## Class-VIII ENGLISH

### **Text Books**

- 1. New Pathways Course Book (MCB)
- 2. New Pathways Literature Reader (LR)
- 3. Collins English Grammar and Composition-8
- 4. The Hound of the Baskervilles by Sir Arthur Conan Doyle

### Learning Objectives -

### Reading

To enable the students to -

- 1. read silently at varying speed depending on the purpose of reading.
- 2. recognise the organisation of a text.
- 3. identify the main points of a text.
- 4. read extensively on their own.

## Writing

To enable the students to -

- 1. express ideas in clear and grammatically correct English, using appropriate punctuation and cohesion devices.
- 2. write a clear description.
- 3. expand notes into a piece of writing.
- 4. use an appropriate style and format to write letters (formal and informal), articles etc.; monitor, check and revise written work.

### Listening

To enable the students to -

- 1. adopt different strategies according to the purpose of listening (e.g. for pleasure, for general interest, for specific information).
- 2. understand and respond appropriately to directive language (e.g. instruction, advice, request and warning).
- 3. understand and interpret messages conveyed in person or by telephone.

## Speaking

To enable the students to -

- 1. operate intelligibly using appropriate word stress, sentence series and intonation pattern.
- 2. narrate incidents and events, real and imaginary, in a logical sequence.

### **General Note:**

A thorough reading of the text on regular basis is a must as questions from within the lesson will be given in the exams/tests. Questions in the exams are likely to be different from those attempted in the note books.

## FIRST TERM

## **Reading Comprehensions**

- MCB 1. My Big Brother
  - 2. Elephants Raid the Kitchen
  - 3. I Think I Could Turn and Live with Animals
  - 4. Can We Change This?

## Writing Skills

- 1. Notice Writing
- 2. School Magazine Report
- 3. Formal Letter Writing
- 4. Guided Story Writing

## Grammar

- 1. Nouns
- 2. Pronouns
- 3. Sentences
- 4. Conditional Sentences
- 5. Transformation of Sentences
- 6. Synthesis of Sentences
- 7. Adjectives
- 8. Verbs
- 9. Agreement of Subject and Verb
- 10. Non-Finite Verbs

11. Adverbs

- 12. Active and Passive Voice
- 13. Test I

### Literature and Long Reading Text

- MCB 1. Refugee Blues (Poem)
- LR 2. The Secret of the Machines (Poem)
  - 3. The Nightingale and the Glow worm (Poem)
  - 4. Boyhood Days
  - 5. Father's Help
  - 6. Jamaican Fragment
- MCB 7. Pocahontas

**N.B.** : Diary entry from the following chapter is to be done in class and assessed in literature section as long answer (80-100 words)

1. Father's Help

## The Hound of Baskerville - Chapters 1 to 7

**Note :** There will be separate assessment of listening and speaking skills.

## Listening Activities to be taken up in the term -

- MCB 1. A Most Important Person (Pg. 33)
  - 2. Elephants Raid the Kitchen (Pg. 57)
  - 3. Can We Change This? (Pg. 83)
  - 4. Assessment of Listening Task 3, Task 4 (Pg. 170, 171)

## **Creative Writing (Expressions)**

- 1. Friendships are fragile things and require as much careful handling as any other fragile and precious thing. Elaborate this statement on the basis of the chapter 'A Most Important Person' (MCB)
- 2. Read the poem 'Somebody's Mother' (MCB) and write how the elderly people need our love and support. Also what can we do to make their life easy and pleasurable.
- 3. Terenty had never been to school but nature had been his greatest teacher. What lessons can we learn from nature? Explain with reference to the chapter 'A Day in the Country' (MCB).

## SECOND TERM

## **Reading Comprehensions**

- MCB 1. Imagination
  - 2. The Diamond Maker
  - 3. The Choice
  - 4. Mr. Tallent's Ghost

## Writing Skills

- 1. Dialogue Writing
- 2. Advertisement Writing
- 3. Article Writing
- 4. Speech Writing

## Grammar

- 1. Phrases and Clauses
- 2. Relative Clauses
- 3. Determiners
- 4. Articles
- 5. Modals
- 6. The Present Tense
- 7. The Past Tense
- 8. The Future Tense
- 9. Direct and Indirect Speech
- 10. Prepositions
- 11. Conjunctions
- 12. Punctuation
- 13. Grammar on the Go
- 14. Idioms and Phrasal Verbs
- 15. Words : A Mixed Bag
- 16. Test II, III

## Literature and Long Reading Text

- MCB 1. Haunted Houses (Poem)
- LR 2. A Newspaper Is a Collection of Half-Injustices (Poem)
  - 3. On a Night of Snow (Poem)

- 4. Her First Party
- 5. The Stalled Ox
- 6. The Unexpected
- 7. Springtime Á La Carte
- MCB 8. The Red-Headed League
- **N.B.** : Diary entry from the following chapter is to be done in class and assessed in literature section as long answer (80-100 words)
  - 1. Her First Party

## The Hound of Baskerville - Chapters 8 to 15

**Note :** There will be separate assessment of listening and speaking skills.

## Listening Activities to be taken up in the term -

- MCB 1. Feathered Friend
  - 2. Journey to the Centre of the Earth
  - 3. Mr. Tallent's Ghost

## **Creative Writing (Expressions)**

- 1. The Chapter 'Emperors on Ice' (MCB) is based upon the expedition taken up by the brave men. Based upon your reading of the chapter, explain what qualities of the explorers are required to undertake the hazardous journey.
- 2. Read the chapter 'Journey to the Centre of the Earth' (MCB) and imagine you are a copywriter for a travel agency. You want to package and promote trips to the centre of the earth. Mention the settings as well as the adventures that are in store for the vacationers.
- 3. Life in space in different from the life on earth. Read the chapter 'Feathered Friend' (MCB) and draw a comparison between the two.

# हिन्दी

- पाट्य पुस्तकें 1. वसंत (भाग-3) (एन.सी.ई.आर.टी.)
  - 2. साम्राज्य हिला चुटकी भर नमक से (सी.बी.टी. प्रकाशन)
  - 3. हिंदी व्याकरण सुधा भाग-8 (गोयल ब्रदर्स प्रकाशन)

## हिन्दी शिक्षण का उद्देश्य ः

- 1. भाषा की बारीकी और सौन्दर्यबोध की क्षमता का विकास करना।
- दृश्य या श्रव्य माध्यमों की सामग्री को पढ़कर, देखकर और सुनकर समझने तथा उस पर स्वतन्त्र व स्वाभाविक मौखिक एवं लिखित प्रतिक्रिया व्यक्त करने की क्षमता का विकास करना।
- विभिन्न साहित्यिक विधाओं का आनन्द उठाने की क्षमता का विकास करना।
- पठित, लिखित और सुने हुए भाषिक ज्ञान से सम्बन्धित सामग्री का तार्किक दृष्टि से अध्ययन करने की प्रवृत्ति का विकास करना।
- अपने भावों व विचारों को सहज, स्वाभाविक और शुद्ध अभिव्यक्त करने की क्षमता का विकास करना।
- शब्दों, मुहावरों, लोकोक्तियों का सुचिंतित प्रयोग करने की क्षमता का विकास करना।
- मौखिक एवं लिखित अभिव्यक्ति के संदर्भ और आवश्यकता के अनुसार समुचित भाषा-शैली व प्रयोग को चुनने की समझ का विकास करना।
- भाषा की नियमबद्ध प्रकृति को पहचानना और उसका विश्लेषण करना।
- नोटः 1. प्रत्येक पाठ से शब्दार्थ, प्रश्नोत्तर और निबंधात्मक प्रश्न करवाए जाएँगे।
  - परीक्षा में पाठ के मध्य से प्रश्न पूछे जाएँगे, अतः पाठ को ध्यानपूर्वक पढ़ना आवश्यक है।

## प्रथम-सत्र

## वसंत भाग-3

- **गद्य पाठ -** 1. लाख की चूड़ियाँ
  - 2. क्या निराश हुआ जाए
- पद्य पाठ 1. कबीर की साखियाँ
  - 2. दीवानों की हस्ती
  - 3. सूर के पद
  - 4. भगवान के डाकिए

पूरक पुस्तक -

साम्राज्य हिला चुटकी भर नमक से - भाग 1 से भाग 6

- व्याकरण 1. वर्ण विचार
  - संज्ञा
  - 3. लिंग, वचन, कारक
  - 4. उपसर्ग, प्रत्यय
  - 5. सर्वनाम
  - 6. विशेषण
  - 7. पर्यायवाची शब्द (1-15)
  - 8. विलोम शब्द (अंत से उष्ण तक)
  - 9. अनेकार्थक शब्द (1-10)
  - 10. मुहावरे (1-10)
  - 11. वाक्यांशों के लिए एक शब्द (1-15)
- रचना कौशल 1. अपठित-गद्यांश (i) जब सिनेमा ने बोलना सीखा (वसंत)
  - (ii) पानी की कहानी (वसंत)
  - 2. अपठित-काव्यांश चिट्ठियाँ (वसंत)
  - 3. संवाद-लेखन 2
  - 4. विज्ञापन-लेखन 2
  - 5. चित्र-वर्णन 2
  - 6. पत्र-लेखन 2 (अनौपचारिक एवं औपचारिक)
  - 7. निबंध-लेखन 2
- ग्रीष्मावकाश प्रयोज्यकार्य हेतु 1. कम्प्यूटर गाएगा गीत (वसंत)
  - 2. अकबरी लोटा (वसंत)

### द्वितीय-सत्र

### वसंत भाग-3

- गद्य पाठ 1. बस की यात्रा
  - 2. बाज और साँप
  - 3. जहाँ पहिया है

- **पद्य पाठ -** 1. ध्वनि
  - 2. यह सबसे कठिन समय नहीं
  - 3. सुदामाचरित

पूरक पुस्तक -

### साम्राज्य हिला चुटकी भर नमक से - भाग 7 से भाग 12

- व्याकरण 1. क्रिया (संरचना के आधार पर)
  - काल
  - अव्यय (क्रिया-विशेषण, संबंधबोधक, समुच्चयबोधक, विस्मयादिबोधक)
  - 4. वाक्य-विचार (वाक्य के अंग)
  - 5. विराम-चिह्न
  - पर्यायवाची शब्द (16-30)
  - 7. विलोम-शब्द (ऊँच से निंदा तक)
  - 8. मुहावरे (11-20)
- रचना कौशल 1. अपठित-गद्यांश (i) पहाड़ से ऊँचा आदमी (वसंत)
  - (ii) चिट्ठियों की अनूठी दुनिया (वसंत)
  - 2. अपठित-काव्यांश- (i) पिता के बाद (वसंत)
  - 3. संवाद-लेखन 2
  - 4. विज्ञापन-लेखन 2
  - 5. चित्र-वर्णन 2
  - 6. पत्र-लेखन 2 (अनौपचारिक एवं औपचारिक)
  - 7. निबंध-लेखन 2

शीतावकाश प्रयोज्यकार्य हेतु 1. हम पृथ्वी की संतान (वसंत)

2. टोपी (वसंत)

## संस्कृत

- **पाठ्य-पुस्तकें -** 1. रुचिरा (तृतीयो भागः)
  - 2. संस्कृत व्याकरण मणिका (8)

## संस्कृत शिक्षण के उद्देश्य

- 1. संस्कृतभाषा एवं साहित्य के प्रति जिज्ञासा उत्पन्न करना।
- अर्थबोध के साथ संस्कृत गद्यांश को पढ़ने की क्षमता विकसित करना तथा संस्कृत श्लोकों को स्मरण कर सस्वर वाचन करने की योग्यता उत्पन्न करना।
- संस्कृतभाषा का सामान्यज्ञान कराना जिससे संस्कृत के सरलांशों को सुनकर या पढ़कर विद्यार्थी समझ सकें एवं मौखिक तथा लिखित अभिव्यक्ति कर सकें।
- संस्कृत में श्रवण-भाषण-वाचन से लेखन-कौशल तथा भाषागत कौशल का विकास करना।
- दृश्य-श्रव्य साधनों को ध्यानपूर्वक देखकर, पढ़कर तथा सुनकर उन पर अपेक्षित क्रियाएँ करने में समर्थ होना।
- विद्यार्थियों में सौन्दर्यबोध, कल्पनाशीलता तथा चिन्तन की क्षमता का विकास करना।

## सामान्य निर्देश ः

- रुचिरा में से परीक्षा हेतु पठित गद्यांशों, श्लोकों, संवादों पर आधारित प्रश्नोत्तर का अभ्यास करवाया जायेगा। भाषिक कार्य में जैसे - प्रश्न-निर्माण, पर्यायवाची, विलोम-शब्द, कर्तृक्रियापदचयन, विशेषण-विशेष्य, संज्ञा-सर्वनाम प्रयोग आदि करवाये जायेंगे।
- रुचिरा के पाठ्यक्रमानुसार पाठों का सम्पूर्ण अभ्यास तथा समस्त शब्दार्थ करवाये जायेंगे।
- 3. श्लोकों का अन्वय रिक्तस्थान के रूप में आयेगा।
- सन्धि, प्रत्यय, अव्यय, संख्या, उपसर्ग, शब्दरूप और धातुरूप वाक्यों में आयेंगे।
- 5. प्रश्नपत्र संस्कृतभाषा में आयेगा।

### प्रथम सत्र

1. रुचिरा - प्रथमः पाठः - सुभाषितानि

- दितीयः पाठः बिलस्य वाणी न कदापि मे श्रुता तृतीयः पाठः - डिजीभारतम् चतुर्थः पाठः - सदैव पुरतो निधेहि चरणम् पञ्चमः पाठः - कण्टकेनैव कण्टकम्
- नवमः पाठः सप्तभगिन्यः

#### 2. व्याकरण

- उपपद विभक्तियाँ उपपद विभक्तियों पर आधारित अशुद्धि संशोधन, रिक्तस्थानादि।
- 2. स्वर सन्धि (वाक्यों में) दीर्घ सन्धि, वृद्धि सन्धि, यण् सन्धि
- उपसर्ग (वाक्यों में) उपसर्ग युक्त धातुएँ (संस्कृत व्याकरण मणिका-पृष्ठ संख्या 101)
- 4. प्रत्यय (वाक्यों में) तुमुन् प्रत्यय, तुमुन् प्रत्यय के योग से वाक्य-संयोजन।
- 5. शब्दरूप (वाक्यों में) नदी, पितृ, अस्मद्, युष्मद्
- धातुरूप (वाक्यों में) पाँचों लकारों में (लट्, लृट्, लङ्, लोट्, विधिलिङ् लकार) धातुएँ - नम्, दृश्, गम्, कृ
- 3. 1. अपठित गद्यांश
  - 2. पत्रलेखनम् संकेताधारितं पत्रम्
  - 3. चित्रवर्णनम् प्रदत्त चित्र के आधार पर संस्कृत में वाक्य।
  - 4. हिन्दी से संस्कृत में अनुवाद (पाँच वाक्यों का)

## पुनरावृत्ति

## द्वितीय सत्र

- 1. रुचिरा षष्ठः पाठः
   गृहं शून्यं सुतां विना सप्तमः पाठः

   सप्तमः पाठः
   - भारतजनताऽहम् दशमः पाठः
   - नीतिनवनीतम् एकादशः पाठः

   एकादशः पाठः
   - सावित्री बाई फुले द्वादशः पाठः
   - कः रक्षति कः रक्षितः
  - चतुर्दशः पाठः आर्यभटः

न षेतानि

- 2. व्याकरण
  - 1. स्वर सन्धि (वाक्यों में) गुण सन्धि, अयादि सन्धि
  - 2. अव्यय (रिक्तस्थान के रूप में) समस्त अव्यय शब्द
  - प्रत्यय (वाक्यों में) क्त्वा तथा ल्यप् प्रत्यय, इन प्रत्ययों के योग से वाक्य-संयोजन।
  - 4. संख्या (वाक्यों में) 51 से 100 तक।
  - 5. शब्दरूप (वाक्यों में) मातृ, मुनि, राजन्, इदम्, (तीनों लिंगों में)
  - धातुरूप (वाक्यों में) पाँचों लकारों में (लट्, लृट्, लङ्, लोट्, विधिलिङ् लकार) धातुएँ - इष्, खाद्, अस्, पच्
  - वाक्य-संशोधनम् वचन, लिंग, पुरुष, लकार तथा विशेषण-विशेष्य पर आधारित।
- 3. 1. अपठित गद्यांश
  - 2. पत्रलेखनम् संकेताधारितं पत्रम्
  - 3. चित्रवर्णनम् प्रदत्त चित्र के आधार पर संस्कृत में वाक्य।
  - 4. हिन्दी से संस्कृत में अनुवाद (पाँच वाक्यों का)

### पुनरावृत्ति

### FRENCH

Text Book : Apprenons Le Français-4

Work Book : Cahier d' exercices-4

## Dictionary : Larousse

### **Learning Objectives**

- 1. To enhance the level of the students both in written and spoken French.
- 2. To enable the students to express themselves more effectively, naturally and correctly in the productive skill of writing.
- 3. To enhance the level of vocabulary and strengthen their concepts of grammar.
- 4. To enable the students to write in an appropriate style for communication purposes.

- 5. To develop basic understanding, conjugation of verbs in present, past and future tense, articles, prepositions, conjunctions, adjectives, imperatives and different expressions.
- 6. To use an appropriate style and format to write messages.
- 7. To implement different strategies to make learning French an enjoyable and interesting experience.
- 8. To acquaint them with French culture and civilization.

#### **General Note :**

Questions from within the lessons and related to culture and civilization of France will be asked in the exams/tests.

#### FIRST TERM

#### **Detailed Study**

Text Book - Leçon 0 - Que savez-vous de la France? (Pg. 9) Leçon 1 - Une boum Leçon 3 - La vie d'un mannequin, est-elle facile? Leçon 4 - On voyage Leçon 5 - Bon voyage!

#### Work Book : Leçons - 1, 3, 4, 5

#### Grammar :

- 1. Les articles (définis, indéfinis, contractés, partitifs)
- 2. Les adjectifs : possessifs, interrogatifs, démonstratifs
- 3. Les adverbes de quantité
- 4. Les conjonctions
- 5. Les verbes réguliers et irréguliers (présent)
- 6. L'interrogation
- 7. Les adverbes interrogatifs
- 8. Les verbes pronominaux
- 9. Les expressions négatives
- 10. Les prépositions
- 11. Le passé composé avec 'avoir'
- 12. Corrigez la faute
- 13. Mettez les phrases en ordre

#### REVISION

#### SECOND TERM

### **Detailed Study**

- Text Book Leçon 0 Que savez-vous de la France? (Pg. 10, 11 & 12) Leçon 6 - Des nouvelles de Lyon
  - Leçon 7 Bon Appétit
  - Lecon 8 Des invitations
  - Leçon 9 Aneesh partira bientôt
- Work Book : Leçon 0, 6, 7, 8, 9

#### **Grammar**:

- 1. Le passé composé avec 'être'
- 2. Les verbes réguliers et irréguliers (passé)
- 3. Faire une recette
- 4. Les expressions négatives au passé composé
- 5. L'impératif (affirmatif, négatif, pronominal)
- 6. Le passé composé des verbes pronominaux
- 7. Le futur simple
- 8. Corrigez la faute
- 9. Mettez les phrases en ordre

#### REVISION

#### MATHS

**Text Book :** Mathematics Textbook for Class-VIII (NCERT)

Practice Book : NCERT Practice Workbook Mathematics (Goyal

Brothers Prakashan)

#### **Learning Objectives**

Teaching of Mathematics helps the learners to

- acquire knowledge and understanding of the terms, symbols, concepts, principles, processes, proofs etc.
- consolidate the Mathematical knowledge and skills acquired at the primary level.
- develop mastery of basic algebraic skills.
- develop drawing skills.

- apply Mathematical knowledge and skills to solve real life problems by developing abilities to analyze, to see interrelationship involved, to think and reason.
- develop interest in Mathematics as a problem solving tool in various fields.
- develop reverence and respect towards great Mathematicians, particularly towards the Indian Mathematicians for their contributions to the field of Mathematics.

#### FIRST TERM

### **Chapter-1 : Rational Numbers**

- Introduction
- Properties of Rational Numbers
- Representation of Rational Numbers on the Number Line
- Rational Numbers between two Rational Numbers
  Ex. 1.1, 1.2 with examples
- Practice Book : Worksheets 1 to 5

#### **Chapter-2 : Linear Equations in One Variable**

- Introduction
- Solving Equations which have Linear Expressions on one Side and Numbers on the other Side
- Some Applications
- Solving Equations having the variable on both sides
- Some More Applications
- Reducing Equations to Simpler Form
- Equations Reducible to the Linear Form
  Ex. 2.1 to 2.6 with examples

Practice Book : Worksheets 8 to 15

#### **Chapter-3 : Understanding Quadrilaterals**

- Introduction
- Polygons
- Sum of the Measures of the Exterior Angles of a Polygon
- Kinds of Quadrilaterals

- Some Special Parallelograms
  - Ex. 3.1 to 3.4 with examples
- Practice Book : Worksheets 18 to 22

## **Chapter-5 : Data Handling**

- Looking for Information
- Organising Data
- Grouping Data
- Circle Graph or Pie Chart
- Chance and Probability
  Ex. 5.1 to 5.3 with examples
- **Practice Book :** Worksheets 31 to 36

## **Chapter-6 : Squares and Square Roots**

- Introduction
- Properties of Square Numbers
- Some More Interesting Patterns
- Finding the Square of a Number
- Square Roots
- Square Roots of Decimals
- Estimating Square Root
  Ex. 6.1 to 6.4 with examples

**Practice Book :** Worksheets 39 to 46

## **Chapter-7 : Cubes and Cube Roots**

- Introduction
- Cubes
- Cube Roots
  - Ex. 7.1, 7.2 with examples

## Practice Book : Worksheets 49 to 52

## **Chapter-8 : Comparing Quantities**

- Recalling Ratios and Percentages
- Finding the Increase or Decrease Percent
- Finding Discounts
- Prices Related to Buying and Selling (Profit and Loss)
- Compound Interest
- Deducing a Formula for Compound Interest

- Rate Compounded Annually or Half Yearly (Semi Annually)
- Applications of Compound Interest Formula
  - Ex. 8.1 to 8.3 with examples
- Practice Book : Worksheets 55 to 64

## **Chapter-16 : Playing With Numbers**

- Introduction
- Numbers in General Form
- Games with Numbers
- Letters for Digits
- Tests of Divisibility
  - Ex. 16.1, 16.2 with examples

## Practice Book : Worksheets 111 and 112

## **Vedic Mathematics**

- 1. Solving equations of the type ax + b = cx + d by Parvartya Yojayat Method.
- 2. Solving equation of the type  $\frac{ax+b}{cx+d} = \frac{m}{n}$  by Parvartya

## Yojayat Method

- 3. Division of 4 and 5 digit numbers by 9 using Nikhilam Sutra
- 4. Multiplication of numbers with special case using Antyayordasake pi method.

## SECOND TERM

## **Chapter-4 : Practical Geometry**

- Introduction
- Constructing a Quadrilateral
- Some Special Cases

Ex. 4.1 to 4.5 with examples

## Practice Book : Worksheets 25 to 28

## **Chapter-9 : Algebraic Expressions and Identities**

- What are Expressions?
- Terms, Factors and Coefficients
- Monomials, Binomials and Polynomials
- Like and Unlike Terms

- Addition and Subtraction of Algebraic Expressions
- Multiplication of Algebraic Expressions : Introduction
- Multiplying a Monomial by a Monomial
- Multiplying a Monomial by a Polynomial
- Multiplying a Polynomial by a Polynomial
- What is an Identity?
- Standard Identites
- Applying Identities
  Ex. 9.1 to 9.5 with examples
- **Practice Book :** Worksheets 67 to 75

#### **Chapter-10 : Visualising Solid Shapes**

- Introduction
- Views of 3-D Shapes
- Mapping Space Around Us
- Faces, Edges and Vertices
  Ex. 10.1 to 10.3 with examples
- Practice Book : Worksheets 78 and 79

#### **Chapter-11 : Mensuration**

- Introduction
- Let us Recall
- Area of Trapezium
- Area of a General Quadrilateral
- Area of a Polygon
- Solid Shapes
- Surface Area of Cube, Cuboid and Cylinder
- Volume of Cube, Cuboid and Cylinder
- Volume and Capacity
  - Ex. 11.1 to 11.4 with examples
- Practice Book : Worksheets 82 to 89

### **Chapter-12 : Exponents and Powers**

- Introduction
- Powers with Negative Exponents
- Laws of Exponents

- Use of Exponents to Express Small Numbers in Standard Form
  - Ex. 12.1, 12.2 with examples
- **Practice Book :** Worksheets 92 to 94

### **Chapter-13 : Direct and Inverse Proportions**

- Introduction
- Direct Proportion
- Inverse Proportion
  - Ex. 13.1, 13.2 with examples
- Practice Book : Worksheet 97

### **Chapter-14 : Factorisation**

- Introduction
- What is Factorisation?
- Division of Algebraic Expressions
- Division of Algebraic Expressions Continued (Polynomial ÷ Polynomial)
- Can you Find the Error?
  Ex. 14.1 to 14.4 with example
  - Ex. 14.1 to 14.4 with examples
- Practice Book : Worksheets 100 to 103

#### **Chapter-15 : Introduction to Graphs**

- Introduction
- Linear Graphs
- Some Applications
  - Ex. 15.1 to 15.3 with examples
- Practice Book : Worksheets 106 to 108

### **Vedic Mathematics**

- 1. Finding squares of numbers ending in 5 by Ekadhikena Purvena Sutra.
- 2. Finding HCF of algebraic expressions of the type :  $(ax^2 + bx + c)$  and  $(ax^2 + dx + e)$  by Lopana Sthapana Sutra.
- 3. Multiplication of any number by 12 using Urdhava Tiryak Sutra.
- 4. Finding squares of numbers not ending in 5 by Ekadhikena Purvena Sutra.

### SCIENCE

Text Book : Science text book for Class VIII (NCERT)

#### Learning Objectives

- to strengthen the knowledge acquired at primary level
- to emphasize the acquisition of scientific knowledge
- to appreciate nature and sensitise the students about the environment.
- to understand scientific language i.e. symbols, formulae, equations etc.
- to develop scientific aptitude/temper
- to apply the theoretical knowledge of science to daily life
- to make the students abreast with the latest technological developments that have taken place and their impact on the society
- to enable the students to develop the process of problem solving and decision making

## PHYSICS FIRST TERM

#### **Chapter-11 : Force and Pressure**

Force : A push or a pull, forces are due to an interaction, exploring forces, a force can change the state of motion, force can change the shape of an object, contact forces, non-contact forces, pressure, pressure exerted by liquids and gases, atmospheric pressure.

#### **Chapter-12 : Friction**

Force of friction, factors affecting friction, Friction : A necessary evil, increasing and reducing friction, wheels reduce friction, fluid friction.

#### **Chapter-13 : Sound**

Sound is produced by a vibrating body, sound produced by humans, sound needs a medium for propagation, we hear sound through our ears, amplitude, time period and frequency of a vibration, audible and inaudible sounds, noise and music, noise pollution.

#### **Chapter-15 : Some Natural Phenomena**

Lightning, charging by rubbing, types of charges and their interaction, transfer of charge, the story of lightning, lightning safety, earthquakes, what causes an earthquake? Protection against earthquake.

#### REVISION

#### SECOND TERM

#### **Chapter-14 : Chemical Effects of Electric Current**

Do liquids conduct electricity? Chemical effects of electric current, electroplating.

#### Chapter-16 : Light

What makes things visible? Laws of reflection, regular and diffused reflection, reflected light can be reflected again, multiple images, sunlight - white or coloured, what is inside our eyes? Care of the eyes, visually impaired persons can read and write, what is braille system?

### Chapter-17 : Stars and the Solar System

The moon, the stars, constellations, the solar system, some other members of the solar system, artificial satellites

#### REVISION

### CHEMISTRY FIRST TERM

#### **Chapter-3 : Synthetic Fibres and Plastics**

What are synthetic fibres? Types of synthetic fibres, characteristics of synthetic fibres, plastics, plastics as material of choice, plastics and the environment.

#### Chapter-4 : Materials : Metals and Non-metals

Physical properties of metals and non-metals, chemical properties of metals and non-metals, uses of metals and non-metals.

#### REVISION

#### SECOND TERM

#### **Chapter-5 : Coal and Petroleum**

Coal, petroleum, natural gas, some natural resources are limited.

#### **Chapter-6 : Combustion and Flame**

What is combustion? How do we control fire? Types of combustion, flame, structure of flame, what is a fuel? Fuel efficiency.

#### **Chapter-18 : Pollution of Air and Water**

Air pollution, how does air get polluted? Case study - The Taj Mahal, Greenhouse effect, what can be done? Water Pollution, how does water get polluted? What is potable water and how is water purified? What can be done?

#### REVISION

#### BIOLOGY

#### FIRST TERM

#### **Chapter-2 : Microorganisms : Friend and Foe**

Microorganisms, where do microorganisms live? Microorganisms and us, harmful microorganisms, food preservation, nitrogen fixation, nitrogen cycle.

#### **Chapter-7 : Conservation of Plants and Animals**

Deforestation and its causes, consequences of deforestation, conservation of forest and wildlife, biosphere reserve, flora and fauna, endemic species, wildlife sanctuary, national park, red data book, migration, recycling of paper, reforestation.

#### **Chapter-8 : Cell Structure and Functions**

Discovery of the cell, the cell, organisms show variety in number, shape and size, cell structure and functions, parts of the cell, comparison of plant and animal cells.

#### REVISION

#### SECOND TERM

#### **Chapter-1 : Crop Production and Management**

Agricultural practices, basic practices of crop production, preparation of soil, sowing, adding manures and fertilizers, irrigation, protection from weeds, harvesting, storage, food from animals.

#### **Chapter-9 : Reproduction in Animals**

Modes of reproduction, sexual reproduction, asexual reproduction.

#### **Chapter-10 : Reaching the Age of Adolescence**

Adolescence and puberty, changes at puberty, secondary sexual characters, role of hormones in initiating reproductive function, reproductive phase of life in humans, how is the sex of the baby determined? Hormones other than sex hormones, role of hormones in completing the life history of insects and frogs, reproductive health.

#### REVISION

#### SOCIAL SCIENCE

#### Learning Objectives

The course in Social Science will help learners :

- develop an understanding of the processes of change and development - both in terms of time and space, through which human societies have evolved.
- deepen the knowledge and understanding of environment in its totality, their interactive processes and effects on the future life of people.
- develop scientific temper by promoting the spirit of enquiry and following rational and objective approach in analysing and evaluating data and information as well as views and interpretations.

#### **Textbooks :**

- 1. Our Pasts-III : Textbook in History for Class VIII (NCERT)
- 2. Social and Political Life-III : Textbook for Class VIII (NCERT)
- 3. Resources and Development : Textbook in Geography for Class VIII (NCERT)
- 4. Atlas Oxford School Atlas

### FIRST TERM

#### **Our Pasts-III**

- Chapter-1: How, When and Where
- Chapter-2: From Trade to Territory (The Company Establishes Power)
- Map Work : World Political Map Sea route to India via Cape of Good Hope; continent where slave trade began; continent from where British, French & Portuguese came; Portuguese base in India

India Political Map - Battles fought, area ruled by Ranjit Singh, place ruled by Tipu Sultan, Areas conquered by Doctrine of Lapse.

- Chapter-3 : Ruling the Countryside
- Map Work : India Political Map Champaran movement against Indigo plantation; famine in 1770; Place governed by Thomas Munro; Kalamkari weavers; Production of indigo in India
- Chapter-4: Tribals, Dikus and the Vision of a Golden Age
- Chapter-5: When People Rebel (1857 and After)
- Map Work : India Political Map : Main centres of the Revolt of 1857 SOCIAL AND POLITICAL LIFE III
- Chapter-1: The Indian Constitution
- Chapter-2: Understanding Secularism
- Chapter-3: Why do we need a Parliament?
- Chapter-4 : Understanding Laws
- Chapter-5 : Judiciary

#### **RESOURCES AND DEVELOPMENT**

- Chapter-1: Resources
- **Map Work :** India Political Map : Place where Uranium is found, Popular wind farms in India
- Chapter-2: Land, Soil, Water, Natural Vegetation and Wildlife Resources
- **Diagram :** Soil Profile

- Chapter-3: Mineral and Power Resources
- **Map Work :** World Political Map First country to develop hydroelectricity; Largest producer of bauxite, diamond, high grade iron-ore; iron-ore

#### SECOND TERM

#### **Our Pasts-III**

- Chapter-6: Weavers, Iron Smelters and Factory Owners
- Map Work : India Political Map Tata Iron and Steel Plant; First Cotton Mill, Major centres of silk weaving in the 18th century
- Chapter-7: Civilising the "Native", Educating the Nation
- Map Work : India Political Map Place where Hindu college and Santiniketan was established, places where Universities were established in 1857
- Chapter-8 : Women, Caste and Reform
- Map Work : India Political Map Place where Brahmo Samaj and Paramhans Mandali were found
- Chapter-9: The Making of the National Movement (1870s–1947)
- Map Work :India Political Map Champaran, Partition of Bengal,<br/>Jallianwala Bagh, Sabarmati to Dandi, Chauri Chaura
- Chapter-10: India after Independence
- Map Work : India Political Map Linguistic States; State where Bhilai Steel plant is located, First linguistic state SOCIAL AND POLITICAL LIFE-III
- Chapter-6: Understanding Our Criminal Justice System
- Chapter-7: Understanding Marginalisation
- Chapter-8: Confronting Marginalisation
- Chapter-9: Public Facilities
- Chapter-10: Law and Social Justice

#### **RESOURCES AND DEVELOPMENT**

- Chapter-4 : Agriculture
- **Map Work :** World Political Map Leading producers of jute, cotton, tea, coffee, rice, wheat, millets

Chapter-5: Industries

- Map Work : World Political Map Countries which have Iron & Steel Industry; Manchester of Japan India Political Map - States producing steel; States and cities rich in cotton textile, Manchester of India
- Chapter-6 : Human Resources
- Map Work : World Political Map Most sparsely populated country; Most populous country; Densely populated continents
- **Diagram :** Population Pyramid of India, Kenya.

### **COMPUTER SCIENCE**

#### **Learning Objectives**

- to enhance the knowledge of website designing using HTML.
- to familiarize the students with the concepts of Computer Networks, E-Commerce, AI
- to develop basic skills of programming using PYTHON.

### Text Book - IT Planet - Petabyte (Class 8)

#### FIRST TERM

#### Lesson 1 : Computer Network

- Communication
- Comptuer Network
- Types of Network
- Network Hardware
- Communication Channels
- Network Architecture
- Network Topology
- Protocol

#### Lesson 4 : HTML - Form, Multimedia & CSS

- HTML
- Creating Forms
- Adding Multimedia
- Cascading Style Sheets (CSS)

### Lesson 6 : E-Commerce & Blogging

— E-Commerce

- E-Commerce Business Models
- E-Retailing, Security Concern
- Top E-Commerce Websites
- Blogging

#### SECOND TERM

#### Lesson 7 : Artificial Intelligence (AI)

- Introduction
- Artificial Intelligence
- Understanding AI Environment
- Timeline of AI Intelligence
- Artificial Intelligence in Daily Life
- Future of AI
- AI and Ethics

#### Lesson 9: Python - Introduction

- Programming Language
- Introduction to Python
- Character Set, Tokens, Comments
- Statements, Datatypes, Variables
- Defining Input and Output in Python
- Error Handling
- Programs in Python

#### Lesson 10 : Python - Control Structures

- Control Structures
- Conditional Control Structures
- Loop Control Structures
- Break Statement
- Continue Statement

#### For Practical Sessions only

- Lesson 2 : Access Tables and Forms
- Lesson 3 : Access Query and Reports
- **Lesson 8 :** App Development

## GENERAL KNOWLEDGE FIRST TERM

#### NATURE

- The World of Plants •
- Animal Phobia .
- Which Animal? •

### INDIA

- Folk Art •
- The Nine Yards •

### WORLD •

- **Immortal Speeches**
- Natural Reserves •

## LANGUAGE

**Indian Writers** •

## **SCIENCE**

- Phenomenal Scientists •
- Tech Talk •
- Robotic •

## **SPORTS**

- Great Cricketers •
- Stress Management Life Skills •

## **ENTERTAINMENT**

Lights, Camera, Action On the Red Carpet • •

### SECOND TERM

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•

## NATURE

- Indian Mythology and Plants •
- Rainforests •
- Cauvery Calling •

## INDIA

- International Borders .
- The First Citizen .
- Teenage Life Skills •

- **Distinctive Plants**
- Nocturnal Animals
- Handicrafts of India
- Super South
- The Philippines •
- **Bloody Battles** •
  - Must Reads
- Nobel Laureates .

Marine Life

Geo India

Womb of Life!

National Organisations

Scientific Studies

Go GPS •

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- WORLD
  - Legends of the world •
  - Which Country? •

## LANGUAGE

Colourful Speech •

## **SCIENCE**

- IT Greats •
- Camera Clicks
- Nuclear Science •

### **SPORTS**

- Winter Olympic Sports •
- **Bowling Alley** •

## **ENTERTAINMENT**

- On the Canvas •
- Test Paper 1
- Test Paper 2

## WORK EXPERIENCE

### **Learning Objectives :**

- To help the pupils to develop essential knowledge and understanding in terms of :
- acquainting themselves with productive activities in the community
- understanding facts and scientific principles involved in various forms of work
- knowing the sources of raw materials and understanding the \_\_\_\_ use of tools and equipment in the production of goods and services.
- understanding the utility of productive work and services to the community
- developing abilities for self-evaluation of performance and entrepreneurship

## **ENGLISH LITERARY CLUB** FIRST TERM

- Newspaper Reading and making of a newspaper 1.
- 2. Vocabulary Enhancement
- 3. Poem Writing, Poem Reading and Recitation

(28)



Folk Music

- Features of the World •
- International Organisation •
- The Bard of Avon .
- Genetic Diseases .
- Dinosaurs
- Space Odyssey
- Formula 1 •

Topics — Narrative poems

- Humorous poems
- 4. Advertisement Writing and Dramatization
- 5. Slogan Writing and Poster Making
- 6. Spin-A-Yarn
- 7. Extempore
  - Topics TV Commercials, lead or mislead
    - Haste makes Waste

#### SECOND TERM

- 1. Story telling and Reading of self-written stories
- 2. Vocabulary Enhancement (Through games)
- 3. Reading of Quotations
- 4. Radio Show
- 5. Conducting an Interview
- 6. Character Dramatization
- 7. Twist-a-Tale
- 8. Debates and Elocutions
- 9. Proverb Enactment
- 10. Dramatization of Short Stories and Plays

## हिन्दी साहित्यिक समिति

### प्रथम सत्र

- 1. शब्दकोश निर्माण
- 2. कविता पाठ
- 3. नारे लेखन
- 4. समाचार लेखन एवं वाचन
- 5. स्वरचित कविता, कहानी
- 6. विज्ञापन बनाना तथा अभिनीत करना

### द्वितीय सत्र

- 1. दोहा⁄पद पाठ
- 2. सूचना-लेखन
- 3. चित्रों पर आधारित कहानी निर्माण करना
- पत्र पाठ
- 5. लघु एकांकी मंचन / एकल अभिनय

### MATHEMATICS CLUB FIRST TERM

- 1. Puzzle Solving
- 2. Venn Diagrams
- 3. Euler's Formula (Activity)
- 4. Coding Decoding and Direction Test
- 5. Crossword
- 6. Reasoning Test
- 7. Mathemagic Squaring Formula
- 8. Histogram (Activity)
- 9. To verify the algebraic identity  $(a b)^2 = a^2 2ab + b^2$

## SECOND TERM

- 1. Exterior angles of a Polygon (Activity)
- 2. Quiz (Written)
- 3. Magic of Numbers (Patterns)
- 4. Vedic Maths (Solving Linear Equations)
- 5. Relation between area and perimeter of a square (Activity)
- 6. Coordinate Geometry (Activity)
- 7. Surface Area and Volume of Cubes and Cuboids (Activity)
- 8. Simple and compound interest & graphical representation
- 9. To verify the algebraic identity  $a^2 b^2 = (a + b) (a b)$

## ELECTRONICS AND ECO CLUB FIRST TERM

- 1. Celebrating Van Mahotsav Tree plantation drive
- 2. Making of Steam Boat
- 3. Build a water wheel
- 4. Project Energy Conservation Model of Solar Cooker
- 5. Power point presentation on World Ozone Day
- 6. Slogan Writing Balanced diet and myths related to healthy nutrition.

### SECOND TERM

- 1. Campaign on Eco-friendly Diwali
- 2. Model of an Electroscope
- 3. Making of Mechanical Crane

- 4. Saving our precious species Bird nest making
- 5. Play Holi with Safe Colours campaign Making herbal colours
- 6. Excursion to generate awareness on environment

### FINE ART FIRST TERM

- 1. Paper Collage
- 2. Miniature Painting
- 3. Painging of Buddha
- 4. Composition in 'Pointillism'
- 5. Indian Contemporary Art

#### SECOND TERM

- 1. Landscape in water colours
- 2. Madhubani Painting
- 3. Abstract Art
- 4. Portrait Study
- 5. Figure Composition

#### HANDICRAFTS FIRST TERM

- 1. Mirror frames
- 2. Collage painting
- 3. Alluminium Foil Craft
- 4. Quill work
- 5. Card Making

### SECOND TERM

- 1. Coasters
- 2. Curtain strings
- 3. Weave a mat
- 4. Candle lamps
- 5. Mosaic work

## CONNOISSEURS CLUB FIRST TERM

- 1. Protein Upma
- 2. Chatpata whole cereal Oats pancake
- 3. Moong Dal Idli/Cheela
- 4. Flower floating cup decor (with hot Glue gun)

- 5. Super Meva Mix
- 6. Designer Wax Candle
- 7. White Sauce/Cucumber dip
  - \* Table mats / Cushion Covers 6
  - \* Pillow covers 2 / Dupatta 1

### SECOND TERM

- 1. Garlic bread loaf
- 2. Healthy Pizza/Stuff Pizza Pocket
- 3. Gel Candle
- 4. Frill Bowl
- 5. Chocolate Making
- 6. Crunchy Dalia Pattise
- 7. Club Sandwich
- 8. Nutritious Patties

### WESTERN DANCE

### Flamenco, Zive, Jamaican, Chinese

- 1. Body movements
- 2. Exercise (warming work out)
- 3. Stretching exercise for flexibility of body
- 4. One self composition based dance

## शास्त्रीय नृत्य तथा लोक नृत्य

## शास्त्रीय नृत्य

1.	गणेश श्लोक	2.	सरस्वती श्लोक
3.	हस्त मुद्राएँ	4.	पद भेद
5.	तालो का ज्ञान		

## लोक नृत्य

1. पहाड़ी (नटी)	2.	कश्मीरी	(डोगरी)
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4.

महाराष्ट्र (लावणी)

3. असम (बीहू)

## MUSIC

## Theory

- 10 अलंकार
- 2. राग और ताल
- 3. राग के नियम

- 4. सरगम गीत, तराना, लक्षण गीत
- 5. तालबद्ध अलंकार
- झपताल, एकताल, तीनताल को एकगुन, दुगुन में ताली, खाली और सम विभाग दिखाते हुए ताल-लिपि में लिखना
- 7. अलंकार की परिभाषा

#### Practical

- 1. अलंकारों का अभ्यास
- 2. तालों का अभ्यास
- 3. तालबद्ध अलंकारों का अभ्यास
- 4. राग देस
- 5. सरगम गीत देस राग
- 6. लोकगीत गुजराती गीत
- 7. भजन भजन मन निस दिन तेरो नाम
- 8. English Songs 'Glorious Song'
  - 'There shall be showers of blessings'
- 9. प्रार्थना तथा देशभक्ति गीतों का अभ्यास
- 10. संस्कृत श्लाक सं गच्छध्वं, सं वदध्वम्
- 11. वाद्ययंत्र Casio, Kongo, Harmonium

### YOGA

- (a) (i) Definition and general instructions
  - (ii) Elements of yoga
  - (iii) Types of Pranayama and its benefits

### (b) Yogasana

- (1) Yogasana (2)
- (3) Karnapidasana
- (5) Padamasana
- (7) Makarasana
- (9) Janu-Sirsasana
- (11) Surya-Namaskara
- (13) Tadasana
- (15) Salabhasana

- (2) Vajarasana(4) Kukkutasana
- (4) Kukkutasan
  - (6) Brahmacharyasana
  - (8) Bhunamanasana
  - (10) Mandukasana
  - (12) Naukasana
  - (14) Kurmasana
  - (16) Urd-Sarvangasana

(17) Simhasana(10) Virasana

## (18) Gomukhasana

(20) Makrasana

### (c) Yogic Suksma-Vyayama

- (1) Buddhi-Tatha-Dhrti-Sakti-Vikasaka
- (2) Smarana-Sakti-Vikasaka
- (3) Netra-Sakti-Vikasaka
- (4) Karna-Sakti-Vikasaka
- (5) Griva-Sakti-Vikasaka (3 types)
- (6) Udara-Sakti-Vikasaka (9 types)
- (7) Kati-Sakti-Vikasaka (5 types)
- (8) Bhuja-Balli-Sakti-Vikasaka
- (9) Purna-Bhuja-Sakti-Vikasaka
- (10) Naksa-Sthala-Sakti-Vikasaka (2 types)
- (d) Yogic-Sthula-Vyayama
  - (1) Hrd-gati (2) Sarvanga-Pushti
  - (3) Rekha-gati (4) Sirsasana

## **ART EDUCATION**

### Learning Objectives

- Introduce the students to new media and technique and their use for creative expression and making objects of common use.
- Refine the sense of appreciation of the beauty of nature and the basic elements of art forms.

## FIRST TERM

- 1. Know about colours (Primary, secondary and Neutral)
- 2. Basic colouring strokes and techniques.

### Art, Craft and Me : Book-6

Pages 7 to 374

### SECOND TERM

### Art, Craft and Me : Book-6

Pages 38 to 66

### MUSIC, DANCE, DRAMA

### Theory :

- 1. Concept of Art Education
- 2. Basic knowledge of performing Art

- 3. Definition of Sangeet, Raga, Alankars
- 4. Ten Alankars
- 5. Four Talas (detailed study)
- 6. Written work of 'Teentaal, Dadra, Keherva, Jhaptaal'
- 7. Knowledge of Classical Dance and Folk Dance
- 8. Western Dance forms

## Practical :

- 1. Practice of Alankars
- 2. Practice of Taal
- 3. Practice of prayers and songs from diary
- 4. Practical of Dance forms
- 5. Folk song Gujarati Song
- 6. English Song 'We are the World'
- 7. भजन 'अच्युतम केश्वम्'
- 8. Exercises of Western Dance and Classical Dance

## PHYSICAL EDUCATION AND HEALTH EDUCATION

## Learning Objectives

- To develop a scientific point of view regarding Health and Physical Education
- To give knowledge about balanced diet and nutrition
- Knowledge of exertices on cardiovascular
- Effects of exercises on respiratory system

## Theory

- 1. Importance of good posture and advantages of correct Postures
- 2. Knowledge of weight training and food supplement for children
- 3. Drugs and their side effects on our body

## Practical

- 1. Volley Ball 2. Basketball
- 3. Throw Ball 4. Badminton
- 5. Cricket 6. Table Tennis
- 7. Athletics