Revision Notes

CHAPTER – 3

Playing WITH NUMBERS

We have discussed multiples, divisors, factors and have seen how to identify factors and multiples.

- We have discussed and discovered the following:
  (a) A factor of a number is an exact divisor of that number.
  (b) Every number is a factor of itself. 1 is a factor of every number.
  (c) Every factor of a number is less than or equal to the given number.
  (d) Every number is a multiple of each of its factors.
  (e) Every multiple of a given number is greater than or equal to that number.
  (f) Every number is a multiple of itself.

- We have learnt that –
  (a) The number other than 1, with only factors namely 1 and the number itself, is a prime number. Numbers that have more than two factors are called composite numbers. Number 1 is neither prime nor composite.
  (b) The number 2 is the smallest prime number and is even. Every prime number other than 2 is odd.
  (c) Two numbers with only 1 as a common factor are called co-prime numbers.
  (d) If a number is divisible by another number then it is divisible by each of the factors of that number.
  (e) A number divisible by two co-prime numbers is divisible by their product also.

- We have discussed how we can find just by looking at a number, whether it is divisible by small numbers 2,3,4,5,8,9 and 11. We have explored the relationship between digits of the numbers and their divisibility by different numbers.
  (a) Divisibility by 2,5 and 10 can be seen by just the last digit.
  (b) Divisibility by 3 and 9 is checked by finding the sum of all digits.
  (c) Divisibility by 4 and 8 is checked by the last 2 and 3 digits respectively.

(d) Divisibility of 11 is checked by comparing the sum of digits at odd and even places.

- We have discovered that if two numbers are divisible by a number then their sum and difference are also divisible by that number.

- We have learnt that –
  (a) The Highest Common Factor (HCF) of two or more given numbers is the highest of their common factors.
  (b) The Lowest Common Multiple (LCM) of two or more given numbers is the lowest of their common multiples.