# **Introduction to Fractions**

#### Fraction

A fraction is a way of showing a part of a whole.

It tells how many equal parts something is divided into and how many parts we are talking about.

#### It is written in the form= Numerator Denominator

- Numerator: Number of parts taken
- **Denominator:** Total number of equal parts

#### Example:

If a chocolate bar is divided into 4 equal parts, and you eat 1 part, then the fraction eaten is:

 $\frac{1}{4}$  (one-fourth)

### More Examples:

- $\frac{3}{5} \rightarrow 3$  parts out of 5
- $\frac{7}{8} \rightarrow 7$  parts out of 8
- $\frac{1}{2}$   $\rightarrow$  Half of something

# **Types of Fractions:**

Туре	Example	Description
1. Proper Fraction	$\frac{3}{4}$	Numerator < Denominator
2. Improper Fraction	$\frac{5}{3}$	Numerator > Denominator
3. Mixed Fraction	$2\frac{1}{4}$	Whole number + proper fraction
4. Like Fractions	$\frac{2}{5}, \frac{3}{5}$	Same denominators
5. Unlike Fractions	$\frac{2}{3},\frac{3}{4}$	Different denominators
6. Unit Fraction	$\frac{1}{2},\frac{1}{5}$	Numerator is 1

## **Properties of Fractions:**

i. If numerator = denominator, the fraction is equal to 1

Example: 
$$\frac{4}{4} = 1$$

ii. If numerator < denominator, it's a proper fraction

Example:  $\frac{2}{5}$ 

iii. If numerator > denominator, it's an improper fraction

**Example:**  $\frac{7}{3}$ 

iv. Any number divided by 1 gives the number itself

Example: 
$$\frac{5}{1} = 5$$

v. Fractions represent division

**Example:**  $\frac{3}{4}$  means 3 divided by 4