

**Natural Numbers** : The counting numbers: 1, 2, 3,...

**Whole Numbers**: The natural numbers and zero : 0, 1,2,3,...

**Integers**: The whole numbers and their opposites : ...-3, -2, -1, 0, 1, 2, 3

**Rational Numbers**: can be expressed in the form  $\frac{a}{b}$ , where a and b are both integers and  $b \neq 0$  . Rational numbers can also be repeating or terminating decimals.

Repeating decimals: are rational numbers in decimal form that have a block of one or more digits that repeats continuously

Terminating decimals are rational numbers in decimal form that have a finite number of digits

**Irrational Numbers**: Cannot be expressed in the form  $\frac{a}{b}$ . They include square roots of whole numbers that are not perfect squares and non-terminating decimals that do not repeat:  $\sqrt{2}$ ,  $\sqrt{11}$ ,  $\pi$