

Number System

(i) *Knowing our Numbers:*

Consolidating the *sense* of numberness up to 5 digits, Size, estimation of numbers, identifying smaller, larger, etc. Place value use of symbols =, <, > and use of brackets, word problems on number operations involving large numbers up to a maximum of 5 digits in the answer after all operations. This would include conversions of units of length & mass (from the larger to the smaller units), estimation of outcome of number operations. Introduction to a sense of the largeness of, and initial familiarity with, large numbers up to 8 digits and approximation of large numbers)

(ii) *Playing with Numbers:*

Simplification of brackets, Multiples and factors, divisibility rule of 2, 3, 4, 5, 6, 8, 9, 10, 11. (All these through observing patterns. Children would be helped in deducing some and then asked to derive some that are a combination of the basic patterns of divisibility.) Even/odd and prime/composite numbers, Co-prime numbers, prime factorization, every number can be written as products of prime factors. HCF and LCM, prime factorization and division method for HCF and LCM, the property $LCM \times HCF = \text{product of two numbers}$. All this is to be embedded in contexts that bring out the significance and provide motivation to the child for learning these ideas.

(iii) *Whole numbers*

Natural numbers, whole numbers, properties of numbers (commutative, associative, distributive, additive identity, multiplicative identity), number line. Seeing patterns, identifying and formulating rules to be done by children. (*As familiarity with algebra grows, the child can express the generic pattern.*)

(iv) *Negative Numbers and Integers*

How negative numbers arise, models of negative numbers, connection to daily life, ordering of negative numbers, representation of negative numbers on number line. *Children to see patterns, identify and formulate rules.* What are integers, identification of integers on the number line, operation of addition and subtraction of integers, showing the operations on the number line (addition of negative integer reduces the value of the number) comparison of integers,

ordering of integers.

(v) Fractions:

Revision of what a fraction *is*, Fraction as a part of whole, Representation of fractions pictorially and on number line), fraction as a division, proper, improper & mixed fractions, equivalent fractions, comparison of fractions, addition and subtraction of fractions (Avoid large and complicated unnecessary tasks). (Moving towards abstraction in fractions) Review of the idea of a decimal *fraction*, place value in the context of decimal *fraction*, inter conversion of fractions and decimal fractions (avoid recurring decimals at this stage), word problems involving addition and subtraction of decimals (two operations together on money, mass, length and temperature)

Syllabus for Class VII Entrance Examination: GENERAL SCIENCE

Food: Sources of food; Components of food; cleaning food

Materials: Materials of daily use; Different kinds of materials; How things change; How things react with one another

The world of living: Things around us; the habitat of the living; Plants – form and functions; Animals – form and functions

Moving things: Motion; Measurements

How things work: Electric current and circuits; Magnets

Natural Phenomena: Rain, thunder and lightning; Light

Natural Resources: Importance of water; Importance of air; Waste

Syllabus for Class VII Entrance Examination: HINDI

<u>Sr. No.</u>	<u>Topics</u>	<u>Marks</u>
1	Essay writing	20
2	Picture writing	20
3	Unseen Comprehension	10
4	Completing and writing meaning of idioms	10
5	Gender Changing	10
6	Number Changing	10
7	Incorrect to correct words	10
8	Translation (English to Hindi)	10

Syllabus for Class VII Entrance Examination: ENGLISH

- 1) Composition
- 2) Comprehension Passage
- 3) Grammar:
 - Direct and Indirect Speech
 - Active - Passive Voice
 - Tense
 - Prepositions
 - Adjectives (Degrees of Comparison)
 - Conjunctions
 - Articles, Determiners
 - Jumbled words
 - Question Tags
 - Picture Composition
 - Antonyms & synonyms