 = 12$ ones,

Regroup 12 ones = 1 ten + 2 ones

Put 2 in ones place and carry over

1 to tens place.

Add Tens :

H	T	O
1	1	
2	5	8
+ 1	9	4
5		2

$$1 + 5 + 9 = 15 \text{ tens ,}$$

Regroup **15 tens = 1 hundred + 5 tens**

Put **5** in tens place and carry over

1 to hundreds place.

Add Hundreds :

H	T	O
1	1	
2	5	8
+ 1	9	4
4		5
		2

$$1 + 2 + 1 = 4 \text{ hundreds,}$$

Put **4** in hundreds place.

1	1	
2	5	8
+ 1	9	4
4	5	2

Exercise 2

Add the following numbers :

a)	3 5 8	b)	3 3 9	c)	2 8 5	d)	5 9 8	e)	4 5 5
	+ 4 9 0		+ 2 7 2		+ 5 4 2		+ 2 0 9		+ 5 4 5