

ACTIVE

SCIENCE

for you

BOOK - 1

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PREFACE

Active Science For You by Arrow Publishers is a five-level series for classes I to V designed with the objective of making the learning of science a joyful experience for the young learners. The content addresses the learners directly to make it interactive and learner-centred and also add a personal flavour to it and establish a warm and friendly relationship between the learners and their environment. The series takes the learners on a fascinating journey to the amazing world of science, arouses their natural curiosity and nurtures their creative instincts.

The series aims to develop in learners habits of observation and exploration, the ability to think logically and draw inferences. A serious and conscious attempt has been made to link all the basic principles and concepts of science to the immediate environment and experiences of the young learners so that learning becomes relevant and meaningful.

The key features that make the series unique are :

- Graded content presented in a simple and lucid style to facilitate easy understanding of the concepts
- Colourful and lively illustrations which make the books a visual delight for the young learners
- ‘Did you know’ section in each lesson which adds to the information given in the lesson
- Key words and key points in each lesson to help learners summarise the content in the lesson
- ‘Check Your Progress’ to recapitulate and reinforce the concepts learnt in each lesson
- ‘Fun Time’ to make learning fun-filled, lively and interesting
- ‘Activity Time’ to engage the learners in meaningful activity
- ‘Quiz Time’ to encourage learners to gather more information on any given topic
- Practice papers to help in continuous assessment
- ‘Fascinating Facts’ to expose the learners to some interesting information beyond the textbook.
- Interactive CD-Rom to make learning interesting and child-friendly
- Teacher’s Handbook that serves as a guide to the teachers.

We hope this series will equip learners with the necessary skills and knowledge and also serve to fulfil the larger goal of fostering a scientific attitude and a spirit of scientific inquiry in them.

Happy teaching and happy learning!

We are grateful to Mrs Padmini Sameeran for her valuable suggestions and guidance during the making of this series.

– Publishers

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LIVING AND NON-LIVING THINGS

1

Look around you. What do you see?

You can find both living and non-living things.

Look at the picture below.

Can you name some things that you think are living?

Can you name some things that you think are non-living?



You are living. Plants and animals are living too. But your house, toys, books, clothes and bed are all non-living.

How do you know they are living or non-living?

Let us find out.

LIVING THINGS GROW

You are growing bigger and bigger.



baby



child



man

Not just you.

Animals also grow big.



puppy



dog



kitten



cat

Even plants grow.

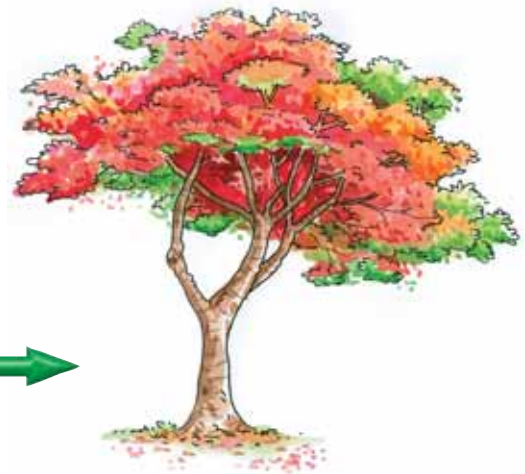
They grow from seeds to become big plants.



seed



small plant



tree

LIVING THINGS CAN MOVE ON THEIR OWN

You can walk, run and jump.



walk



run



jump

Animals too can move.



a dog runs



a fish swims



a bird flies

Plants cannot move like you. But they move in their own way.



branches and leaves



sunflower



touch-me-not plant

Did you know?

The sunflower always faces the sun.



LIVING THINGS NEED AIR TO LIVE

You breathe in air.

Plants and animals also take in air.

Did you know?

Plants have holes in leaves to take in air.



living things breathe

LIVING THINGS NEED FOOD AND WATER TO LIVE

You eat food every day. You drink water too. Plants and animals also take food and water.



Living things need food and water

LIVING THINGS FEEL

You feel happy. You feel sad at times.

You feel pain when you get hurt.



happy



sad



pain

You can also see, hear, smell, taste and touch things around you.

Plants and animals too feel like you.

LIVING THINGS HAVE BABIES

A mother has babies.



hen with chick



mother with baby

Animals also have young ones.

Even plants make new plants from seeds.



seed



plant

Non-living things do not need food, air and water. They do not feel, grow or have babies and they cannot move on their own.



book



toy



car

All living things are made by nature. Some non-living things like water and rock are also made by nature. They are called natural things.



water



rock

Some things like a house, a table, a chair are made by man. Things made by man are called **man-made** things.

All man-made things are non-living.



house



chair and table

So, all around you, you see many things.

Do you now know what makes them living or non-living?

KEY WORDS



living	grow	smell	water	natural
non-living	feel	see	rock	man-made
air	move	taste	babies	animals
eat	plant	food	touch	happy
drink	hear	breathe	pain	sad

KEY POINTS



- * Things can be living or non-living.
- * Living things need food, air and water.
They feel, move, grow and have babies.
- * People, plants and animals are living.
- * Non-living things do not need food, air and water. They do not feel, move, grow or have babies.
- * All living things are made by nature and are called natural things.
- * Non-living things can be natural or man-made.

CHECK YOUR PROGRESS



1. Answer the following questions.

1. What are the two types of things you see around you?

2. What do living things need to live?

3. Name three living things.

4. Write the names of three non-living things around you.

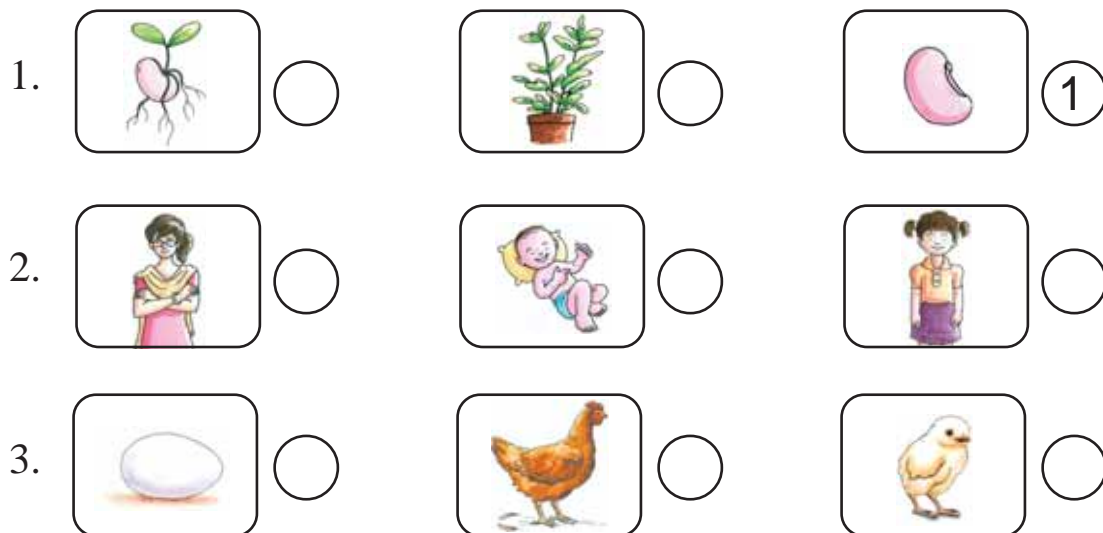
II. Look at the picture below. Mark L for living and NL for non-living.



III. Mark ✓ or x in the box.

1. Plants can walk like you.
2. Water is non-living.
3. A book is man-made.
4. Birds are non-living.
5. You need air to live.

IV. Write numbers to put the pictures in an order.





Look at these pictures. Mark **N** for the natural things and **M** for man-made things.



ACTIVITY TIME

Paste pictures of five living and five non-living things in your scrap book.

QUIZ TIME

The leaves of this plant close when you touch them :



touch-me-not
plant