

We see many things around us. There are human beings, plants, animals, stones, tables, cars, buses, boats, houses, mountains, aeroplanes and so on.



Human beings



Houses



Plants



Mountains



: THE WORLD AROUND US

Cow



Aeroplanes

LIVING AND NON-LIVING THINGS

Among the things we see around us, some of them move on their own, while others need something to move them. For example, a lion and a rat move on their own, but a table or a chair moves only when you push or pull it.

So we can divide things around us into two groups-living and non-living things. Plants, animals and human beings are living things. Chair, table, stone, water, mountain, etc. are non-living things.



Lion









NATURAL AND MAN-MADE THINGS

Of the things around us, some of them like cars, buses, aeroplanes and houses are made by man, hence they are called Man-made things.

Other things like mountains, soils, rivers, clouds, etc. are formed in the nature on their own. They are called Natural things. Plants, animals and human beings are also natural things.

Living things need Food

Living things need food to grow. Food provides energy to them. Human beings and animals eat and drink. Plants also need water and mineral salts to live.

Plants prepare their food with the help of air, water, sunlight and chlorophyll. Animals eat plants and flesh of other animals.

Non-living things like table, chair, etc. neither prepare food nor do they need it to live.









Boy eating food

Goat eating grass

Green plants

Lion eating flesh

Living things Grow

All living things can grow. They grow and change their shape and size, as they get older. A baby grows into a young boy/girl and then goes on to become a man/ woman. In the same way, seed of a plant develops into a baby plant which grows into a big tree.

Non-living things like pencil, pen, etc. do not grow.



Seed



Seedling SCIENCE-3



Green plants

Living things Breathe

Breathing is the process of inhalation and exhalation. The process of taking in oxygen from air is called **Inhalation** and releasing carbon dioxide is called **Exhalation**.

All living things breathe. Human beings breathe through lungs. Fish breathe through gills. Insects breathe through small holes present on their body called **Spiracles**. Plants breathe through small holes on their leaves called **Stomata**.

Non-living things do not breathe.



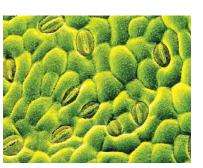
Human lungs



Frog



Insect



Stomata

Do You Know ?

Difference between Respiration and Breathing:

Respiration refers to the process of passing gaseous nutrients to the blood, in humans and animals. On the other hand, breathing is the process that moves air in and out of the lungs. The air that is moved in, is oxygen while the air that is moved out is carbon-dioxide.

Living things Move

All living things show movement. Human beings and animals move from one place to another while plants show movement in some of their parts only. For example, cat, dog, horse and human beings move here and there in search of food, water and shelter.

Plants like 'Touch-Me-Not' show movement upon touching and sunflower turns towards the sun. Non-living things do not move by themselves.



Touch-Me-Not plant





Sunflower

Living things Feel

Living things react to changes around them. We react to touch, light, heat, cold and sound, as do other living things. Human beings and animals feel with the help of their sense organs such as eyes, nose, ears, tongue and skin.

We switch on the fan in summer because we feel hot and wear woollen clothes in winter as we feel cold. We laugh when we are happy and cry when we are sad.

Similarly, plants also respond to changes. For example, most plants grow towards sun, a 'touch-me-not' plant closes its leaves when touched. The leaves return to normal after a few minutes.



Protecting from cold

Similarly, a dog hangs out its tongue when it feels hot and an elephant fans its ears to keep itself cool in summers.



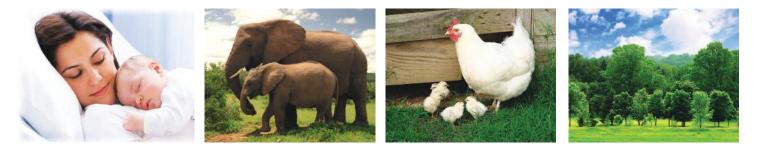
Dog

Elephant

On the other hand, non-living things do not respond to changes in the surroundings because they cannot sense or feel any changes.

Living things Reproduce

The ability of animals, plants and human beings to multiply their own kind is called reproduction.



Living things reproduce



Human beings and animals like cats, dogs, buffaloes, etc. give birth to their young ones. Birds, fishes, snakes and frogs lay eggs and the young ones hatch out of the eggs. Plants produce seeds from which new plants arise.

Non-living things does not reproduce.

Living things have a Life-cycle

Living things are born; they grow up, reproduce and die. This is called a **life-cycle**. The time during which a living thing remains alive is called its **life span**.









Baby

Child boy

Man

Old man

Differences between Living things and Non-living things

S.No.	Living Things	Non–living Things		
1.	Living things grow.	Non-living things do not grow.		
2.	Living things need food and water to	Non-living things do not need food and		
3.	live.	water.		
4.	Living things breathe.	Non-living things do not breathe.		
5.	Living things show movement.	Non-living things do not move on their		
6.	Living things feel and react.	own.		
7.	Living things reproduce their own	Non-living things do not feel and react.		
	kind.	Non-living things do not reproduce.		
	Living things have life cycle.	Non-living things do not have life cycle.		

Know the Keywords :

Reproduction: The ability of animals, plants and human beings to multiply their own kindLife span: Time during which a living thing remains alive



Point to Remember

- Living things have certain features that make them alive.
- Living things can grow, eat, breathe, move, feel and reproduce. They also grow old and die.
- Plants and animals are living things.
- Human beings are living things too.

EXERCISE TIME

Α.	Tick (\checkmark) the correct option :				
	1.				
		a. gills	b. stomata	C. lungs	\bigcirc
	2.	Which of these is a natura			
		a. paper	b. frog	C. stone	\bigcirc
	3. Which one of these gives birth to young ones?				
		a. hen	b. human being	g 🔵 c. fish	\bigcirc
	4.	Fishes use their	to breat	the in oxygen.	
		a. lungs	b. wings	C. gills	\bigcirc
B.	Fill	Fill in the blanks :			
	 Plants breathe through tiny pores called Living things require for energy. 				(stomata/fins)
					(food/air)
	3.	3. Human beings, animals and plants are all			_ things.
					(non-living/living)
	4.	While breathing we take i	(oxygen/helium)		
C.	Wri	te 'T' for true and 'F' for fals			
	1.	1. All living things breathe, feel, grow and reproduce.			\bigcirc
	2.	2. Non-living things show movement on their own.			\bigcirc
	3.	3. Birds lay eggs for producing their young ones.			\bigcirc
	4.	. Sun, moon and stars are natural things.			\bigcirc
			12 SCIENCE-2		



D. Answer the following questions :

- 1. Why do living things breathe ? Name two organs that animals use to breathe.
- 2. Give five features of living things.
- 3. Differentiate between living and non-living things.
- 4. What are natural and man-made things? Give some examples.
- 5. What is a life-cycle?

🔀 Creative Work

• Which of the three (air, water, food) do they need?







- Make a list of ten living and ten non-living things around you. Also collect their pictures and paste them along with their names in your scrapbook.
- Write NL for non-living things and L for living things. Colour all the living things in the picture.

