

## 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)

### **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)
- 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)

## Urdu

سوئک 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