

### **Secondary Section: Grade VII**

According to AIS Admission Policy, at around 12 years of age, your child is suitable to be admitted in Grade VII 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**

### Grammar

- Parts of speech (Nouns and their types, Verb, Verb tenses Pronouns, Reflexive pronouns, Adjectives and possessive adjectives, Adverbs, Prepositions, Conjunctions and interjections, Connectors)
- Punctuation (Capital letters, full stops, commas, speech marks, ellipsis and apostrophes)
- Direct/Indirect speech
- Question Tags
- Forms of Sentences
- Figures of speech (Similes, metaphors, personification and onomatopoeia)

### Vocabulary

- Contextual meaning
- Synonyms/ Antonyms
- Uses of proverbs

#### Comprehension

• Critical Analysis

### **Creative Writing**

- Summarizing the main idea
- Formal/Informal Letter
- Autobiography
- Brochure Advertisement
- Descriptive writing (Word Limit 120-150)

# **Mathematics**

- Place value ,ordering and rounding
- Integers powers and roots (order, add and subtract positive and negative integers, Prime factors, LCM and HCF, multiples)
- Expressions (Order of operations when simplifying algebraic expressions, writing expressions for area and perimeter)
- Formula and Substitution (Derive and use a simple formulae e. g converting metric units, hours to min and sec, Celsius to Fahrenheit, Substitute values into expressions and formulae)
- **Ratio and Proportions** (Equivalent ratios, Direct proportion, Dividing a quantity in a given ratio, using percentages to compare proportions)
- Fractions, Decimals and Percentages (Equivalent fractions, Fraction of a quantity, Addition and subtraction of fractions with common and different denominators, Mixed numbers to improper fractions, Simple calculations with decimals, Converting decimal to a fraction, Simple percentage of a quantity)
- Area and Perimeter of squares and rectangles (simple and composite figures made from rectangle)
- Angle Properties (Missing angles of a quadrilateral ,Angles on a straight line, Parallel lines and at a point)
- Cubes and cuboids (Calculating volume and surface area of cubes and cuboids)

# **Science**

### Biology

- Major Organ Systems: Organ systems of flowering plants, human organ systems.
- Cells: Parts of plant and animal cells.
- Living Things in the environment : Food chains
- People and the plant: Renewable and non-renewable energy resources.
- Classification and variation : vertebrates and invertebrates

### Physics

- Energy: Forms of energy and energy transfers.
- The Earth and Beyond: Solar System, planets of solar system
- Forces and motion: Types of forces, friction, ways to reduce friction, advantages of friction

### Chemistry

- States of matter: Particle Theory, Particle arrangement in all three states of matter, changes in states of matter
- Rocks and Soil: Types of rocks and soil
- Acids and alkalis: PH, Acid rain, Air pollution

# <u>Urdu</u>