

ENGLISH LANGUAGE

Following are the contents you need to study to prepare for English admission test.

Year 8 (Preparatory IG)

GRAMMAR (USAGE) SKILLS

- **Parts of speech** noun, adjective, verb, adverb, conjunctions, articles (identification and use)
- **Sentence:** parts and structure
 - 'subject' and 'predicate'
 - 'simple' and 'compound sentence' – use of FANBOYS (identification, joining, conversion)
- **Tenses (Past, Present):** Simple, Continuous, Perfect (negative, interrogative)

READING COMPREHENSION

- 2 to 3-word answer to questions, multiple choice questions, text-based word's meaning.

COMPOSITION

- paragraph – (Following the format: topic sentence, explanation, evidence, conclusion) (80-110 words)
- letter/email (as instructed)

SCIENCE (biology, physics, chemistry)

Following are the contents you need to study to prepare for **Science** admission test.

Year 8 (Preparatory IG)

- Plant and animal cell (biology)
- Photosynthesis and respiration (biology)
- Digestion (biology)
- Transport in plants (biology)
- Magnets and electromagnets (physics)
- Sound (physics)
- Light (physics)
- Atom molecules, mixture and compounds (chemistry)
- The particulate nature of matter (chemistry)
 - The properties of solids, liquids, and gases
 - The structure of solids, liquids, and gases in terms of particle separation, arrangement, and types of motion
 - Changes of state in terms of melting, boiling, evaporation, freezing, condensation and sublimation

Mathematics

Following are the contents you need to study to prepare for **Mathematics** admission test.

Year 8 (Preparatory IG)

Number

- Identify and use natural numbers, integers (positive, negative and zero), prime numbers, square and cube numbers, common factors and common multiples
- Express numbers as a product of prime factors. Finding the lowest common multiple (LCM) and highest common factor (HCF) of two or more numbers.
- Addition subtraction multiplication of decimals. e.g. 2.32×0.45
- Use the four rules for calculations with whole numbers, decimals, and fractions (including mixed numbers and improper fractions), including correct ordering of operations and use of brackets.
- Calculate a given percentage of a quantity
- Conversion of units e.g., km to m, ml to liters etc.

Algebra

- Manipulate directed numbers. Use brackets and extract common factors. Expand products of algebraic expressions. e.g., expand $3 \times (2x - 4y)$
- Recognize patterns and find the next term.
- Solve simple algebraic equations e.g., $3x - 4 = 13$

Geometry

- Shapes and geometric reasoning
- Calculate unknown angles using the following geometrical properties: e.g. Angles at a point and angles at a point on a straight
- Construction of angles

Measure

- Carry out calculations involving the perimeter and area of a rectangle, triangle and compound shapes derived from these
- Carry out calculations involving the volume of cube.

Handling data

- Read, interpret, and draw inferences from tables and statistical diagrams. Mark tally.
- Interpret bar charts and pictograms

Computer Science

Following are the contents you need to study to prepare for **Computer Science** admission test.

Year 8 (Preparatory IG)

- Computer Architecture
- Input & Output
- Measurement of the size of computer memories
- Communication and internet
- Binary computing (binary, denary/decimal, hexa-decimal)