

EVERSHINE

echo series

FACT FINDER

SCIENCE

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PART
3



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PREFACE

The environment around us inspires and integrates all spheres of education with our daily lives. The topics introduced in the books are in harmony with the world around. Science, it is believed, is the perception of the world around us.

This series of science takes the child from rote memory to self learning, making each learning experience unique. It is an attempt to encourage natural curiosity and power of observation.

The series introduces the young learners to the world of science in a simple language and systematic manner. The aim is to ensure that all learners acquire knowledge and understand the subject in a better way. The activities laid out in each book help the students to develop a scientific attitude.

The special features of the series are as follows :

- ❖ Use of simple language.
- ❖ Theme based study.
- ❖ Thinking skills and fun activities.
- ❖ Activities for children to enjoy.
- ❖ Summary at the end of each chapter for recapitulation.
- ❖ Teacher's guidelines for effective teaching.
- ❖ Practice model papers at the end of the book.

ABOUT THE AUTHOR

Ms. Ritu Khati is an educationist with an experience of more than thirty years. She has authored and designed several books. She has been actively involved with children instilling in them the ability to reason. She believes in encouraging the children to acquire an inquiring mind, to reflect on their own learning and ideas and to pursue imaginative activities. She treats her students as participants in learning. She is flexible in her thoughts and does not hesitate to implement new ideas and concepts.

She is a thorough professional and creates a positive mark in the life of the students and the people around.

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Living and Non Living Things



1

There are many things around us. We see human beings, animals, plants, chairs, tables, televisions, books, clothes, toys, flowers, cars, etc. We see these things at home, in the neighbourhood, on the road, in the park, in the school and in the market. All these things are not of the same kind. Some of these are natural things, while others are man-made things.



Natural things are those which occur in nature. Some common examples of natural things are plants, animals, water, rocks, air, etc.

Man-made things are those which are made by man. Some common examples of man-made things are chairs, tables, televisions, books, clothes, toys, cars, etc.

Plants and animals are **living things**. Natural things like air, water and rocks are **non-living things**. All man-made things are non-living.



Living and Non-Living Things

Some natural things are living and some are non-living

Living things have life. These can grow, breathe, eat food, move, feel, etc. Human beings, animals and plants are examples of living things.

Non-living things do not have life. These things do not grow, breathe, eat food, move, feel, etc on their own.

Sun, moon, stars, clouds, air, water and rocks are examples of non-living things.



Features of Living Things

Living things show some special features which make them different from non-living things. Let us learn about them :

1. Living things move

Living things such as cow, man, birds, fish, etc. can move from one place to another. We see that a cow moves from one place to another in search of food. A man goes from place to place for different needs. Birds fly from one place to another place. Fish swim in the water. On the other hand, non-living things cannot move. For example, a stone does not move on its own. Similarly, a chair does not move on its own.



A deer runs.



A fish swims.



A bird flies.

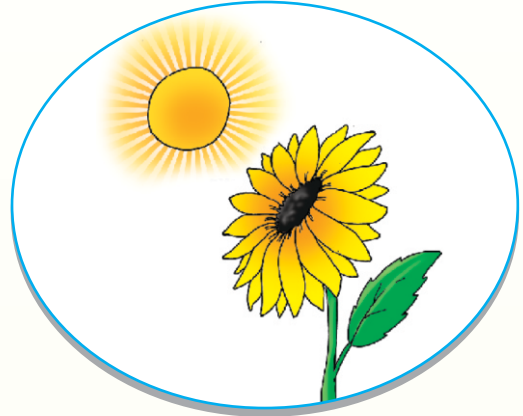
Thus, we see that most living things move from one place to another on their own. Their movements show that they have **life**. All animals can move. However, when they die, they do not move because they have no life after death.

Plants are living things too. They remain fixed but they can move or bend their parts in response to light, water, gravity, touch, etc. These movements are called **tropic movements**.

When you touch **chhui-mui** or **touch-me-not** plant, it shows some movement as its leaves close. The **sunflower** turns its face towards the sun. These are examples of tropic movements.



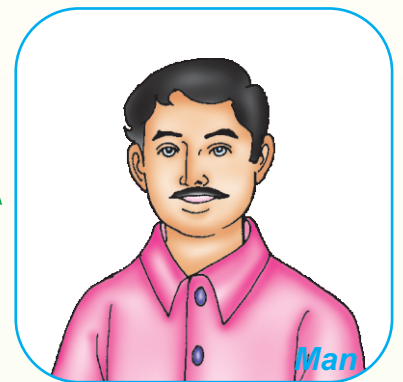
Touch-me-not



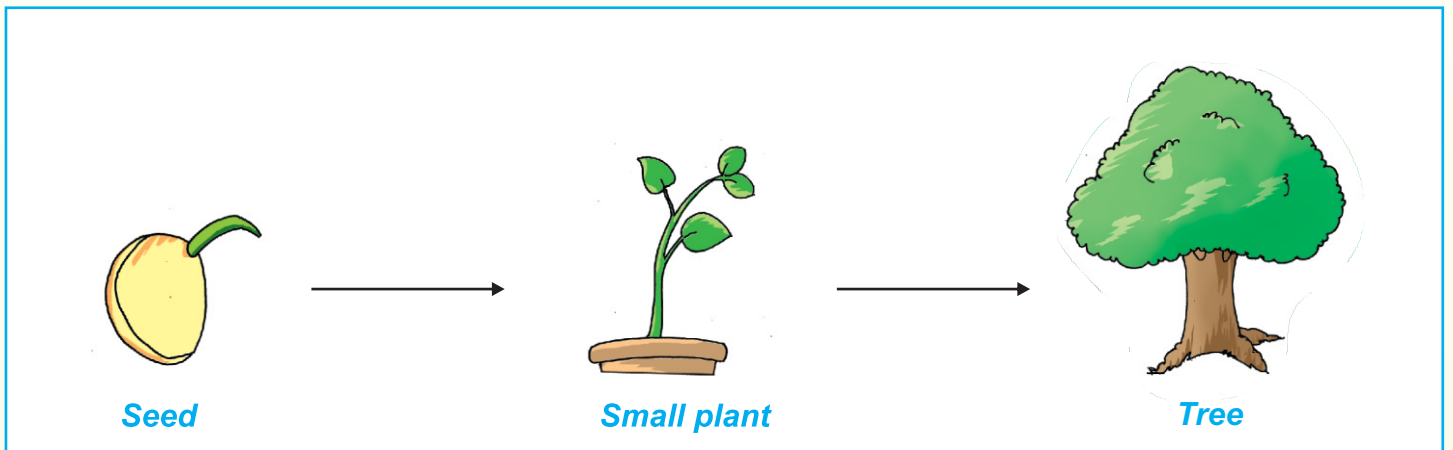
Sunflower

2. Living things grow

All living things grow. A baby grows into a child. A child grows into a man.



A seed grows into a small plant. The small plant grows into tree.



Similarly, a little puppy grows into a dog. A kitten grows into a cat. A chick comes out of an egg and grows into a hen.

On the other hand, non-living things do not grow.

Things like chair, table, glass, pen etc. in your home do not grow. A small chair does not become a big chair. A small table does not become a big table.

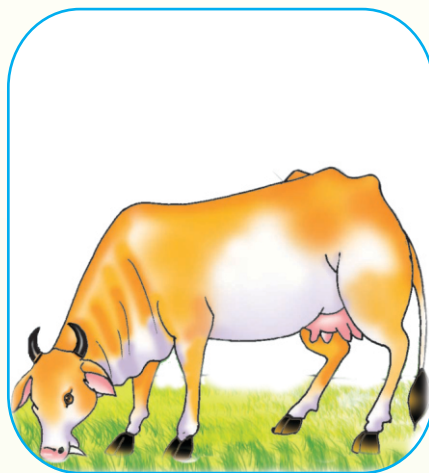
3. Living things need food to live

All living things need energy to do work and to grow. Energy comes from the food. Therefore, all living things need food.

Plants also need food. They make their own food with the help of air, water and sunlight. The process of food making in plants is called **photosynthesis**.

Animals get their food from plants and other animals. A cow eats grass to stay alive. A lion eats flesh of other animals to live.

Non-living things such as chair, table, book, etc. do not need food.

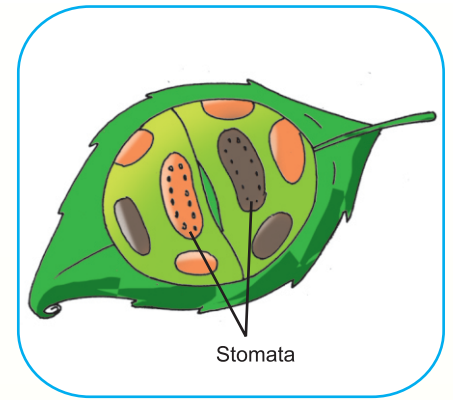
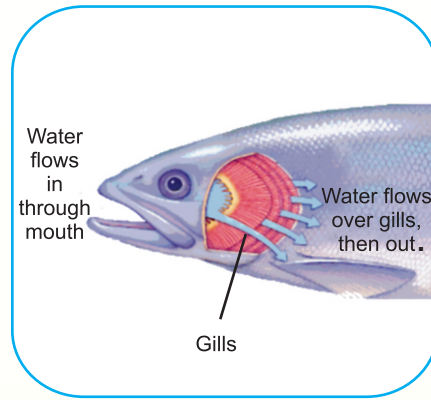
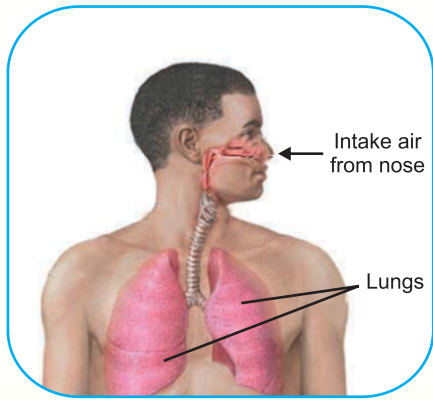


Living things need food.

4. Living things breathe

All living things breathe in air. We cannot stay alive without breathing.

Press your nose with your fingers for some time. You will feel uncomfortable. We cannot remain as such for a long time. Now, remove your hand. You will feel comfortable. This shows that breathing is necessary to stay alive.



All living things breathe in air to stay alive.

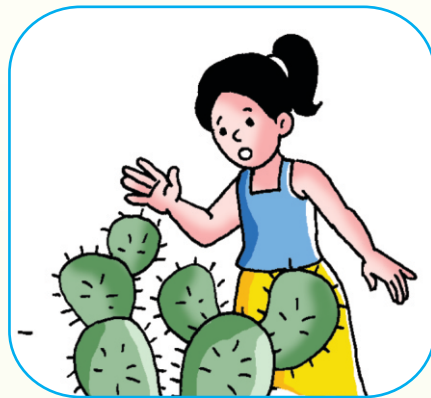
Animals have special breathing organs like **nose**, **lungs**, **gills** and **air-holes**.

Plants breathe through the small pores in their leaves. These small pores are called **stomata**.

Non-living things such as chairs, tables, windows, etc. do not breathe.

5. Living things feel

All living things feel and react. Look at the pictures given below :



- ★ What happens when you touch a hot pan ? You feel hot and move away your hand quickly.
- ★ On feeling the prick of a thorn, the girl pulls away her hand quickly.
- ★ When someone throws a flashlight in your eyes, you close your eyes immediately. This shows that living things feel.

Animals have sense organs like **eyes**, **ears**, **nose**, **tongue** and **skin** to feel.

Plants do not have any sense organs, still they feel. You have learnt earlier that a touch-me-not plant closes its leaves if you touch it.

6. Living things reproduce

All living things produce their own kind.

Human beings give birth to babies. Animals give birth to young ones or lay eggs. A cat gives birth to kittens. A hen lays eggs out of which chicks hatch out.



Plants also give rise to new plants.

Most plants produce seeds. Seeds grow into new plants. Some plants can produce new plants from their stems or leaves.

Non-living thing such as a table does not give birth to a small table.

7. Living things die

Living things live for a definite period and then die. They do not live for ever.

Did You Know ?

The oldest living thing on the earth is the **bristlecone pine tree** in California (USA). It is thought to be 4,300 years old.



Bristlecone pine

The longest living animal in the world is **clam** in the ocean. It can live up to 175 years!



Clam

Key Words

Natural things	:	things which occur in nature on their own
Man-made things	:	things made by man
Stomata	:	pores in the leaves of the plants through which they take in air
Reproduction	:	the process of producing more of one's own kind



Let Us Remember

- ☹ Things around us are **natural things** and **man-made things**.
- ☹ Natural things can be **living** or **non-living**.
- ☹ Man-made things are **non-living things**.
- ☹ Human beings, plants and animals are **living things**.
- ☹ Living things have **life** . They can move, grow, eat, feel, breathe and reproduce.
- ☹ Non-living things **do not** have life in them. They cannot move, grow, eat, feel, breathe and reproduce.

EXERCISES

[A] Answer the following questions :

1. What are natural things ? Give two examples.
2. What are man-made things ? Give two examples.
3. List out three special features of living things.
4. Explain 'tropic movement' in plants.
5. Why do living things need food ?

[B] Mark tick (✓) for the correct and cross (X) for the wrong statements in the boxes :

1. All the things around us are of the same kind.
2. Plants, animals and water are natural things.
3. All natural things are living things.
4. All man-made things are non-living things.
5. All animals give birth to young ones.

[C] Fill in the blanks with the right word given in the box :

sunflower, grow, life, stomata, nose

1. Living things have _____.
2. All living things _____.
3. We breathe through our _____.
4. Plants breathe through _____ in their leaves.
5. The _____ turns its face towards the sun.

[D] Match the following :

Column A

1. A baby
2. A child
3. A little puppy
4. A kitten
5. A chick

Column B

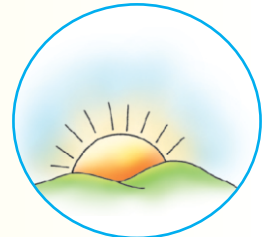
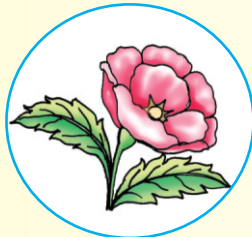
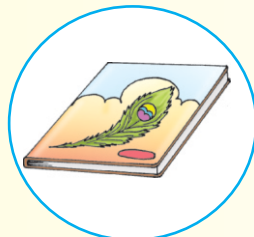
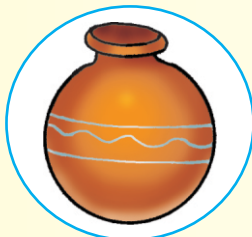
- (a) grows into a cat
- (b) grows into a dog
- (c) grows into a child
- (d) grows into a hen
- (e) grows into a man

[E] Name the following :

1. This flower turns its face towards the sun. S.....
2. This is food making process in plants. P.....
3. These are small pores on the leaves. S.....
4. This plant is sensitive to touch. T.....
5. Fish breathe in air through these organs. G.....

More To Do

- (i) Collect ten pictures each of living and non-living things. Paste them in your scrap book.
- (ii) Collect pictures of five young ones and their parents.
- (iii) Look at the following natural and man-made things. Tick (✓) the natural things:



Teacher's Guidelines

1. The main objective of this lesson is to make the children understand the basic differences between living and non-living things.
2. Ask the students to compare a dog with a chair as living and non-living.

