



# SPECTRUM Science Series

Compliant with the Single National Curriculum  
and USA Common Core State Standards



Grade 1

Grade 2

Grade 3

Grade 4

Grade 5

**Spectrum**  
Enlightening Generations





# Introduction to Spectrum Science

In simple words, Science can be defined as the knowledge about the natural world that is based on facts learnt through observations and experiments. Spectrum Science is the reflection of this basic definition for the young, curious and enthusiastic learners.

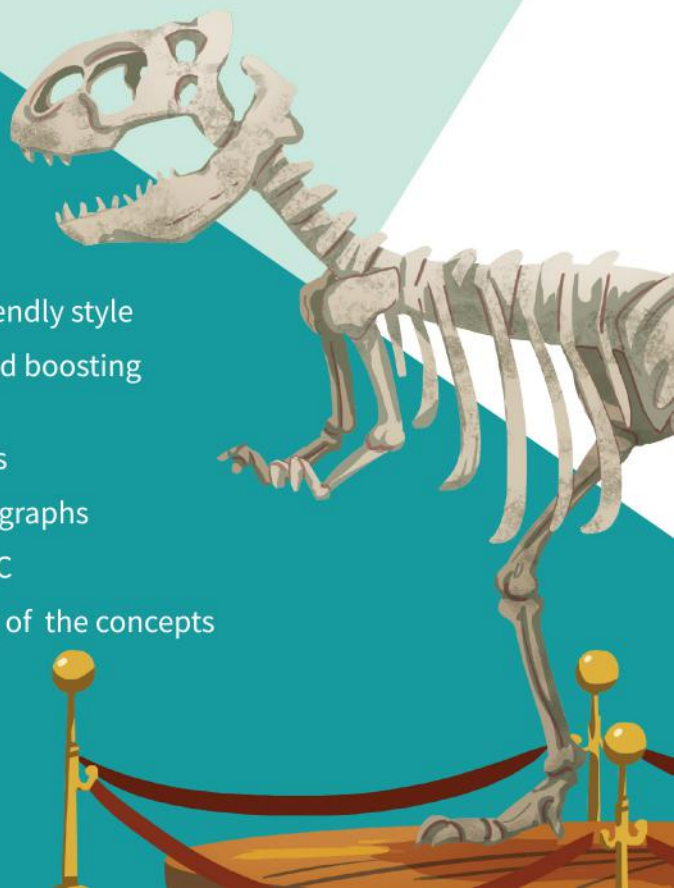
The series triggers children's intellect to ask why and how about the everyday phenomena around them. The colourful layout of the books attracts children. Easy language, interesting colourful illustrations and hands-on activities in each unit engage their enquiring minds. Concepts of Biology, Chemistry, Physics and Space Sciences progress from one level to the next in a very logical and rational manner.

Besides the curriculum, a window to further knowledge is opened through the information under the heading of "Do You Know?". There is an exercise section at the end of each unit to assess what a child has learnt and gained from the knowledge shared in the unit.

**Spectrum Science** correlates with the latest Single National Curriculum of Pakistan and also keeps in view the recommendations of some international curricula for Science.

## Key Features of the Series

- Compliant with the current Single National Curriculum of Pakistan
- Incorporates recommendations from some international curricula for Science (Common Core State Standard USA)
- Covers various dimensions of scientific concepts
- Ensures logical progression from one level to the next
- Follows a child-centred approach along with a teacher-friendly style
- Focuses on developing children's critical thinking skills and boosting their creativity
- Captivating design with a colourful layout and illustrations
- Eye-catching illustrations supplemented by real life photographs
- Hands-on activities, practicals and experiments as per SNC
- Variety of exercises to assess the children's understanding of the concepts
- Research and evidence based content





## THINK

Each unit begins with some food for thought for students. This activity is mainly based on their everyday observations so that they can refer to Science as part of their lives.

## KNOW

Here you will find an explanation of the core concepts with lots of interesting illustrations and colourful photographs to develop students' interest in the concepts.



## Do You KNOW?

Some interesting information about the concepts is provided to encourage children to go beyond the textbook and explore further.

## ACTIVITY

To retain students' interest in the theory and acknowledge the concepts as part of their lives, several hands-on activities have been suggested.

## Proud to Know

The Islamic integration (in the form of Qur'anic verses, Hadith, Islamic values and history) with the concepts has been provided under "Proud to Know" icon to strengthen the students' bond with the Almighty Allah and the Prophet ﷺ and also give them a pride and confidence over their faith, Islamic culture and values.

## EXPLORE

Each unit contains an icebreaking activity under the icon "Explore" to stimulate students' interest in the information that the unit contains and its implications around them. Here students may use their common sense or general knowledge to answer the simple questions.

## MEMORY BOX

Summary of the unit is given here for a quick recall and revision.

## Glossary

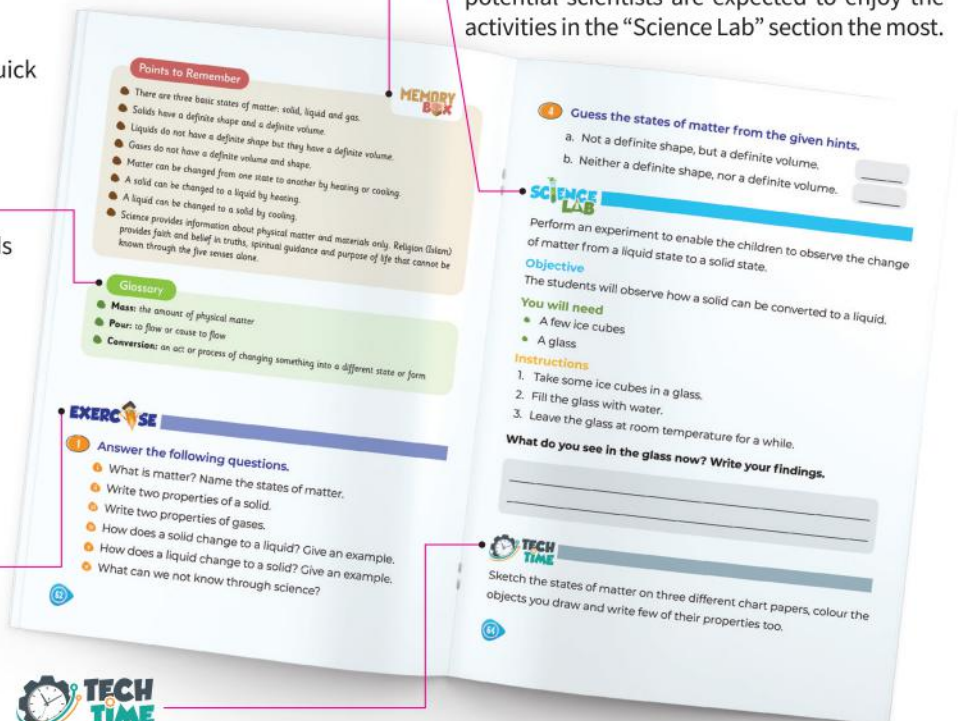
Scientific terms and newly introduced words are briefly explained here as a handy guide.

## EXERCISE

At the end of each unit, students are assessed on what they have grasped and retained from the knowledge shared in the unit.

## SCIENCE LAB

From Book 3 onwards, "Science Lab" section has been added to most of the units. The potential scientists are expected to enjoy the activities in the "Science Lab" section the most.



## TECH TIME

From Book 3 onwards, another outstanding feature entitled "Tech Time" has been added to most of the units. This section brings more value to Spectrum Science series. It corresponds with KLA-4 of Science and Technology Curriculum prepared by Punjab Curriculum and Textbook Board (PCTB). It also correlates with Standard-6 (STEM) of Single National Curriculum of Pakistan for Science.



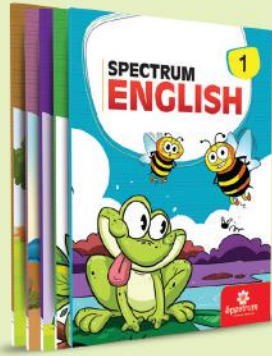
# SPECTRUM Science Series



## OTHER SPECTRUM SERIES



**Social Studies**  
(Grade 1 to 5)



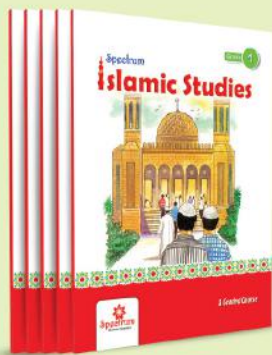
**ENGLISH**  
(Grade 1 to 5)



**اُردو**  
(کلاس 1 تا 5)



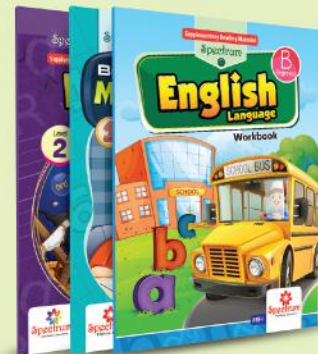
**اسلامیات**  
(کلاس 1 تا 8)



**Islamic Studies**  
(Grade 1 to 8)



**5D Series (3 Steps)**  
Workbooks | Worksheets  
Readers



**SGGP Series (3 Steps)**  
(Spectrum Good Grounding Program)  
Workbooks | Worksheets  
Readers | Flash Cards | Poems  
Islamiat & Islamic Studies