

The Wonderful World of Science

Chapter -1

We have always been curious to know about things around us. We start exploring and asking questions about different things present in our surroundings right from our childhood. Did you enjoy exploring and discovering the world around you in your junior classes? As we enter the middle stage, we will continue this fascinating journey and will try to explore and understand the beautiful world we live in. To achieve this, we have a new subject, Science.

Ques. : What Is Science?

Science is a way of thinking, observing and doing things to understand the world we live in and to uncover the secrets of the universe.



Think science as a big adventure—we ask questions, explore the world and try to understand how things work. For this, the most

important thing is to have 'Curiosity', which is where the title of this book comes from. Science can be as simple as baking a cake or visiting the zoo to thrilling adventures such as studying the ocean or launching a rocket. Science is everywhere and it is fun for everyone.



A Desert



A Coast

If you observe tiny grains of sand or massive mountains, a leaf of grass or a vast forest, you will find something new and exciting to discover. We often have many questions in our mind like how the earth rotates on its axis, why stars twinkle, how flowers bloom on their own and many more. Science helps to find the answers of these questions.

The most wonderful thing about science is that it is everywhere, from the depths of the ocean to the vastness of outer space, from what is cooking in the kitchen to what is happening on the playground.



An underwater view of an Ocean



A Galaxy



Some of the most ground breaking discoveries have often come from unexpected places. These new discoveries often change our understanding about the world.

Ques. : What Will we Explore with The Help of This Book?

This book will help us explore our home, planet Earth. Earth is the only planet that supports life, and it has an environment that we must protect. There is an amazing diversity of life on Earth.



These different plants and animals have managed to survive and thrive in different regions on this planet. You must have seen that a seed grows into a plant, a caterpillar transforms into a beautiful butterfly and many more such observations.

Ques. : How do these plants and animals grow?

All living beings need food to grow. Without food, we also cannot survive. Our country India is a large and diverse country. Across the country, we have different cuisines with their many tasty dishes. What are they made of? How do we find out?



Water is another thing that all living beings need for their survival. It is a precious resource which covers about two-thirds of the Earth's

surface. It is a liquid with many unique properties. Water plays a big role in supporting our communities. Have you ever wondered where all this water come from? It starts out as rain or snow and flows into our local lakes, rivers, and streams or into underground aquifers.

Have you noticed that when we cool water it freezes and becomes ice and when we heat it, it boils and becomes steam? Do you like to drink cold water in summers or take a bath with warm water in winters? How do we perceive hot and cold? Whether it is water or our own body when we have a fever, it can be important to figure out how hot something is.

Have you observed different useful objects around you like chair, table, your school bag, clothes, geometry box, soap, dustbins, etc. Which materials are they made of? Are they made of same material or different materials? Do all these material have same proprieties or different properties.



Can we sort these materials on the basis of their properties? We will have an almost unending list of questions about everything on the Earth as we further explore this book. But why limit our questions to the Earth alone? We can ask questions on things beyond—the Sun, the Moon, and the millions of stars that shine in the sky.

Whether you are learning about the structure of a leaf, discovering how things move, or separating the skin of a peanut seed, each chapter of this book will ignite your spirit of inquiry. And hopefully you will have lots of questions in your mind. There are several daily life situations where we knowingly or unknowingly apply the scientific method. Though we all apply the scientific methods to some extent, learning science will develop our capabilities for finding solutions to bigger problems and solving more mysteries of the universe.

Ques. : After All, To Be A Wise Person, You Must Be A “Whys” Person! ?

Scientists are people who follow the scientific method to solve problems or to discover new things. But anyone who follows the scientific method is working like a scientist. You can think like a scientist by using scientific method to find out answers of your queries, like why your pen stops writing, why dal gets spilled out of pressure cooker, why your bicycle tyre gets flattened, how clouds are formed, how it is raining, etc.



Science is rarely done alone. Scientists across the world work together in a team. So, if you cannot find an answer yourself, ask your classmates, friends, parents and teachers, to help you out. It is always more fun to discover things together. Science is all about joyful exploration. Enjoy your scientific journey, keep exploring and never stop wondering about the amazing mysteries of the universe and asking questions.