

# GRADE 1

## *ENGLISH (eng\_1)*

Chapter 1 of Unit 1 titled 'My Family and Me', talks of parts of the body with an emphasis on hygiene; it also helps children to associate actions with words. Chapter 2 inculcates politeness by introducing the various ways of greeting others, including 'Namaste'. Chapter 3 introduces young learners to the concept of family, through a story of a sparrow family, enabling them to learn words related to family members. Unit 2 titled 'Life Around Us', introduces children to the animals and birds in the surroundings. In Chapter 2, children learn the prepositions 'up' and 'down' through the familiar Indian folktale 'The Cap-seller and the Monkeys'. Chapter 3 emphasises rhyming words, through the comic strip 'Catch me if you can'. Chapter 4 introduces young learners in the farm and around the home. Unit 3 titled 'Food' in Chapter 1, provides a glimpse of the variety of fruits, vegetables and flowers found in our country. Chapter 2 titled 'The Food we Eat' emphasises having respect for food, importance of saying a short prayer before eating meals, and addresses the diversity of food in our country. Unit 4 titled 'Seasons' in Chapter 1 discusses the various seasons, and the changes in temperature, items of clothing, etc. Chapter 2 has a beautiful story on the colours of the rainbow. The chapter ends with the colouring of the national flag.

## *MATH (math\_1)*

### Unit 1: Foundational Concepts

- *Chapter 1: Finding the Furry Cat!* introduces pre-number concepts through positional words like "above," "below," etc., using a playful poem and interactive activities.
- *Chapter 2: What is Long? What is Round?* explores shapes and dimensions with activities involving everyday objects, discussions, and creative tasks.
- *Chapter 3: Mango Treat* focuses on introducing numbers 1 to 9 through counting games, matching exercises, and stories.

### Unit 2: Building Numerical Understanding

- *Chapter 4: Making 10* extends number learning to 10-20 with games, hands-on activities, and conceptual understanding of "zero."
- *Chapter 5: How Many?* covers single-digit addition and subtraction, emphasizing real-life scenarios, collaborative play, and critical thinking.

- *Chapter 6: Vegetable Farm* teaches addition and subtraction up to 20 using relatable examples of vegetables and encourages environmental responsibility through projects.

### Unit 3: Exploring Patterns and Advanced Numbers

- *Chapter 7: Lina's Family* introduces basic measurement concepts using familiar settings.
- *Chapter 8: Fun with Numbers* dives into numbers 21-99 through grouping and interactive counting methods.
- *Chapter 9: Utsav* introduces patterns, blending cultural elements with mathematical concepts.

### Unit 4: Advanced Mathematical Concepts

- *Chapter 10: How do I Spend my Day?* focuses on telling time through daily activities.
- *Chapter 11: How Many Times?* introduces multiplication using visual aids and repeated addition.
- *Chapter 12: How Much Can We Spend?* introduces currency and basic monetary calculations.
- *Chapter 13: So Many Toys* simplifies data handling using examples like toys and objects.

### Additional Activities

- The book integrates puzzles, poems, and stories to make learning joyful and experiential. It emphasizes collaborative projects, cultural rootedness, and critical thinking to build a holistic foundation in mathematics.

## GRADE 2

### *ENGLISH (eng\_2)*

In Unit 1 titled 'Fun With Friends', children get a glimpse of having fun by oneself in 'My Bicycle' and the joy of playing a variety of games like Bat-ball, gilli-danda with friends during holidays. In Unit 2 titled 'Welcome to My World' young learners are exposed to a variety of verbs through the actions they do in 'It's Fun' whereas 'Seeing without Seeing' sensitises them towards differently abled people. It also introduces the idea of belonging to home and beyond in 'This is My Town'. Unit 3 titled 'Going Places' focuses on the concept of travel and modes of transport—the journey of reaching school from the perspective of a young learner. Unit 4 'Life Around Us' brings forth the skill of observation, imagination and perception in the poem 'A Show of Clouds'. It also includes a story of a fly that has forgotten its name. The poem "The Crow" brings out the concepts of self-esteem and the idea of self in a subtle way. Hygiene and cleanliness is the central idea of the story "The Smart Monkey" which brings into discussion the necessity of taking care of oneself and of the surroundings. Chapter 8 focuses on regional and National identity, patriotism and togetherness. The chapter aligns with the Indian ethos of 'Unity in Diversity'. The chapter ends with a short play on 'Charkha' and its association with Mahatma Gandhi.

### *MATH (math\_2)*

Oral Math Talk: This includes discussion on mathematical concepts through poems, picture stories and activities as mentioned below: Maths poems like 'Seasons' and 'East, West, North or South' in Chapter 9. Picture stories for the introduction of concepts, practice and assessment have been included like 'Heena' and 'Aatif' in Chapter 2, 'Shadow Story' and 'Hide and Seek' in Chapter 4, 'Decorating with Garlands' in Chapter 6, 'Rani's Gift' and 'Pumpkin's Chaupal' in Chapter 7, etc. Discussion with children through various daily life contexts like, 'Vallam Kali' on Chapter 1, 'Garba Festival' in Chapter 2, 'Decoration for Festival', 'Let us Count Diyas' in Chapter 6, 'Fruits in the Park' in Chapter 7, 'Let us Share' and 'How many Groups' in Chapter 8, 'Gargi's Day' in Chapter 9, 'Picnic Time', and 'Games we Play' in Chapter 11. Skill Teaching: All Chapters have activities that can be done by the child all alone, in groups, or with the help of elders (parents, teachers, and siblings). This helps the child in the development of various skills with the guided support of others. Skill Practice: Opportunities for skill practice have been included in all the chapters in the form of Let us Do, Project Work, and practice questions. For example, 'Origami Fun', 'Mehandi' and 'Stamping' in Chapter 4 and 'Make your Own Balance' in Chapter 7. Math Games: Math games and

activities have been interwoven in all the chapters throughout the book. For example, 'Let us Make 100', 'Mark by Passing the Path' and 'Flash Card Game' in Chapter 1; 'Patterns in Number Chart' in Chapter 3; 'Yoga asanas' and 'Let us Play with Dots' in Chapter 5; 'Choose the Longest Path' and 'How Many Blocks?' in Chapter 7; 'How Old are We?' in Chapter 9.

## **GRADE 3**

### *ENGLISH (eng\_3)*

The theme of Unit 1 is 'Fun with Friends'. This unit encourages language acquisition through friendly animals, and imaginative characters as a lens, allowing them to seamlessly integrate cross-curricular elements of Mathematics. Through engaging exercises, they learn that friendship may be between children as well as with the environment. It also kindles their imagination with whimsical characters of shapes to aid language learning through a joyful, play-driven process. This unit emphasises the value of friendship. Unit 2 titled 'Toys and Games', takes the children into the world of indigenous toys and games. The chapters, 'Out in the Garden' and 'Talking Toys' give a glimpse of the world of toys taking the child into the imaginary world with emphasis on the joy of playing. Chapter 3, 'Paper Boats', emphasises on the joy of making and sharing simple toys. Unit 3 titled 'Good Food' in Chapter 1, 'The Big Laddoo' steers us into the wondrous world of laddoos and sweets, while playfully introduces the concept of size. Chapter 2 'Madhu's Wish' identifies the significance of water in our lives with an equal importance to good and healthy food. Chapter 3 'Thank God' makes students delve into the vibrant world of an orchard. It not only imparts knowledge of fruits but also instills a sense of gratitude. Unit 4, titled 'The Sky', begins with the Poem 'Night'. In the poem a young child wonders about his day and how it is shaped by the sunset and sunrise. The first prose piece of the Unit 'Chanda Mama Counts the Stars' is a story that introduces the concept of infinity through the characters of the Sun and the Moon. In the third text, 'Chandrayaan', siblings Rani and Prateek try to get a glimpse into India's Lunar Mission 'Chandrayaan' with the help of their neighbour 'Nandini Auntie' who is a scientist.

### *MATH (math\_3)*

**Chapter 1, "What's in a Name?"**, starts with counting using simple marks and explores how numbers are named and written using number cards. **Chapter 2, "Toy Joy,"** builds upon this by grouping things based on what they have in common and shows how addition combines quantities. Moving to bigger numbers, **Chapter 3, "Double Century,"** teaches numbers over 100 using bundles of matchsticks, and looks for patterns in how numbers work. **"Vacation with My Nani Maa," Chapter 4,** uses tens frames and number lines to show addition in various ways. Shifting to shapes, **Chapter 5, "Fun with Shapes,"** dives into rectangles, squares, triangles, circles, and how they relate to each other in space. **Chapter 6, "House of Hundreds - I,"** introduces numbers up to 1000 using Dienes blocks, and explains the idea of place value. **Chapter 7, "Raksha**

**Bandhan,**" cleverly uses the festival context to teach multiplication through repeated addition and skip counting. **Then, "Fair Share," Chapter 8,** introduces fractions, focusing on halves and quarters using visuals and real-life sharing. Continuing with big numbers, **Chapter 9, "House of Hundreds - II,"** puts numbers up to 1000 on the number line and uses them to solve problems. **Chapter 10, "Fun at Class Party!",** revisits multiplication with new strategies like arrays and grouping. **Chapter 11, "Filling and Lifting,"** brings in the idea of capacity and uses liters and milliliters to measure liquids. **Chapter 12, "Give and Take,"** practices adding and subtracting three-digit numbers using box diagrams and number lines. Moving to time, **Chapter 13, "Time Goes On,"** uses calendars and clocks to measure time in days, weeks, months, and years. Finally, **Chapter 14, "The Surajkund Fair,"** takes the fun setting of a fair to explore symmetry and patterns, linking them to cultural traditions like rangoli. Throughout, the "math\_3" textbook encourages hands-on learning through games, puzzles, and real-world examples to foster enjoyment and curiosity in mathematics.

## *SCIENCE (sci\_3)*

**Unit 1, "Our Families and Communities,"** explores the different aspects of families and communities. **Chapter 1, "Family and Friends,"** looks at family members, their relationships, how they support each other, and the joy of living together. It also explores the role of friends in our lives and the games we play with them. **Chapter 2, "Going to the Mela,"** uses the context of a community fair to introduce various modes of transportation, the importance of safety measures during travel, and different occupations and roles people play in a community. **Chapter 3, "Celebrating Festivals,"** delves into the concept of festivals and how they bring people together. It explores the significance of respecting and protecting nature and the various ways people celebrate different festivals.

**Unit 2, "Life Around Us,"** shifts focus to the natural world. **Chapter 4, "Getting to Know Plants,"** introduces the diverse world of plants, encouraging observation of their physical features and exploring their importance. Students learn about different types of plants like trees, shrubs, herbs, grasses, climbers, and creepers. The chapter also highlights the essential requirements for a plant's survival and the importance of caring for them. **Chapter 5, "Plants and Animals Live Together,"** examines the interconnectedness of plants and animals, emphasizing their interdependence for food and shelter. It explores different habitats and the animals that live in them, highlighting the need for harmony and balance in the ecosystem. **Chapter 6, "Living in Harmony,"** emphasizes the importance of kindness towards all living beings. It discusses how plants and animals depend on each other and how we depend on them for various needs. Students explore the uses of plants for food, shelter, clothing, and medicine.

**Unit 3, "Gifts of Nature,"** focuses on essential resources for life. **Chapter 7, "Water — A Precious Gift,"** explores the importance of water, focusing on rainfall and its storage. It discusses the different sources of water and how it is distributed to households. The chapter also highlights the challenges related to water quality and quantity, emphasizing the need for water conservation. **Chapter 8, "Food We Eat,"** delves into the variety of foods we consume and their sources, including plants and animals. Students explore different parts of plants that we eat and understand the importance of eating healthy and seasonal foods. The chapter also addresses food waste and encourages responsible consumption. **Chapter 9, "Staying Healthy and Happy,"** focuses on maintaining good health through hygiene, exercise, and a balanced diet. Students learn about different physical activities and their benefits and understand the importance of good habits for overall well-being.

**Unit 4, "Things Around Us,"** explores the objects we use and their origins. **Chapter 10, "The World of Things,"** encourages observation of objects in our surroundings and understanding their composition and sources. It introduces the concept of natural and artificial materials and explores various properties of materials like transparency, opacity, and states of matter (solids, liquids, and gases). **Chapter 11, "Making Things,"** examines the process of creating objects from different materials. Students learn about various crafts and construction techniques, focusing on the use of natural resources and the importance of safety measures during these processes. **Chapter 12, "Taking Charge of Waste,"** addresses the responsibility of managing waste. It discusses the need for proper waste disposal, segregation of waste into different categories, and the importance of reducing waste through reuse and recycling. The chapter emphasizes the collective effort required to maintain a clean and healthy environment.

## **GRADE 4**

### *ENGLISH (eng\_4)*

Here's a general overview of what each chapter covers:

- **Wake up!** is a cheerful poem that encourages children to start their day with energy and enthusiasm, highlighting the joy of morning routines.
- **Neha's Alarm Clock** tells the story of a girl and her dependable alarm clock, showing how it helps her wake up on time for school.
- **Noses** is a playful poem that explores the different types of noses and their unique features, using fun and imaginative language.
- **The Little Fir Tree** shares the tale of a small tree that dreams of growing tall and experiencing the world, teaching lessons about self-acceptance.
- **Run!** is an exciting poem that inspires children to be active and enjoy outdoor play, emphasising the fun of movement and adventure.
- **Nasruddin's Aim** tells a humorous story about a character named Nasruddin, who learns a valuable lesson about focus and determination.
- **Why?** is a thought-provoking poem that encourages curiosity and questions, helping children think about the world around them.
- **Alice in Wonderland** is a classic story that takes readers on a whimsical adventure, filled with fantastical characters and imaginative settings.
- **Don't Be Afraid of the Dark** reassures children about the night and darkness, highlighting the beauty and mystery of nighttime experiences.
- **Helen Keller** shares the inspiring life of Helen, who overcame challenges to become a great author and advocate, showing the power of determination.
- **Hiawatha** is a poem that celebrates the life and adventures of Hiawatha, a brave and wise Native American hero, filled with natural imagery.
- **The Scholar's Mother Tongue** tells a story about the importance of language and culture, showing how it connects people to their roots.
- **A Watering Rhyme** is a charming poem that describes the joy of watering plants, illustrating the beauty of nature and growth.
- **The Giving Tree** tells a touching story about a tree that selflessly gives to a boy throughout his life, teaching lessons about love and generosity.



- **The Donkey** is a humorous poem that describes the antics of a donkey, bringing smiles and laughter through its playful words.
- **Book** is a delightful poem that celebrates the joy of reading and the adventures that books can bring to young minds.
- **Going to Buy a Book** tells the story of a child's excitement about getting a new book, highlighting the joy of reading and learning.
- **The Naughty Boy** shares a fun tale about a mischievous boy and the lessons he learns from his adventures, filled with humour and life lessons.
- **Pinocchio** is a classic story about a wooden puppet who dreams of becoming a real boy, exploring themes of honesty and growth.

## *MATH (math\_4)*

**Chapter 1, "Building with Bricks,"** uses the familiar context of bricks to explore geometrical concepts like faces, edges, and vertices. It encourages students to observe patterns, create their own designs, and understand the spatial relationships between objects. **Chapter 2, "Long and Short,"** delves into measurement, specifically length. It encourages estimation, comparison of lengths using informal units, and introduces formal units like centimeters and meters. Students learn to measure and record lengths accurately using measuring tools like scales and rulers. **Chapter 3, "A Trip to Bhopal,"** uses a real-life scenario of a school trip to explore mathematical concepts like time, distance, and speed. It reinforces the understanding of time units like hours and minutes and introduces the idea of calculating average speed. Students learn to interpret and solve problems involving time and distance using real-world examples. **Chapter 4, "Tick-Tick-Tick,"** focuses on time and its measurement using clocks and calendars. It reinforces the understanding of different time units, including days, weeks, months, and years. Students learn to read and interpret time from analog and digital clocks, understand the concept of time intervals, and solve problems related to time schedules and durations. **Chapter 5, "The Way The World Looks,"** explores spatial relationships and different perspectives through observation and visualization. Students learn to identify and draw different views of objects, understand the concept of symmetry, and explore patterns in geometric shapes. **Chapter 6, "The Junk Seller,"** uses a real-life story of a woman running a junk shop to introduce concepts related to money, weight, and multiplication. Students learn to calculate the cost of items based on their weight, solve problems involving multiplication and division of money, and understand the practical applications of mathematics in everyday life. **Chapter 7, "Jugs and Mugs,"** delves into the concept of capacity, focusing on the measurement of liquids using liters and milliliters. It encourages estimation, comparison of capacities, and

introduces the idea of conversion between different units. Students learn to measure and record the volume of liquids accurately using measuring cups and jugs. **Chapter 8, "Carts and Wheels,"** explores the properties of circles, introducing concepts like radius, diameter, and circumference. It encourages students to observe and identify circular objects in their surroundings, use tools like compasses to draw circles accurately, and understand the relationship between the different parts of a circle. **Chapter 9, "Halves and Quarters,"** introduces the concept of fractions, focusing on halves and quarters. Students learn to represent fractions visually using diagrams and shapes, understand the equivalence of different fractions, and solve problems involving sharing and division using fractions. **Chapter 10, "Play with Patterns,"** explores patterns in numbers, shapes, and letters. Students learn to identify, extend, and create different types of patterns, including repeating patterns, growing patterns, and symmetrical patterns. This chapter fosters logical thinking and problem-solving skills. **Chapter 11, "Tables and Shares,"** delves into multiplication and division, using real-life contexts like sharing items equally among friends or arranging objects in rows and columns. Students learn to construct multiplication tables, understand the relationship between multiplication and division, and solve problems involving equal sharing and grouping. **Chapter 12, "How Heavy? How Light?"**, focuses on weight and its measurement using kilograms and grams. It encourages estimation, comparison of weights, and introduces the idea of conversion between different units. Students learn to measure and record the weight of objects accurately using weighing scales and balances. **Chapter 13, "Fields and Fences,"** explores the concept of perimeter, focusing on the measurement of the boundary of shapes. It encourages students to measure and calculate the perimeter of different shapes, including squares, rectangles, and irregular shapes, using both formal and informal units. **Chapter 14, "Smart Charts,"** introduces data handling and representation using different types of charts, including bar graphs and pictographs. Students learn to collect, organize, and represent data visually using charts, interpret information from charts, and draw conclusions based on the data presented.

## **GRADE 5**

### *ENGLISH (eng\_5)*

**Unit 1** focuses on the joys and challenges of **everyday life**, including **family relationships, school experiences, and the importance of teamwork**. The poem, "Teamwork," highlights the value of collaboration, while the story, "For Want of a Nail," illustrates the consequences of neglecting small details. The unit encourages students to explore their personal experiences and relate them to the themes presented in the texts. **Unit 2** centers around the theme of **resourcefulness and wise decision-making**, using **food and its preparation** as a central motif. It includes the story "Wonderful Waste!" which emphasizes the importance of utilizing resources effectively and avoiding waste. The unit encourages exploring different cultures and their culinary traditions. **Unit 3** explores the **theme of self-discovery and overcoming fears** through the poem "My Shadow" and the adventure story "Robinson Crusoe Discovers a Footprint." The unit encourages students to investigate the unknown and analyze situations to overcome their anxieties. **Unit 4** delves into the **importance of respecting elders and their experiences** while appreciating the lighter side of life. The story, "My Elder Brother," adapted from Premchand's work, highlights the value of learning from elders and understanding their perspectives. This unit encourages students to reflect on their relationships with family members and learn from their experiences. **Unit 5** focuses on the **theme of communication and problem-solving** using the story "The Talkative Barber," adapted from "The Arabian Nights." The unit explores different personality types and encourages students to develop their communication skills through various activities. **Unit 6** introduces the concept of **imagination and creative thinking** through the poem "Topsy-turvy Land," which depicts a world where everything is upside down. The unit encourages students to use their imagination and think outside the box. **Unit 7** revolves around the **theme of perspective and understanding different viewpoints** through the story "Gulliver's Travels," adapted from Jonathan Swift's work. The unit encourages students to consider situations from various perspectives and develop empathy for others. **Unit 8** explores the **importance of friendship and kindness** through the story "Nobody's Friend," which highlights the negative impact of bullying and the importance of treating others with respect. The unit encourages students to reflect on their social interactions and the importance of building positive relationships. **Unit 9** celebrates the **diversity of human life** and experiences through the poem "Sing a Song of People." The unit encourages students to observe and appreciate the people around them and the different ways they live. **Unit 10** focuses on **leadership qualities and decision-making** using the Manipuri folk tale "Who Will be Ningthou?" The unit introduces cultural diversity, encourages understanding different languages, and highlights the importance of making wise choices.

## *MATH (math\_5)*

**Chapter 1, "The Fish Tale,"** introduces large numbers, their operations, and estimation. The context is fish-drying, and the chapter includes problem-solving related to the fish business. **Chapter 2, "Shapes and Angles,"** explores geometric shapes and angles, including measuring and classifying angles and identifying different types of angles. **Chapter 3, "How Many Squares?"**, focuses on area and perimeter. Students learn to calculate the area of regular and irregular shapes and explore the relationship between area and perimeter. **Chapter 4, "Parts and Wholes,"** introduces fractions. Students learn to represent fractions, compare them, perform operations with them, and understand their equivalence. **Chapter 5, "Does It Look the Same?"**, delves into symmetry. Students learn to identify symmetrical shapes and lines of symmetry and explore different types of symmetry. **Chapter 6, "Be My Multiple, I'll be Your Factor,"** explores factors and multiples. Students learn to find factors and multiples of numbers, identify prime and composite numbers, and solve problems involving factors and multiples. **Chapter 7, "Can You See the Pattern?"**, focuses on patterns in numbers and shapes. Students learn to identify, extend, and create different types of patterns, fostering logical thinking and problem-solving skills. **Chapter 8, "Mapping Your Way,"** introduces maps and scale drawing. Students learn to read and interpret maps, understand the concept of scale, and use maps to solve problems involving distance and location. **Chapter 9, "Boxes and Sketches,"** explores three-dimensional shapes and their representation. Students learn to visualize and draw cubes and cuboids, understand the concept of volume, and make nets of three-dimensional shapes. **Chapter 10, "Tenths and Hundredths,"** introduces decimals. Students learn to represent decimals, compare them, perform operations with them, and understand their relationship to fractions. **Chapter 11, "Area and its Boundary,"** builds upon the concept of area from Chapter 3, delving deeper into the calculation of the area of different shapes, including triangles and quadrilaterals. **Chapter 12, "Smart Charts,"** focuses on data handling. Students learn to collect, organize, and represent data using various types of charts, including bar graphs and pie charts. They learn to interpret data from charts and draw conclusions. **Chapter 13, "Ways to Multiply and Divide,"** builds upon the multiplication and division concepts from earlier chapters, introducing different strategies for multiplying and dividing large numbers. **Chapter 14, "How Big? How Heavy?"**, focuses on volume and weight measurement using units like liters, milliliters, kilograms, and grams. Students also learn about the relationship between volume and capacity.

## **GRADE 6**

### *ENGLISH (eng\_6)*

**Unit 1**, "Fables and Folk Tales," offers timeless wisdom through engaging narratives that resonate with young minds, including a classic fable, a folk tale from Tamil Nadu, and a graphic story. **Chapter 1**, "A Bottle of Dew," tells a story about a man named Rama Natha who believes in a magic potion for turning copper into gold. A wise sage, Mahipati, teaches Rama Natha that true success comes from hard work and diligence by having him tend a banana plantation for six years. **Chapter 2**, "The Raven and the Fox," is a fable told in poetic form, which teaches students about the futility of vanity and flattery. A sly fox flatters a raven into dropping the cheese it's holding by praising its beautiful voice. **Chapter 3**, "Rama to the Rescue," is a graphic story about a clever man who uses his presence of mind to thwart a robber's attempt to steal his valuables. The man cleverly tricks the robber into believing that the god Rama will protect his house.

**Unit 2**, "Friendship," explores the complexities and rewards of friendship through diverse narratives. **Chapter 1**, "The Unlikely Best Friends," tells a heartwarming story of an unlikely friendship between Gajaraj, an elephant, and Moti, a small dog, who bond despite their differences and societal norms. Their friendship showcases that true friendship transcends physical appearances and social barriers. **Chapter 2**, "A Friend's Prayer," is a poem expressing the speaker's heartfelt appreciation for friendship and their desire to make their friends' wishes come true. The poem emphasizes empathy, understanding, and acceptance as essential qualities of true friendship. **Chapter 3**, "The Chair," is a story about a school chair that witnesses the lives and experiences of numerous students who sit on it, symbolizing the enduring nature of true friendship that leaves lasting memories. **Unit 3**, "Nurturing Nature," emphasizes the symbiotic relationship between nature and humans and the healing power of nature. **Chapter 1**, "Neem Baba," is a conversation between a young girl named Amber and a grand old neem tree. Amber learns about the numerous benefits of the neem tree and its medicinal properties that have been passed down for generations. **Chapter 2**, "What a Bird Thought," is a poem exploring the world through the eyes of a little bird, highlighting its innocence, curiosity, and connection to nature. **Chapter 3**, "Spices that Heal Us," is a letter from a grandmother to her grandchildren, sharing traditional knowledge about the healing properties of various spices found in Indian kitchens, like turmeric, ginger, and black pepper. The letter encourages students to appreciate the wisdom of traditional remedies and the interconnectedness of food and wellness. **Unit 4**, "Sports and Wellness," focuses on the importance of physical activity, mental well-being, and a holistic approach to health. **Chapter 1**, "Change of Heart," tells a story about Prabhat, a talented badminton player who learns the true meaning of sportsmanship after an unexpected encounter with his new classmate, Surya. Prabhat realizes that the joy of

the game lies not just in winning but in playing with fairness and respect for the opponent. **Chapter 2**, "The Winner," is a poem capturing the joy and excitement of childhood games and the thrill of outdoor play. It celebrates the carefree spirit of childhood, where winning or losing is secondary to the experience of playing together. **Chapter 3**, "Yoga—A Way of Life," explores the benefits of yoga for physical, mental, and emotional well-being. The chapter introduces students to yoga asanas, breathing techniques, and the philosophy of yoga, promoting a balanced and healthy lifestyle. **Unit 5**, "Culture and Tradition," celebrates India's diverse cultural heritage and the spirit of "Ek Bharat, Shreshtha Bharat" (One India, Great India). **Chapter 1**, "Kalakritiyon ka Bharat" (India of Art Forms), takes the form of narratives from children from different parts of India sharing unique art forms from their regions. Students learn about Aipan from Uttarakhand, Dokra from Chhattisgarh, Kondapalli toys from Andhra Pradesh, and coconut shell crafts from Kerala. **Chapter 2**, "The Kites," is a poem from the perspective of a kite, describing its flight, its movements, and the joy it brings to those who fly it. It symbolizes freedom, aspiration, and the connection between humans and the sky. **Chapter 3**, "Ila Sachani: Embroidering Dreams with her Feet," tells the inspiring story of Ila Sachani, a woman who overcomes physical challenges to become a skilled embroiderer using her feet. Ila's story emphasizes resilience, determination, and the transformative power of art to overcome limitations. **Chapter 4**, "National War Memorial," is a poem paying tribute to India's brave soldiers and their sacrifices. The poem encourages students to reflect upon the values of patriotism, courage, and duty.

## *MATH (math\_6)*

**Chapter 1**, "Patterns in Mathematics," delves into the essence of mathematics as the search for patterns and explanations for why those patterns exist. Students are introduced to number sequences and shape sequences and are encouraged to visualize these patterns using pictures and diagrams. **Chapter 2**, "Lines and Angles," introduces the fundamental building blocks of geometry, starting with points, line segments, rays, lines, and angles. Students learn how to measure angles using a protractor and classify them as acute, obtuse, right, or reflex angles. **Chapter 3**, "Number Play," engages students in exploring numbers through games and puzzles. They are introduced to concepts like supercells, where a number in a table is greater than all its neighboring numbers, and palindromes, which are numbers that read the same backward as forward. The chapter encourages students to look for patterns in numbers and play with digits. **Chapter 4**, "Data Handling and Presentation," focuses on collecting, organizing, and presenting data. Students learn about frequency distribution tables, tally marks, and different types of graphs, including bar graphs and pictographs. The chapter emphasizes the importance of clear and concise data representation to draw meaningful conclusions. **Chapter 5**, "Prime Time," introduces prime numbers,

which are whole numbers greater than 1 that are only divisible by 1 and themselves. Students learn how to identify prime numbers, factorize numbers into prime factors, and understand the significance of prime numbers as the building blocks of whole numbers. **Chapter 6**, *"Perimeter and Area,"* revisits these fundamental concepts from previous grades, providing students with challenging puzzles and problems involving rectangles, squares, and other shapes. The chapter emphasizes the practical applications of these concepts in everyday life. **Chapter 7**, *"Fractions,"* guides students through their first encounter with this essential mathematical concept. They learn to represent fractions using different models, such as rectangular strips and fraction walls, understand equivalent fractions, compare fractions, and perform addition and subtraction of fractions using Brahmagupta's method. **Chapter 8**, *"Playing with Constructions,"* provides students with hands-on experience in drawing geometric shapes using tools like a compass and a ruler. Students learn to construct squares, rectangles, and other shapes, enhancing their geometric intuition and understanding. **Chapter 9**, *"Symmetry,"* explores this important concept that appears in mathematics and beyond. Students learn about lines of symmetry, reflection symmetry, rotational symmetry, and angles of symmetry. They engage in activities like paper folding, cutting, and creating symmetrical designs using tiles. **Chapter 10**, *"The Other Side of Zero,"* introduces students to negative numbers through the concept of "Bela's Building of Fun," which has floors above and below ground level. Students learn to represent integers, compare them, and perform operations like addition and subtraction of integers using different models, including a number line and tokens.

## SCIENCE (sci\_6)

**Chapter 1**, *"The Wonderful World of Science,"* welcomes students to the fascinating world of science, encouraging curiosity and exploration. It introduces the **scientific method**, emphasizing observation, questioning, hypothesis formation, experimentation, analysis, and conclusion drawing. The chapter encourages students to view themselves as scientists in everyday life, fostering a sense of wonder and inquiry about the world around them. **Chapter 2**, *"Diversity in the Living World,"* explores the incredible variety of life on Earth. Students learn about the characteristics of living organisms, different types of plants and animals, their adaptations to various environments, and the importance of biodiversity. This chapter encourages students to appreciate the interconnectedness of life and the need to conserve our planet's rich biological heritage. **Chapter 3**, *"Mindful Eating: A Path to a Healthy Body,"* focuses on the importance of nutrition and making healthy food choices. Students learn about different food groups, essential nutrients, and the impact of diet on overall well-being. The chapter encourages mindful eating habits and promotes a holistic understanding of the relationship between food and health. **Chapter 4**, *"Exploring Magnets,"* introduces

students to the fascinating world of magnetism. They learn about magnetic and non-magnetic materials, the properties of magnets, magnetic poles, and the concepts of attraction and repulsion. The chapter encourages hands-on exploration and experimentation, fostering an understanding of the basic principles of magnetism and its applications. **Chapter 5**, *"Measurement of Length and Motion,"* focuses on fundamental concepts of measurement and motion. Students learn about different units of length, how to measure lengths accurately, types of motion (linear, circular, and oscillatory), and the importance of using standard units for measurement. **Chapter 6**, *"Materials Around Us,"* delves into the properties and classification of materials. Students learn about different properties of materials such as hardness, softness, solubility, transparency, and luster. They engage in activities to explore how materials behave differently and how their properties determine their uses. **Chapter 7**, *"Temperature and its Measurement,"* introduces the concept of temperature and its measurement using thermometers. Students learn about different temperature scales, the working principle of thermometers, and how to measure temperature accurately. They explore the differences between heat and temperature, and the concept of thermal equilibrium. **Chapter 8**, *"A Journey through States of Water,"* explores the three states of matter—solid, liquid, and gas—using water as an example. Students learn about the processes of melting, freezing, evaporation, condensation, and the water cycle. The chapter emphasizes the importance of water as a vital resource and its role in sustaining life on Earth. **Chapter 9**, *"Methods of Separation in Everyday Life,"* examines various methods used to separate mixtures, highlighting their importance in daily life and industries. Students learn about handpicking, threshing, winnowing, sieving, sedimentation, decantation, filtration, evaporation, condensation, magnetic separation, and churning, exploring the scientific principles behind each method. **Chapter 10**, *"Living Creatures: Exploring their Characteristics,"* delves deeper into the characteristics of living organisms, including growth, reproduction, and response to stimuli. Students learn about the life cycles of mosquitoes and frogs, exploring the different stages of development and the adaptations of each stage to its environment. **Chapter 11**, *"Nature's Treasures,"* focuses on natural resources, including air, water, soil, forests, and fossil fuels. Students learn about renewable and non-renewable resources, the importance of conserving these resources, and the impact of human activities on the environment. **Chapter 12**, *"Beyond Earth,"* takes students on a journey into space, exploring celestial objects like stars, planets, comets, asteroids, and galaxies. They learn about constellations, the Pole Star, the solar system, the Milky Way galaxy, and the vastness of the universe, sparking an interest in astronomy and space exploration.



## GRADE 7

### *ENGLISH (eng\_7)*

**Chapter 1**, "*Three Questions*," is a thought-provoking story that explores the timeless questions of what is the right time to do things, who are the most important people, and what is the right thing to do. **Chapter 2**, "*A Gift of Chappals*," is a heartwarming story about empathy, kindness, and the joy of giving. **Chapter 3**, "*Gopal and the Hilsa-Fish*," is a humorous tale about wit, cleverness, and outsmarting a challenging situation.

**Chapter 4**, "*The Shed*," is a descriptive poem about a neglected shed that sparks a child's imagination. **Chapter 5**, "*Quality*," is a story that emphasizes the importance of craftsmanship, integrity, and taking pride in one's work. **Chapter 6**, "*Trees*," is a poem that celebrates the beauty and value of trees, highlighting their importance for birds, children, and the environment. **Chapter 7**, "*Expert Detectives*," is a mystery story about two young detectives, Nishad and Maya, who use their observation skills and deductive reasoning to solve a puzzling case. **Chapter 8**, "*The Invention of Vita-Wonk*," is a whimsical and imaginative story about a quirky inventor, Mr. Wonka, who creates a remarkable candy that can make people younger. **Chapter 9**, "*Dad and the Cat and the Tree*," is a humorous poem about a father's misadventures while trying to rescue a cat stuck in a tree. **Chapter 10**, "*A Bicycle in Good Repair*," is a lighthearted story about the narrator's attempts to fix his bicycle, highlighting the challenges and frustrations that can arise from seemingly simple tasks. **Chapter 11**, "*Garden Snake*," is a poem about a child's encounter with a snake in a garden, exploring themes of fear, curiosity, and respect for nature. **Chapter 12**, "*The Ashes That Made Trees Bloom*," is a folktale from Japan about kindness, compassion, and the rewards of good deeds.

### *MATH (math\_7)*

**Chapter 1**, "*Integers*," delves into the properties and operations of integers, including addition, subtraction, multiplication, and division. **Chapter 2**, "*Fractions and Decimals*," revisits operations with fractions and decimals, including multiplication and division. **Chapter 3**, "*Data Handling*," focuses on collecting, organizing, and representing data using various methods, including mean, median, mode, and bar graphs. **Chapter 4**, "*Simple Equations*," introduces the concept of algebraic equations and solving them using trial and error and systematic methods. **Chapter 5**, "*Lines and Angles*," explores the properties of lines, angles, and transversals, including parallel lines and their properties. **Chapter 6**, "*The Triangle and its Properties*," covers the types of triangles, their properties, including medians, altitudes, and angle sum property, as well as congruence and Pythagoras theorem. **Chapter 7**, "*Comparing Quantities*," deals with

ratios, proportions, percentages, profit, loss, and simple interest. **Chapter 8**, "*Rational Numbers*," introduces rational numbers, their representation on the number line, and operations with them. **Chapter 9**, "*Perimeter and Area*," focuses on calculating the perimeter and area of various shapes, including parallelograms, triangles, and circles. **Chapter 10**, "*Algebraic Expressions*," explores algebraic expressions, terms, factors, coefficients, and simplifying expressions. **Chapter 11**, "*Exponents and Powers*," covers exponents, laws of exponents, and their application in simplifying expressions and expressing large numbers in standard form. **Chapter 12**, "*Symmetry*," examines line symmetry, rotational symmetry, and symmetry in regular polygons and other shapes. **Chapter 13**, "*Visualising Solid Shapes*," focuses on visualizing and representing three-dimensional shapes, including oblique and isometric sketches of cuboids and other solid objects.

## SCIENCE (sci\_7)

**Chapter 1**, "*Nutrition in Plants*," examines how plants obtain nutrients and the process of photosynthesis. **Chapter 2**, "*Nutrition in Animals*," focuses on how animals obtain and digest food, covering different modes of feeding and the human digestive system. **Chapter 3**, "*Heat*," explores the concept of heat, temperature measurement, and the transfer of heat through conduction, convection, and radiation. **Chapter 4**, "*Acids, Bases and Salts*," discusses the properties of acids and bases, natural indicators, neutralization reactions, and the formation of salts. **Chapter 5**, "*Physical and Chemical Changes*," differentiates between physical and chemical changes, providing examples and explaining concepts like rusting and crystallization. **Chapter 6**, "*Respiration in Organisms*," examines the process of respiration in plants and animals, highlighting the importance of oxygen and energy release. **Chapter 7**, "*Transportation in Animals and Plants*," covers the circulatory system in animals and the transportation of substances in plants, including blood circulation, excretion, and the role of xylem and phloem. **Chapter 8**, "*Reproduction in Plants*," explores different modes of reproduction in plants, including sexual and asexual reproduction. **Chapter 9**, "*Motion and Time*," focuses on measuring motion, speed, distance, and time, using graphs and different units. **Chapter 10**, "*Electric Current and its Effects*," introduces electric circuits, components, heating, and magnetic effects of electric current. **Chapter 11**, "*Light*," covers reflection, refraction, lenses, the human eye, and the dispersion of light. **Chapter 12**, "*Forests: Our Lifeline*," emphasizes the importance of forests, their role in the ecosystem, and the impact of deforestation. **Chapter 13**, "*Wastewater Story*," discusses wastewater treatment, sanitation, and the importance of clean water.

## **GRADE 8**

### *ENGLISH (eng\_8)*

**Chapter 1**, *"The Best Christmas Present in the World,"* explores the enduring power of love and forgiveness amidst the backdrop of war. **Chapter 2**, *"The Tsunami,"* is a poignant account of the devastating 2004 tsunami and its impact on individuals and communities. **Chapter 3**, *"Glimpses of the Past,"* offers a historical perspective on India's struggle for independence, highlighting key figures and events. **Chapter 4**, *"Bepin Choudhury's Lapse of Memory,"* is a suspenseful mystery that questions the reliability of memory and the nature of truth. **Chapter 5**, *"The Summit Within,"* reflects on the challenges and rewards of mountaineering, drawing parallels between physical and inner journeys. **Chapter 6**, *"This is Jody's Fawn,"* explores the complexities of human-animal relationships and the bond between a boy and a fawn. **Chapter 7**, *"A Visit to Cambridge,"* is a heartwarming account of the author's encounter with renowned scientist Stephen Hawking, highlighting the triumph of the human spirit over physical limitations. **Chapter 8**, *"A Short Monsoon Diary,"* captures the beauty and transformative power of nature through diary entries that chronicle the arrival and departure of the monsoon season.

### *MATH (math\_8)*

**Chapter 1**, *"Rational Numbers,"* explores the properties and operations of rational numbers, including addition, subtraction, multiplication, and division. **Chapter 2**, *"Linear Equations in One Variable,"* focuses on solving linear equations involving one variable using various methods. **Chapter 3**, *"Understanding Quadrilaterals,"* delves into the properties of different types of quadrilaterals, including parallelograms, rhombuses, rectangles, squares, and trapeziums. **Chapter 4**, *"Data Handling,"* covers data organization, representation, and interpretation using bar graphs, pie charts, and histograms, and introduces the concept of probability. **Chapter 5**, *"Squares and Square Roots,"* focuses on finding squares, square roots, and Pythagorean triplets. **Chapter 6**, *"Cubes and Cube Roots,"* explores the calculation of cubes and cube roots of numbers. **Chapter 7**, *"Comparing Quantities,"* covers ratios, proportions, percentages, profit, loss, discount, simple interest, and compound interest. **Chapter 8**, *"Algebraic Expressions and Identities,"* introduces algebraic expressions, monomials, binomials, trinomials, and operations with them, along with standard identities. **Chapter 9**, *"Mensuration,"* deals with calculating the perimeter, area, and volume of various two-dimensional and three-dimensional shapes, including triangles, quadrilaterals, circles, cubes, cuboids, and cylinders. **Chapter 10**, *"Exponents and Powers,"* covers exponents, laws of

exponents, and scientific notation. **Chapter 11**, *"Direct and Inverse Proportions,"* explores direct and inverse proportionality relationships between quantities. **Chapter 12**, *"Factorization,"* focuses on factoring algebraic expressions using various methods, including common factors, grouping, and identities. **Chapter 13**, *"Introduction to Graphs,"* introduces the concept of graphs and their applications in representing and interpreting data, including linear graphs.

## SCIENCE (sci\_8)

**Chapter 1**, *"Crop Production and Management,"* delves into the practices and techniques involved in cultivating crops, from sowing to harvesting. **Chapter 2**, *"Microorganisms: Friend and Foe,"* examines the diverse world of microorganisms, highlighting their beneficial and harmful roles in various processes. **Chapter 3**, *"Coal and Petroleum,"* discusses the formation, extraction, and uses of coal and petroleum as fossil fuels. **Chapter 4**, *"Combustion and Flame,"* explores the process of combustion, the types of flames, and fire safety measures. **Chapter 5**, *"Conservation of Plants and Animals,"* emphasizes the importance of biodiversity, conservation efforts, and protected areas like sanctuaries and national parks. **Chapter 6**, *"Reproduction in Animals,"* covers the modes of reproduction in animals, including sexual and asexual reproduction, and the development of offspring. **Chapter 7**, *"Reaching the Age of Adolescence,"* focuses on the physical, emotional, and hormonal changes that occur during puberty. **Chapter 8**, *"Force and Pressure,"* introduces the concept of force, its effects on objects, and the pressure exerted by liquids and gases. **Chapter 9**, *"Friction,"* examines the force of friction, its types, advantages, disadvantages, and methods to increase or decrease friction. **Chapter 10**, *"Sound,"* explores the production, propagation, and characteristics of sound, including the human voice and musical instruments. **Chapter 11**, *"Chemical Effects of Electric Current,"* discusses the chemical reactions that occur when electric current passes through conducting solutions, and the concept of electroplating. **Chapter 12**, *"Some Natural Phenomena,"* covers natural events like lightning, earthquakes, and tsunamis, explaining their causes and effects. **Chapter 13**, *"Light,"* delves into the properties of light, reflection, refraction, lenses, the human eye, and vision.

## GRADE 9

### *ENGLISH (eng\_9)*

**Chapter 1**, "*The Fun They Had*," explores a futuristic world where children learn from mechanical teachers and long for the human interaction of the past, while "*The Road Not Taken*" by Robert Frost encourages introspection about choices. **Chapter 2**, "*The Sound of Music*," shares inspiring stories of musicians Evelyn Glennie, who overcomes deafness to achieve success, and Bismillah Khan, the shehnai maestro, highlighting their dedication to their craft, while the poem "*Wind*" by Subramania Bharati personifies wind and urges strength against adversity. **Chapter 3**, "*The Little Girl*," portrays a child's evolving relationship with her father, while "*Rain on the Roof*" by Coates Kinney evokes nostalgia through vivid imagery. **Chapter 4**, "*A Truly Beautiful Mind*," delves into the life and accomplishments of Albert Einstein, his scientific contributions, and his humanitarian perspective, while the poem "*The Lake Isle of Innisfree*" by William Butler Yeats expresses a yearning for nature's tranquility. **Chapter 5**, "*The Snake and the Mirror*," is a humorous tale of a vain young man's encounter with a snake, leading to self-discovery, while "*A Legend of the Northland*" by Phoebe Cary teaches a moral lesson through a folktale. **Chapter 6**, "*My Childhood*," recounts A.P.J. Abdul Kalam's early life experiences and the lessons he learned, while "*No Men Are Foreign*" by James Kirkup promotes universal brotherhood and condemns war and hatred. **Chapter 7**, "*Packing*," is a humorous account of the challenges and chaos of packing for a trip, while "*Reach for the Top*" features the inspiring stories of two women, mountaineer Santosh Yadav and tennis star Maria Sharapova, who overcame challenges to achieve their goals, and the poem "*On Killing a Tree*" by Gieve Patel uses vivid imagery to depict the resilience of nature. **Chapter 8**, "*Kathmandu*" captures the vibrant sights, sounds, and cultural experiences of the Nepalese capital, while "*A Slumber Did My Spirit Seal*" by William Wordsworth reflects on the loss of innocence and the permanence of death. **Chapter 9**, "*If I Were You*" is a one-act play filled with suspense and wit, as a criminal attempts to impersonate a playwright to escape capture.

### *MATH (math\_9)*

**Chapter 1**, "*Number Systems*," explores the different types of numbers, including real numbers, rational numbers, and irrational numbers, and their properties. **Chapter 2**, "*Polynomials*," delves into polynomials, their degrees, coefficients, zeros, and factorization. **Chapter 3**, "*Coordinate Geometry*," introduces the Cartesian coordinate system, plotting points, and the concept of distance. **Chapter 4**, "*Linear Equations in Two Variables*," focuses on linear equations, their solutions, and graphical

representation. **Chapter 5**, *"Introduction to Euclid's Geometry,"* provides an introduction to Euclid's postulates, axioms, and theorems. **Chapter 6**, *"Lines and Angles,"* covers the properties of angles formed by intersecting and parallel lines, and related theorems. **Chapter 7**, *"Triangles,"* explores the properties of triangles, including congruence criteria and inequalities. **Chapter 8**, *"Quadrilaterals,"* delves into the properties of different quadrilaterals, including parallelograms, rhombuses, rectangles, and squares. **Chapter 9**, *"Areas of Parallelograms and Triangles,"* focuses on calculating the areas of these shapes using different formulas. **Chapter 10**, *"Circles,"* covers chords, tangents, angles subtended by arcs, and cyclic quadrilaterals. **Chapter 11**, *"Constructions,"* deals with constructing various geometric shapes using a compass and straightedge. **Chapter 12**, *"Heron's Formula,"* introduces Heron's formula for calculating the area of a triangle. **Chapter 13**, *"Surface Areas and Volumes,"* covers calculating the surface areas and volumes of three-dimensional shapes, including cubes, cuboids, cylinders, cones, spheres, and hemispheres. **Chapter 14**, *"Statistics,"* introduces data handling, representation, and analysis using mean, median, mode, and graphical methods like histograms and frequency polygons. **Chapter 15**, *"Probability,"* explores the basic concepts of probability and its applications.

## SCIENCE (sci\_9)

**Chapter 1**, *"Matter in Our Surroundings,"* delves into the properties and states of matter, including solids, liquids, and gases. **Chapter 2**, *"Is Matter Around Us Pure,"* examines mixtures, solutions, suspensions, and colloids, and separation techniques. **Chapter 3**, *"Atoms and Molecules,"* introduces Dalton's atomic theory, atoms, molecules, chemical formulas, and molecular mass. **Chapter 4**, *"Structure of the Atom,"* explores the structure of the atom, including electrons, protons, neutrons, atomic number, and isotopes. **Chapter 5**, *"The Fundamental Unit of Life,"* focuses on the cell as the basic unit of life, covering cell structure and functions. **Chapter 6**, *"Tissues,"* discusses plant and animal tissues, their types, and functions. **Chapter 7**, *"Diversity in Living Organisms,"* introduces the classification of living organisms, including the five kingdoms. **Chapter 8**, *"Motion,"* covers motion, speed, velocity, acceleration, and graphical representation. **Chapter 9**, *"Force and Laws of Motion,"* introduces Newton's laws of motion, force, inertia, and momentum. **Chapter 10**, *"Gravitation,"* explores gravity, the universal law of gravitation, and its applications. **Chapter 11**, *"Work and Energy,"* covers work, energy, power, and forms of energy. **Chapter 12**, *"Sound,"* explores the production, propagation, and characteristics of sound. **Chapter 13**, *"Why Do We Fall Ill?,"* discusses health, diseases, and their causes. **Chapter 14**, *"Natural Resources,"* examines natural resources, their conservation, and management. **Chapter 15**, *"Improvement in Food Resources,"* covers crop production, animal husbandry, and sustainable agriculture.

## **GRADE 10**

### *ENGLISH (eng\_10)*

**Chapter 1**, "*A Letter to God*," is a story about faith and the power of hope, featuring Lencho, a farmer whose crops are destroyed by hail, and the irony of his unwavering belief in divine intervention, while the poems "*Dust of Snow*" by Robert Frost and "*Fire and Ice*" by Robert Frost offer contrasting perspectives on nature's power. **Chapter 2**, "*Nelson Mandela: Long Walk to Freedom*," is an autobiographical account of Mandela's struggle against apartheid in South Africa and his journey to freedom, emphasizing the importance of perseverance, forgiveness, and the triumph of the human spirit, while the poem "*A Tiger in the Zoo*" by Leslie Norris contrasts the restricted life of a captive tiger with the freedom of its natural habitat. **Chapter 3**, "*Two Stories about Flying*" includes "*His First Flight*" by Liam O'Flaherty, which explores a young seagull's fear of flying and his eventual triumph, and "*Black Aeroplane*" by Frederick Forsyth, a suspenseful tale of a pilot's encounter with a mysterious black aeroplane during a storm, while the poems "*How to Tell Wild Animals*" by Carolyn Wells uses humor to depict animal characteristics and "*The Ball Poem*" by John Berryman explores a young boy's experience of loss and the process of growing up. **Chapter 4**, "*From the Diary of Anne Frank*," presents excerpts from Anne Frank's diary, written while she was in hiding during the Holocaust, offering a poignant glimpse into her thoughts, feelings, and experiences during a time of adversity, while the poem "*Amanda!*" by Robin Klein portrays the frustrations of a young girl who feels misunderstood and restricted. **Chapter 5**, "*Glimpses of India*," includes three prose pieces: "*A Baker from Goa*" by Lucio Rodrigues, which evokes nostalgia for traditional baking practices, "*Coorg*" by Lokesh Abrol, which describes the beauty and cultural richness of Coorg, and "*Tea from Assam*" by Arup Kumar Dutta, which offers insights into the tea-growing industry, while the poem "*The Trees*" by Adrienne Rich explores the tension between nature and human civilization. **Chapter 6**, "*Mijbil the Otter*" by Gavin Maxwell recounts the author's experience of raising an otter as a pet, highlighting the animal's unique characteristics and the bond between human and animal, while the poem "*Fog*" by Carl Sandburg uses vivid imagery to depict fog's arrival and departure.

### *MATH (math\_10)*

**Chapter 1**, "*Real Numbers*," delves into the properties of real numbers, including the Euclid's division algorithm and the Fundamental Theorem of Arithmetic. **Chapter 2**, "*Polynomials*," explores the geometrical representation of polynomials and the relationship between their zeroes and coefficients. **Chapter 3**, "*Pair of Linear Equations*

*in Two Variables*," focuses on different methods of solving linear equation pairs, including graphical and algebraic approaches. **Chapter 4**, *"Quadratic Equations,"* introduces quadratic equations and various methods for finding their solutions, including factorization. **Chapter 5**, *"Arithmetic Progressions,"* explores arithmetic progressions, including the  $n$ th term and the sum of the first  $n$  terms. **Chapter 6**, *"Triangles,"* covers the concepts of similarity in triangles and applies them to various geometrical problems. **Chapter 7**, *"Coordinate Geometry,"* focuses on using coordinate geometry to calculate distances between points, find the coordinates of dividing points on line segments, and solve geometrical problems. **Chapter 8**, *"Introduction to Trigonometry,"* introduces trigonometric ratios, identities, and their applications in solving right triangles. **Chapter 9**, *"Some Applications of Trigonometry,"* applies trigonometry to solve real-world problems involving heights and distances. **Chapter 10**, *"Circles,"* covers tangents to circles and the number of tangents from a point on a circle. **Chapter 11**, *"Areas Related to Circles,"* focuses on calculating the areas of sectors and segments of circles. **Chapter 12**, *"Surface Areas and Volumes,"* covers calculating surface areas and volumes of combinations of solids, such as cylinders with hemispheres. **Chapter 13**, *"Statistics,"* explores mean, median, and mode for grouped data, as well as cumulative frequency distributions and their graphical representation. **Chapter 14**, *"Probability,"* covers the theoretical approach to probability and its applications in problem-solving. The textbook also includes two appendices: *"Proofs in Mathematics,"* which discusses different methods of proof, and *"Mathematical Modelling,"* which provides an introduction to the concept of mathematical modeling.

## SCIENCE (sci\_10)

**Chapter 1**, *"Chemical Reactions and Equations,"* explores chemical reactions, equations, and types of reactions, including combination, decomposition, displacement, and double displacement reactions. **Chapter 2**, *"Acids, Bases and Salts,"* examines the properties of acids, bases, and salts, pH scale, and neutralization reactions. **Chapter 3**, *"Metals and Non-metals,"* delves into the properties, reactions, and extraction of metals and non-metals, along with concepts like corrosion. **Chapter 4**, *"Carbon and its Compounds,"* focuses on the versatile element carbon, its allotropes, bonding, homologous series, and chemical properties of carbon compounds. **Chapter 5**, *"Life Processes,"* explores the essential life processes, such as nutrition, respiration, transportation, and excretion in plants and animals. **Chapter 6**, *"Control and Coordination,"* discusses the nervous and endocrine systems in animals, along with plant hormones and their functions. **Chapter 7**, *"How do Organisms Reproduce?,"* covers various modes of reproduction, including asexual and sexual reproduction in plants and animals. **Chapter 8**, *"Heredity and Evolution,"* explores the principles of inheritance, Mendel's laws, and the concept of evolution. **Chapter 9**, *"Light – Reflection*



*and Refraction,"* delves into the laws of reflection and refraction of light, image formation by spherical mirrors and lenses. **Chapter 10**, *"The Human Eye and the Colourful World,"* examines the human eye, its structure, defects of vision, and atmospheric refraction. **Chapter 11**, *"Electricity,"* covers electric current, Ohm's law, resistance, series and parallel circuits, and electric power. **Chapter 12**, *"Magnetic Effects of Electric Current,"* explores the magnetic field, electromagnets, and the force on a current-carrying conductor in a magnetic field. **Chapter 13**, *"Our Environment,"* examines environmental issues, ecosystems, and the impact of human activities on the environment.