Number Sense

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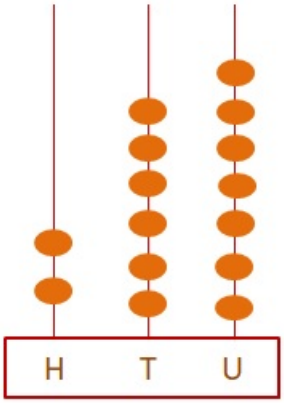
- A number can consist of one or many digits.
- Each digit has a place (or we can say a position) in the number
- Places are defined as units, tens, hundreds, thousands and so on starting from the right. Thus rightmost place is the unit place.
  E.g. 267 has 2 at hundred's place, 6 at ten's place and 7 at unit's place.

  2 6 7
  H T U

  267 can be represented on abacus as:



- Each digit has 2 types of values - face value and place value
- **Face value** is the **actual value** of a digit irrespective of its position.

  E.g. place value of 9 in 298 is 9. Similarly, place value of 8 in 298 is 8.

- **Place value** possessed by digit **because of its place** or position in the number.
- **Place value** =(**face value** of the digit) **X** (**value of** the position or **place)**.

  E.g. place value of 9 in 298=face value of 9 X value of the place (ten)=9 X 10=90.

- At unit's place, face value and place value of a number are same.
- Face value and place value of zero is always zero.
- The successor of a number is the number next to the number. E.g. The successor of 5 is 6. The successor is obtained by adding 1 to the number.
- The predecessor of a number is the number which is previous to the number. It is obtained by subtracting 1 from the number. The predecessor of 15 is 14.

Number Names

- Number name is the name of the number. e.g. 1 - One, 2- Two, 20 - Twenty, 250 - Two hundred fifty etc.
- To name a number first we have to expand that number.

  E.g. To get the name of 435 we write the expanded form of 435.

  435=400 + 30 + 5=four hundered + thirty + five.
  So name of 435 is four hundred thirty five.

Places in a number have different names. E.g. if we want to name 891

Hundred	Tens	Unit

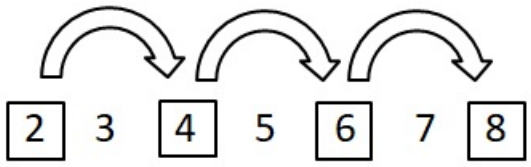
8	9	1
Eight Hundred	Ninety	One

So name of 891 is Eight Hundred Ninety One.

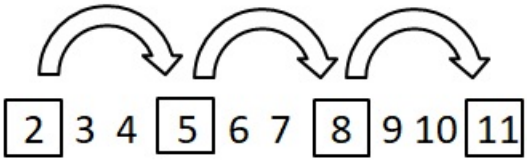
Skip Counting

Skip counting is a technique to learn addition, subtraction and multiplication. When we skip count by a number "N" we add "N" to each number in the chain to get the next number. We can also say that we skip or jump by "N" to reach next number.

Skip counting by 2:



Skip counting by 3:



Comparison of numbers

- To compare 2 numbers, first, we have to compare the number of digits.
- The number which has more digits is greater than the other number.
- While counting digits zeros in the leftmost places should be ignored if there are any.
- If two numbers have the same number of digits than we should compare digits starting from the leftmost place. The number which has higher leftmost digit is greater than other. If leftmost digits are same we should compare next digits to the right. We have to move right till we get 2 different digits. If we don't get any 2 different digits than both numbers must be same.
- E.g. if we have to compare 4367 and 890, then 4367 is greater than 890 as it has more digits.
- If we have to compare 4367 with 4384, as the numbers of digits are same we have to start comparing the digits from the leftmost place. 2 leftmost digits are same in both the numbers (4 and 3). Next digits on the right are 6 and 8. As 8 is greater than 6, so 4384 is greater than 4367.
- The arrangement of a set of numbers in the order from lowest to highest is called ascending order. E.g. 12, 23, 45, 68
- The arrangement of a set of numbers in the order from highest to lowest is called descending order. E.g. 85, 63, 57, 45, 32