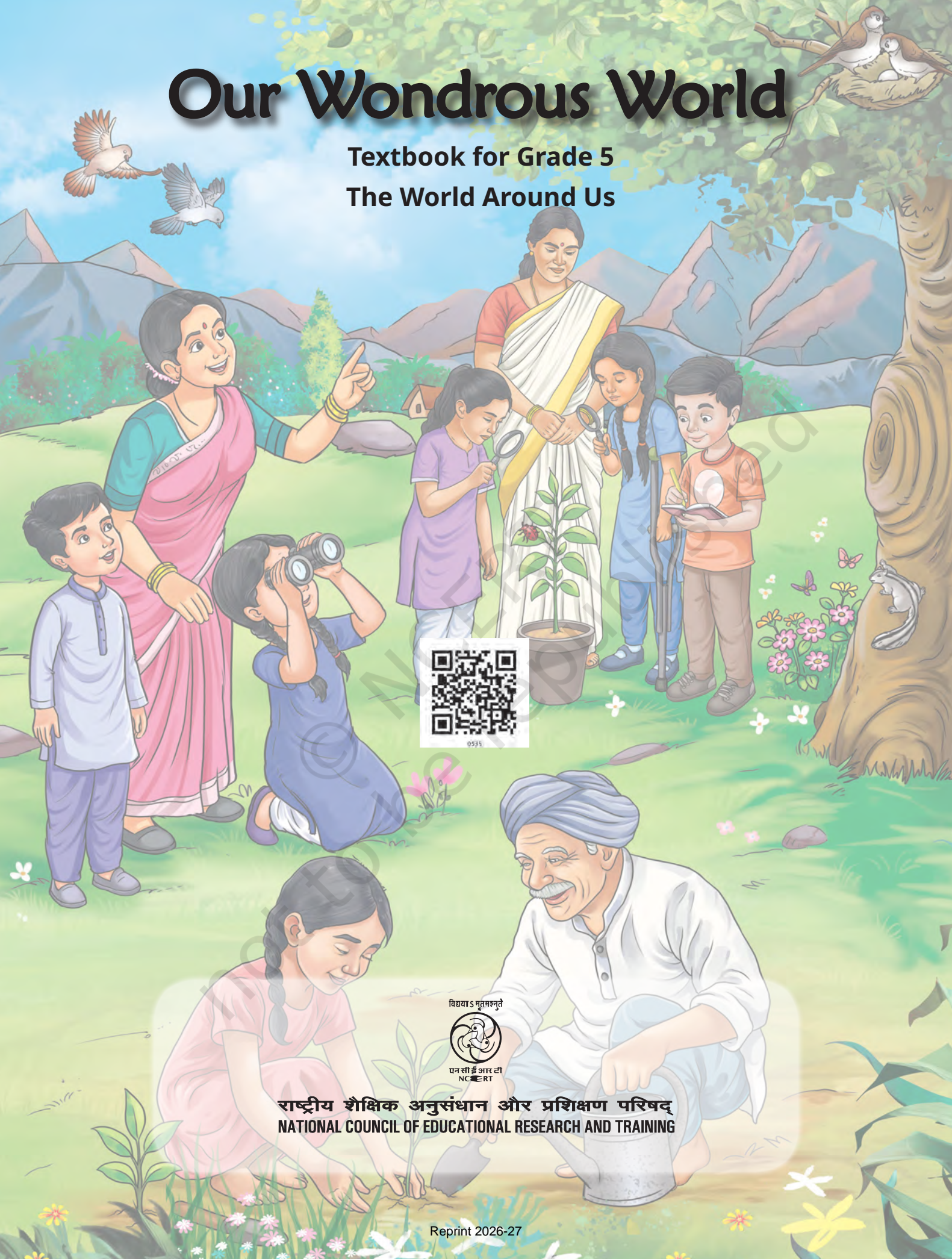


Our Wondrous World

Textbook for Grade 5
The World Around Us



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एन सी ई आर टी
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

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Foreword

The foundational stage in school education, as envisaged by the National Education Policy (NEP) 2020, serves as the cornerstone for the holistic development of children. It enables students not only to imbibe the invaluable *samskaras* rooted in our country's ethos and constitutional framework, but also to acquire basic literacy and numeracy. This foundation equips them to transition seamlessly into a more challenging preparatory stage.

The preparatory stage acts as a bridge between the foundational and the middle stages, spanning three years from Grades 3 to 5. The education provided during this stage builds upon the pedagogical approaches of the foundational stage. While the play-way, discovery, and the activity-based learning methods continue, students are also introduced to textbooks and formal classroom settings. This introduction aims to establish a foundation across curricular areas, promoting holistic learning and self-exploration through reading, writing, speaking, thinking, drawing, singing, and playing. This comprehensive approach encompasses physical education, art education, environmental education, languages, mathematics, basic science and social sciences, ensuring that students are well-prepared both at the cognitive-sensitive and physical-emotional levels to effortlessly transition to the middle stage.

Adhering to the recommendations of the National Curriculum Framework for School Education (NCF-SE) 2023, brought out, as a follow-up to the NEP 2020, a new subject area called 'The World Around Us' at the preparatory stage is introduced. This subject aims to provide environmental education through an experiential learning approach, connecting students' experiences with the basic concepts of different subject areas, which they will study at the middle stage.

Our Wondrous World, the textbook for The World Around Us, has been designed to help students connect their day-to-day learning about their world to the basic concepts of various subject areas—science, social sciences and environmental education. It aims to enhance their sensitivity towards their environment, develop skills to work with the community, and foster a positive attitude towards various professions.

Our Wondrous World emphasises conceptual understanding, critical thinking, creativity, and the values and dispositions essential for this developmental stage. It incorporates cross-cutting themes such as inclusion, multilingualism, gender equality, and cultural rootedness, integrating appropriate ICT tools and school-based assessments.

In Grades 3 and 4, students were familiarised with units—Our Communities, Life Around Us, Health and Well-being, Things Around Us and Our Environment. Grade 5 being the final year of the preparatory stage enables students for the middle stage in a complimentary way. It lays a sound foundation for students in science and social science, so that they are ready to learn these subjects separately from middle stage. The Grade 5 students are familiarised with vibrant India, important role of water through the example of river Godavari, health and well-being at home and school, what and how of different things around the students, and the environment on and around the planet Earth. Content and processes have been designed by keeping in view the age, experiences, interests and diversity of students everywhere. This textbook also carries a wide range of interesting facts about India's traditions, culture and achievements.

Student's innate curiosity at this stage needs to be nurtured by addressing their questions and designing activities based on the core learning principles. While the play-way method continues, the nature of toys and games used for teaching evolves to enhance the engagement rather than mere attraction.

While this textbook is valuable, students also need to explore additional resources on the subject. School libraries should facilitate this extended learning, and parents and teachers should support their endeavours.

An effective learning environment motivates students, keeps them engaged and fosters curiosity and wonder—vital for learning.

I recommend this textbook with confidence to all students and teachers at the preparatory stage. I extend my gratitude to everyone involved in its development, hopeful that it will meet the expectations. As NCERT remains committed to systemic reforms and improving the publication quality, we welcome feedback to refine the textbook content.

New Delhi
28 June 2025

Dinesh Prasad Saklani
Director
National Council of Educational
Research and Training



About the Textbook

The National Curriculum Framework for School Education (NCF-SE) 2023 in alignment with the National Education Policy (NEP) 2020 has introduced The World Around Us (TWAU) as a core curricular area at the preparatory stage of school education for Grades 3–5. As described in NCF-SE 2023, it aims to address the natural curiosity of students and help them gain a more systematic understanding of the natural, physical and social environment in their immediate context. Guided by the policy and the curriculum framework, the TWAU textbook is designed as a learning companion that encourages observation, questioning, investigation, reflection, and expression among students. It integrates science, social science, environmental studies, and foundational and vocational skills into one cohesive narrative, promoting interdisciplinary thinking and action. Through this approach, students begin to recognise patterns, processes and relationships between people and nature, cause and consequence, tradition and change.

The Grade 5 textbook of TWAU, *Our Wondrous World*, continues the journey from the foundations laid in Grades 3 and 4. As students progress into the final year of the preparatory stage, this book reinforces experiences of exploration, experiments, play and discovery by guiding learners toward more structured, yet interactive learning. The textbook embodies the core principles of experiential learning through nature walks, observations, interviews, model-making, experiments and surveys. Students are encouraged to apply the basics of the scientific methods—to observe, hypothesise, test and conclude. In doing so, they also develop environmental awareness, ethical reasoning, empathy and a sense of responsibility towards others, and the planet.

With the vision of developing cognitive, emotional, and physical capacities through holistic and integrated learning, this textbook adopts a student-centric, activity-rich and inquiry-driven pedagogy. It also supports a gradual progression from immediate surroundings to broader contexts. This structured exploration of the environment is assumed to develop the competencies identified for preparatory stage through TWAU based on the curricular goals identified in NCF-SE 2023. While designing and developing the content and activities, effort has been made for providing students with varied experiences of exploring environment, which helps students to understand the interdependence in the world and develop sensitivity towards environmental, and social issues. Throughout the book, inputs have been given for students to recognise the importance of

safety of self and others, gearing towards their responsible behaviour in different situations. Collection of data and their analysis through observation, experiments and social survey would surely provide seeds of skills of questioning, and arriving at probable solutions. The book also tries to provide basic understanding of the concepts that would be discussed in different disciplines at middle stage. In addition, the book provides experience of map reading and interpretation as tools of exploring the world.

The Indian Knowledge System (IKS) is organically integrated, offering students a lens to value indigenous practices, local crafts, folklore, and the wisdom of communities. Language, mathematics, and arts are also naturally embedded through cross-disciplinary activities. Designed with inclusivity and diversity at its heart, this book provides unique experiences for learners of different abilities and backgrounds. It encourages collaborative learning, respects multilingual contexts, and fosters the values of care, cooperation and democratic citizenship.

The textbook has 10 chapters, structured into five thoughtfully curated units—Life Around Us, Health and Well-being, Incredible India, Things Around Us and Our Amazing Planet. The book provides opportunities for students to engage with real-life issues, local knowledge systems, and diverse cultures spread across our nation. Each unit has briefly outlined the desired competencies and the concepts covered. It is attempted to follow different approaches in each chapter. In the form of a narrative, Chapter 1: ‘Water—The Essence of Life’ emphasises how we need to be responsible and why it is important to maintain the balance in nature. This is followed by Chapter 2: ‘Journey of a River’ which is written in the form of an autobiography of the river Godavari to show how environmental, social and economic aspects are interconnected. Chapter 3: ‘The Mystery of Food’ uses an exploratory style, emphasising looking at things in the world around us that we do not see with the naked eye, for example, the discussion on microbes. Chapter 4: ‘Our School—A Happy Place’ is based on research, planning and action. Chapter 5: ‘Our Vibrant Country’ is about learning through things that are around us that we have not noticed or examined like the currency notes. Chapter 6: ‘Some Unique Places’ is a travelogue about discovering unique places in India, while Chapters 7 and 8 use activities and experiments to engage students. Chapter 7: ‘Energy—How Things Work’ and Chapter 8: ‘Clothes—How Things are Made’ are extension of the themes—how things work and how things are made as discussed in Grades 3 and 4. Chapter 9: ‘Rhythms of Nature’ gets students to note observations in the journal provided at the back of the book. Looking at things from historical perspectives



in the form of short stories is the main focus of the Chapter 10: 'Earth—Our Shared Home' through which the concept of 'Earth' as a well-connected planet is being exposed to students. In the chapter, we are also highlighting the connections between what we do and the environment around us. In brief, the students are exposed to the world around us, how it is made, where things come from, what is their history, how we could be vulnerable and how we can act responsibly by understanding how the world around us is interconnected and how our ancient Indian philosophy of treating the world as one family, 'Vasudhaiva Kutumbakam', is important for sustainability. This book provides scope for students to record their observations in four quarters of the year in 'Seasons' Journal' at the end. Teachers would guide students for doing so.

Assessment is integrated into the learning process through reflective exercises, projects, group work, and creative expressions. 'Let us reflect' sections promote self-assessment and metacognition in alignment with the competencies given in the NCF-SE. Questions are placed in the book to promote critical thinking. The teacher needs to be more of a facilitator than someone who has all the answers. The teacher is encouraged to vary and extend the activities in the book as well as to initiate discussion in the classroom. The intention is to encourage the spirit of inquiry and openness to questions that may seem outside the curriculum. Some of these may deserve a discussion, if not an answer. 'Notes to the Teacher' offers guidance on facilitating rich classroom discussions and adapting content to local contexts. It is also important that teachers use adequate learning teaching materials such as maps and globes as without these, the designed activities would be incomplete and there is fear of achieving the competencies.

Ultimately, *Our Wondrous World* aims to kindle a lifelong curiosity and joy in learning, enabling students to see their lives as part of a larger, interconnected world. It serves as a bridge between lived experiences and abstract ideas, between the local and the global, and between learning and living. The book has been designed as an exciting tool for the hands of the teacher and the student. The book aims to inculcate a sense of pride in India's rich diversity, which is our strength. We hope that this textbook will provide a strong foundation for developing a wide range of competencies in students in the years ahead.

Dhanya Krishnan
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National Council of Educational
Research and Training, New Delhi



CONSTITUTION OF INDIA

Part III (Articles 12 – 35)

(Subject to certain conditions, some exceptions
and reasonable restrictions)

guarantees these

Fundamental Rights

Right to Equality

- before law and equal protection of laws;
- irrespective of religion, race, caste, sex or place of birth;
- of opportunity in public employment;
- by abolition of untouchability and titles.

Right to Freedom

- of expression, assembly, association, movement, residence and profession;
- of certain protections in respect of conviction for offences;
- of protection of life and personal liberty;
- of free and compulsory education for children between the age of six and fourteen years;
- of protection against arrest and detention in certain cases.

Right against Exploitation

- for prohibition of traffic in human beings and forced labour;
- for prohibition of employment of children in hazardous jobs.

Right to Freedom of Religion

- freedom of conscience and free profession, practice and propagation of religion;
- freedom to manage religious affairs;
- freedom as to payment of taxes for promotion of any particular religion;
- freedom as to attendance at religious instruction or religious worship in certain educational institutions.

Cultural and Educational Rights

- for protection of interests of minorities;
- for minorities to establish and administer educational institutions;
- saving of certain Laws 31A–31D.

Right to Constitutional Remedies

- by issuance of directions or orders or writs by the Supreme Court and High Courts for enforcement of these Fundamental Rights.

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Constitution of India

Part IV A (Article 51 A)

Fundamental Duties

It shall be the duty of every citizen of India —

- (a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, and wildlife, and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;
- * (k) who is a parent or guardian, to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years.

Note: The Article 51A containing Fundamental Duties was inserted by the Constitution (42nd Amendment) Act, 1976 S.11 (with effect from 3 January 1977).

* (k) was inserted by the Constitution (86th Amendment) Act, 2002 S.4 (with effect from 1 April 2010).

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Contents



<i>Foreword</i>	<i>iii</i>
<i>About the Textbook</i>	<i>v</i>

Unit 1: Life Around Us

Chapter 1: Water—The Essence of Life	3
Chapter 2: Journey of a River	21

Unit 2: Health and Well-being

Chapter 3: The Mystery of Food	40
Chapter 4: Our School—A Happy Place	55



Unit 3: Incredible India

Chapter 5: Our Vibrant Country	75
Chapter 6: Some Unique Places	94

Unit 4: Things Around Us

Chapter 7: Energy—How Things Work	114
Chapter 8: Clothes—How Things are Made	131



Unit 5: Our Amazing Planet

Chapter 9: Rhythms of Nature	147
Chapter 10: Earth—Our Shared Home	161



THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a ¹**[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC]** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the ²[unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949 do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

1. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
2. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Unity of the Nation" (w.e.f. 3.1.1977)