

## CHINMAYA INTERNATIONAL RESIDENTIAL SCHOOL COIMBATORE - INDIA

### ASSESSMENT OBJECTIVES FOR ENGLISH FOR CLASS IX

- I. COMPREHENSION, ANALYSIS, INFERENCE
- II. CREATIVE AND ANALYTICAL WRITING SKILLS
- III. ADEQUATE VOCABULARY AND GRAMMAR

#### I. COMPREHENSION, ANALYSIS, INFERENCE

There will be a comprehension passage or a poem and exercises will be given based on it. They need not be purely comprehension questions, but may test the students' ability to draw inferences.

#### II. CREATIVE AND ANALYTICAL WRITING SKILLS

The candidate appearing for the exam should be able to write a fairly lengthy composition/ story on a given topic.

The student is also expected to know both formal and informal letter writing.

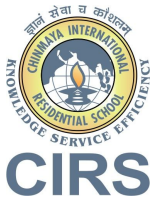
#### III. ADEQUATE VOCABULARY AND GRAMMAR

- a) Parts of Speech—Usage
- b) Direct / Indirect speech
- c) Use of question tags
- d) Tenses
- e) Active + Passive voice
- f) Phrases + clauses

*The entrance examination will test the student in the above areas. These areas are broadly delineated cannot be specified in a detailed or precise manner in the curriculum content.*

### SCHEME OF ASSESSMENT FOR ENGLISH FOR CLASS IX

Assessment Objectives	Weightage (%)	Duration of Paper	Marks
Exercises based on Comprehension	40	1 Hour	50 Marks
Creative/ Critical Writing Skills	30		
Vocabulary Exercises	30		



## CHINMAYA INTERNATIONAL RESIDENTIAL SCHOOL COIMBATORE - INDIA

### ASSESSMENT OBJECTIVES FOR MATHEMATICS FOR CLASS IX

- I. Mathematical knowledge with understanding of concepts
- II. Applications of concepts – Problem solving skill

#### I. MATHEMATICAL KNOWLEDGE WITH UNDERSTANDING OF CONCEPTS

The candidate taking the entrance exam should be able to present mathematical knowledge and understanding of concepts in relation to:

- a. Organise and present information accurately in written, tabular, graphical and diagrammatic forms.
- b. Perform calculations by suitable methods.
- c. Understand systems of measurement in everyday use and make use of them in the solution of problems.
- d. Estimate, approximate and work to degrees of accuracy appropriate to the context.

#### II. APPLICATIONS OF CONCEPTS – PROBLEM SOLVING SKILL

The candidate taking the entrance exam should be able to solve the numerical problems using appropriate formulae, symbols, units, graphs etc. The candidate will be tested on the following skills:

- a. Interpret, transform and make appropriate use of mathematical statements expressed in words or symbols.
- b. Recognise and use spatial relationships in two and three dimensions, particularly in solving problems.
- c. Recall, apply and interpret mathematical knowledge in the context of everyday situations.
- d. Make logical deductions from given mathematical data.
- e. Recognise patterns and structures in a variety of situations, and form generalizations.
- f. Respond to a problem relating to a relatively unstructured situation by translating it into an appropriately structured form.
- g. Analyse a problem, select a suitable strategy and apply an appropriate technique to obtain its solution.
- h. Apply combinations of mathematical skills and techniques in problem solving.
- i. Set out mathematical work, including the solution of problems, in a logical and clear form using appropriate symbols and terminology.

***The entrance examination will test the above objectives. These skills cannot be further specified in a detailed or precise manner in the curriculum content. However the questions are well within the syllabus of the entrance examination.***

## SCHEME OF ASSESSMENT FOR MATHEMATICS FOR CLASS IX

Assessment Objectives	Weightage (%)	Duration of Paper	Marks
Mathematical Knowledge	20	1 Hour	50 Marks
Understanding of Concepts	30		
Application Skills	30		
Problem solving skills	20		

## SYLLABUS OUTLINE OF MATHEMATICS FOR CLASS IX

### Numbers and Number sense

- The student will
  - a) use arithmetic operators ( + , - ,  $\times$  and  $\div$ ) and the laws of exponents (indices) to simply numerical expressions involving rational numbers and decimals.
  - b) will solve multi step simplifications involving operations on rational numbers using **BODMAS**, i.e. hierarchy of operations. (**B**racket of **D**ivision, **M**ultiplication, **A**ddition and **S**ubtraction)
  - c) find squares & square roots and cubes & cube roots of numbers.

### Algebra

- The student will
  - a) simplify algebraic expressions using basic operations
  - b) simplify/factorize the algebraic expressions using standard identities  $(a + b)^2$ ,  $(a - b)^2$ ,  $a^2 - b^2$ ,  $(a + b + c)^2$ ,  $(a + b)^3$ ,  $(a - b)^3$ ,  $a^3 + b^3$  and  $a^3 - b^3$ .
  - c) find the quotient and the remainder when a polynomial is divided by either a monomial or binomial.
  - d) frame and solve linear equations in one variable.

### Ratio and Proportion and commercial mathematics

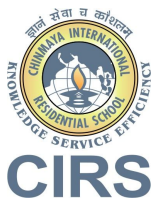
- The student will
  - a) solve problems using compound interest
  - b) solve word problems using percentage, profit & loss and discount.

## Measurement and Geometry

- The student will
  - a) find the surface area and volume of cylinder, cone and sphere.
  - b) solve problems involving area of parallelogram, trapezium, rhombus and quadrilateral.
  - c) solve simple problems using the properties of quadrilaterals, circles and congruence of triangles.

## Statistics

- The student, given a problem situation, will analyze, display, and interpret data in a variety of graphical methods, including line and bar and circle (**pie**) graphs and draw inferences from graphs.



# CHINMAYA INTERNATIONAL RESIDENTIAL SCHOOL COIMBATORE - INDIA

## ASSESSMENT OBJECTIVES FOR SCIENCE FOR CLASS IX

- I. Factual knowledge with understanding of concepts
- II. Application of concepts – Problem solving
- III. Drawing Skills

### I. FACTUAL KNOWLEDGE WITH UNDERSTANDING OF CONCEPTS

The candidate taking the entrance exam should be able to present factual knowledge and understanding of concepts in relation to:

- a. Facts, phenomena and laws.
- b. Define terms:  
Definition of physical, chemical and biological terms with SI units, symbols and equations.
- c. Explain a concept using examples from daily life or laboratory apparatuses
- d. Explain or suggest applications of science and technology in daily life with appropriate examples.

### II. APPLICATION OF CONCEPTS – PROBLEM SOLVING

The candidate taking the entrance exam should be able to solve the numerical problems using appropriate formulas, symbols, units, graphs etc. The candidate will be tested on the following skills:

- a. Present the information given in the problem accurately.
- b. Convert units from one form to another.
- c. Manipulate data and equations (Physical and Chemical).
- d. Present the solution with appropriate steps.
- e. Present the result as desired by the problem with appropriate units.

### III. DRAWING SKILLS

Drawing of diagrams and labeling them appropriately. Drawing of diagrams includes experiments in physics, chemical apparatuses / setups and biological structures.

**The entrance examination will test the above objectives. These skills cannot be further specified in a detailed or precise manner in the curriculum content. However the questions are well within the syllabus of the entrance examination.**

## SCHEME OF ASSESSMENT FOR SCIENCE FOR CLASS IX

Paper	Assessment Objective	Weightage (%)	Duration of the paper	Marks
Entrance to class 9	Factual Knowledge	20	1 Hour	50 Marks
	Understanding of Concepts	30		
	Application Skills	30		
	Drawing Skills	20		

## SYLLABUS OUTLINE OF SCIENCE FOR CLASS IX

**TOPICS:** FOOD; MATERIALS OF DAILY USE; WORLD OF THE LIVING; FORCE AND MOTION; SOUND; ELECTRIC CURRENT AND CIRCUITS; LIGHT; NATURAL RESOURCES.

### FOOD

- Crop production: How are different food crops produced? What are the various foods we get from animal sources?
- Micro-organisms and how they produce food.

### MATERIALS OF DAILY USE

- Clothes and their uses.
- Classification of natural and man-made fibers for making clothes
- Metals and Non-Metals
  - Uses of basic metals in daily life like iron, copper, aluminum etc.
  - Uses of basic non-metals like graphite etc.

### ACID AND BASES

- Physical and chemical properties of acids and bases
- Acids and bases in daily life (lactic acid in milk, vinegar in pickles etc)

## WORLD OF LIVING

- Cells: Internal structure of plant and animal cells.
- Cell organelles – nucleus, vacuole, chloroplast, cell membrane, cell wall.

## FORCE AND MOTION

- Idea of Force: How a force can change the speed, direction or shape of an object.
- Friction: Advantages and Disadvantages of Friction.
- Pressure: Idea of pressure; Pressure exerted by solids, liquids and air; Barometer (qualitative idea).

## SOUND

- Characteristics of sound: Frequency, wavelength and speed.
- Propagation of sound in different mediums.
- Various sources of sound.

## ELECTRIC CURRENT AND CIRCUITS

- Conductors of electricity
- Electrical hazards: How do we get electric shock? Its prevention.
- Chemical uses of electricity: Basic idea of electroplating.

## LIGHT

- Image formed by a plane mirror; Laws of Reflection.
- Regular and diffused reflection.
- Multiple reflections using more than one mirror.
- Color: Dispersion of light into seven colors.

## NATURAL RESOURCES

- Natural resources like wood, coal and petroleum.
- Consequence of deforestation.
- Reforestation and recycling of paper and other resources.

Questions will also be asked to test the general awareness in science pertaining to the age group.