

## **Secondary Section: Grade VIII**

According to AIS Admission Policy, at around 13 years of age, your child is suitable to be admitted in Grade VIII of the AIS Secondary Section. In order to cope up with a wide range of activity based lessons, your child must be well acquainted with particular levels of skills, knowledge and understanding.

The following literacy and numeracy skills are required in your child as prerequisites for this grade:

### **English**

#### **Comprehension**

- Critical Analysis

#### **Grammar**

- Parts of Speech
- Punctuation
- Active/passive voice
- Figures of speech
- Verb Tenses
- Use of simple and complex sentences

#### **Vocabulary**

- Synonyms/Antonyms
- Use of Proverbs
- Various expressions of writing

#### **Creative Writing**

- Essay writing
- Letter writing (Formal & Informal Letter)
- Summarizing poetry & prose
- Autobiography
- Persuasive writing
- Personal Account

### **Mathematics**

- Expressions, Equations and formulas
- Integers powers and roots
- Equation and simple functions
- Formula and substitution
- Fractions, Decimals and percentages
- Ratio and proportion
- Congruency and properties of three dimensional shapes
- Angle properties
- Surface area and volume

## **Science**

### **Biology**

- Photosynthesis (factors needed for photosynthesis, equation and its reactants and products)
- Ecosystem (Food Chain, Food Web & Ecology)
- Starch test
- Balanced diet and its components
- Digestion along the alimentary canal
- Human respiratory system( Aerobic and Anaerobic respiration ,Fermentation )
- Heart and blood vessels in circulatory system.
- Immune System

### **Physics**

- Speed (calculating speed and distance/time graph)
- Sound ( loudness and pitch of sound , detecting sound waves by human ear)
- Light( reflection and refraction of light)
- Magnetism (behavior of magnets, the link between magnetism and electricity, the magnetic field and the electromagnet)
- Forces and Energy (balanced and unbalanced forces, speed, distance and time, turning forces, movement of particles)

### **Chemistry**

- The particle theory of matter (solid ,liquid and gas)
- Elements, compounds, mixtures and atoms (mixture of elements, chemical reactions and equations, chemical names of compounds, different types of mixtures and separating mixtures, properties of elements, chemical symbols and first twenty elements of the periodic table)
- Properties of materials (Solution and solubility, chromatography)
- Metals and non-metals (metals and non-metals in the periodic table, reactions between metals and non-metals, reactions between oxygen and metals and non-metals)

## **Islamiyat**

- Passages from the Quran: Main theme and its practical application
  - Ayat al Kursi
  - Surah al Alaq
  - Surah An Naas
  - Surah Fatiha
  - Surah Ikhlas
  - Surah Anaam
  - Surah Fussilat ( 41:37-39)
- Major teachings in the Hadith of the Prophet Muhammad (PBUH)
  - Hadith 1 to 10: Main teachings of Hadith and its practical application

- LIFE IN MAKKAH from Birth till Migration to Yasrib and Holy Prophet's experiences in caves.
- The History and Importance of the Quran: Characteristics, Makki and Madni Surahs,
- Revelation of the Quran between 610-632 A.D
- Compilation of The Quran under the rightly guided Khalifas
- The History and Importance of the Quran
- Articles of Faith: Tauheed, Angels, Revealed Books, Prophets, Life after Death ,Allah's Predestination and Decree

## **Pakistan Studies**

### **History**

- Cultural and historical background to the Pakistan Movement
  - Success of the religious thinkers in spreading Islam in the sub-continent
  - during the 18th and 19th centuries
  - The causes and consequences of the decline of the Mughal Empire
  - Importance of Sir Syed Ahmad Khan's work to the development of Pakistan Movement in the 19<sup>th</sup> Century.
  - Urdu and regional languages contributed to the cultural development of Pakistan since 1947

### **Geography**

- Natural Topography
- Climate
- Natural Resources
- Forests

## **Urdu**

سوتک الفاظ اور ہندسوں میں گنتی

"الف، ت" کا اضافہ کر کے جمع بنانے والے واحد جمع مثلاً فقرہ: فقرات، تعلیم: تعلیمات وغیرہ

منظر نگاری، مکالمہ، خط، درخواست، کہانی اور دیے گئے موضوعات پر ۲۰۰ الفاظ تک کا مضمون لکھنے کے قابل ہونا

خلاصہ نگاری

الفاظ کے متضاد

نثر پارہ پڑھ کر سوالات کے جوابات دینا، محاورات کے جملے بنانا

نثر پارے سے غلط املا والے الفاظ پہچان کر درست املا لکھنا