**Class 9 Syllabus**

The syllabus for Sainik School Class 9 consist of **History, Civics, Geography, General Knowledge, English, Science, and Mathematics.**

The details syllabus is as follows:

**History**

Students appearing for Sainik School Class 9 admission must prepare the History subject with the below given topics.

1. Modern Indian History & World History
2. Persons in History of India
3. Places of Importance in Indian History
4. Wars and Battles in Indian History
5. Dates and Events in Indian History
6. Events of Indian National Movement
7. Revolutions in the World (17 to 19 Century AD)
8. Industrial Revolution
9. Revolt of 1857
10. Heritage sites of India & World

**Civics**

The civics topics consist of the following:

(1) Indian Constitution - (basic information), Fundamental Rights President, Vice President, & Prime Minister, Governor & Chief Minister Supreme Court & High Court, Panchayati Raj System National & Regional Political Parties, Salaries & Emoluments of the President, Vice-President, Prime Minister, MPs, Chief Justices & Judges.

(2) About United Nations -

Organs of the UN Specialized Agencies

Officials of the UN Location of the UN Headquarters

(3) Globalization, Human Rights, Rights of the Child

(4) Dance & Music - Indian Classical & Folk arts.

(5) Location of prominent Institutions in India

(6) General Information on Indian Army, Indian Navy, Indian Air Force (basics).

(7) Indian Railways - Railway Zones, Important Trains

**Geography**

Students must prepare themselves for the Sainik School Entrance Exam for Class 9 Geography topics with Physical Geography,

India's Geography, and

World Geography.

The precise topics are given below.

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| **Geography** | **Topics** |
| Physical Geography | a) Solar System. (b) Rock System. (c) Soil Types. (d) Disasters - Volcanoes, tsunami, earthquakes. (e) Atmospheric pressure. (f) Water cycle & Water bodies. (g) World famous Mountain Ranges. (h) World famous Rivers. (i) World famous Volcanoes. (j) World famous earthquakes. (k) Goegraphical Terminology India and World. |
| India's Geography | a) Geographical divisions. (b) Major food crops & cash crops. (c) Rivers of India. (d) Heritage sites of India - Geography. (e) Festivals & Customs. (f) Minerals & States. (g) India's Climatic System. (h) Mountain Ranges of India. (i) States & Capitals. (j) Natural Resources, Soil Water Plants and Wild Life. (k) Manufacturing Industires. |
| World Geography | (a) On par with Indian Geography. (b) Geographical Surnames. (c) Largest, Smallest, Highest and other superlatives of World Geographical features. (d) Countries and Capitals. (e) World Geographical Monuments and their location. |

**English**

The English subject for the Sainik School Admission test for class 9 consist of the following topics.

Comprehension

1. Letter Writing
2. Guided Writing
3. Essay Writing
4. Vocabulary and Usage
5. Prepositions
6. Antonyms
7. Synonyms
8. Direct / Indirect Speech
9. Voice
10. Sentence types: *(i) Interrogative (ii) Exclamatory (iii) Imperative (iv) Positive / Negative (v) Simple / Compound. (vi) Degrees of Comparisons.*
11. Tenses
12. Clauses
13. Question Tags
14. Future time reference.
15. Re arranging words to make meaningful sentences.
16. Use of grammatical structures.
17. One word substitutes.

**Science**

The science subject have the following topics that a student preparing for the Sainik School Entrance Exam for Class 9 must prepare.

1. The Universe : Measurement of very large distance, stars, constellations, solar systems and its constituents (plants, comets, meteors, satellites), artificial satellites and their use.
2. Soil : Formation of Soil, soil profile, composition and type of soil, soil pollution and erosion.
3. Air : Structure of atmosphere, measurement of atmospheric pressure, composition of air (oxygen, nitrogen) their physical and chemical properties with uses, causes and prevention of air pollution.
4. Transformation of Substances : Purification of substances, characterization of substances, chemical reactions their types and characteristics.
5. Structure of atom : Model and composition of atom, atomic number and mass number, isotopes, ions, valence and formula, chemical reactions and equations.
6. Metals and non-metals : Characteristics, properties and their uses, Noble Metals, Alloys, Corrosion.
7. Carbon : Occurrence, allotropy, forms of carbon, compounds of carbon with oxygen and hydrogen.
8. Cell Structure and Functions : Cells, shape, size and variety of cells, cell structure, difference between plant and animal cells.
9. Micro organisms : Discovery, habitat and culture of micro organisms, different micro-organism their types and structure (bacteria, blue-green algae, fungi, virus, protozoa)
10. Refraction of Light : Refractive index, refraction through glass slab and prism, dispersion, lenses and image formation by them, application of lens (microscope, telescope, camera), the human eye.
11. Electricity and Magnetism : Electric Current, sources of electric current (voltaic cell, Denial cell, dry cell, button cell), electric circuits, conductors and insulators, magnetism, electric current and magnetism, electro magnetic induction.
12. Sources of Energy : Renewable and non-renewable sources of energy. Types of fuel, judicious use of energy, fire fighting.
13. Common Diseases : Factors affecting health, modes of transmission of diseases (cholera, tuberculosis, typhoid, polio, rabies, chicken pox, diarrhea, gastroenteritis, common cold) vaccination.
14. Food Production and Management : Basic agricultural practices (soil preparation, sowing, irrigation, maturing, weeding, protection, harvesting, storage) crop improvement, food from animals (dairying, poultry, fisheries, apiculture).

**Mathematics**

1. Squares and square roots of large numbers, decimals and fractions by division method.
2. Cubes and Cube roots of large numbers, negative numbers and fractions by prime factorisation method.
3. Rational exponents and radicals including negative powers.
4. Profit, loss and discount with percentages.
5. Compound Interest.
6. Algebraic identities such as (x+a) (x+b), (a+b)2, (a+b)3, (a+b+c)2
7. Factorisation of algebraic expressions such as linear, quadratic, cubic etc.
8. Division of Polynomiols.
9. Linear equations in one variable including word problems.
10. Parallel lines, equal intercepts property, proportional intercepts property, dividing a line segment into given number of equal parts or in the given ratio.
11. Quadrilaterals, special types of quadrilaterals and their properties, construction of quadrilaterals of all types.
12. Circles, perpendicular from centre to chord, equal chords and angles substended by them, relation between the angle subtended by an arc at the centre and at the remaining part of the circle, cyclic quadrilateral.
13. Perimeter and areas of triangle, all types of quadrilaterals, circle, sector, segment of a circle etc.
14. Surface areas and volumes of cube, cuboid, cylinder, cone, sphere and hemisphere.
15. Statistics - preparation of frequency distribution table for ungrouped and grouped data, construction and reading of histogram.