

This book has been carefully prepared for Grade 4 students. It contains all topics for the PSAC curriculum.

Pictures and illustrations have been included to make the subject easier and more interesting.

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# **ABOVE ALL**

## **Science Grade 4**



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**Answers may be obtained by E-mail or WhatsApp. (Educators and Parents)**

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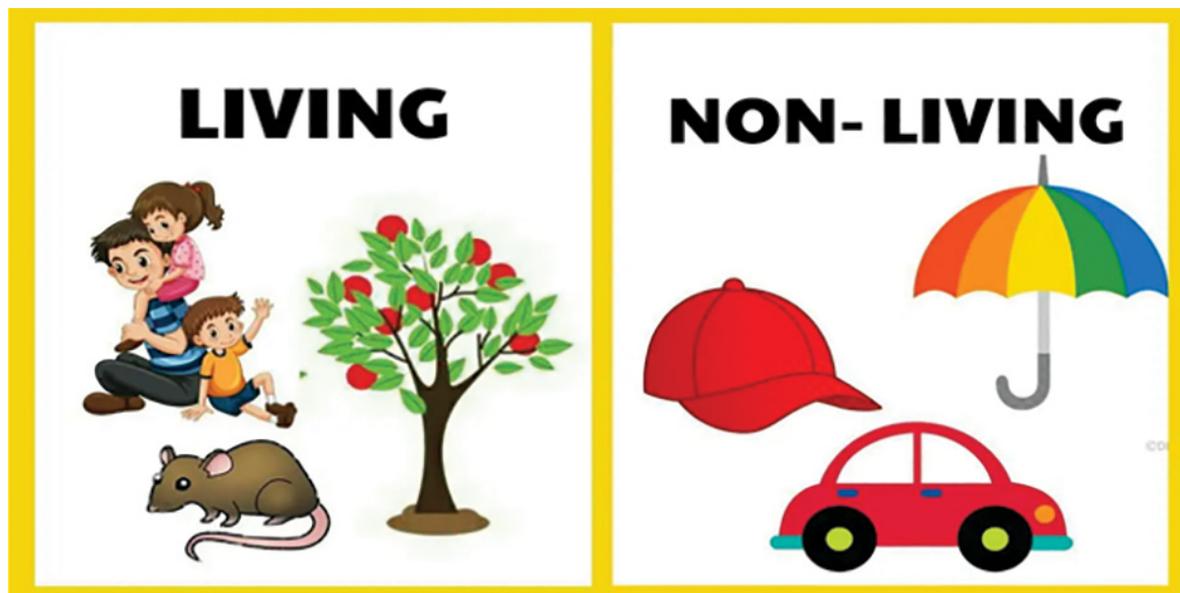
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## What Are Living Things?

Living things are all **plants**, **animals**, and **humans** that grow, move, breathe, reproduce, and respond to their environment.

Non-living things are objects that do not have life in them. They can be classified into two categories:

- **Natural**
- **Man-made**



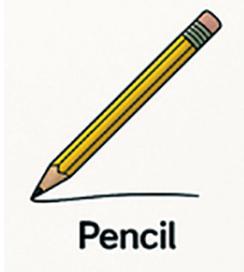
## Characteristics of Living Things:

- **Grow:** They get bigger or change over time
- **Move:** They can move by themselves
- **Feed:** They eat and give food to their young ones
- **Breathe:** They take in air or gases needed to live
- **Reproduce:** They make babies or seeds to have new living things

## Characteristics of Non-living things

- **Cannot move or grow**
- **Cannot eat, breathe or feel**
- **Cannot reproduce**

Question 1 Classify the following pictures into living and non-living things.



Pencil



Rose Plant



Ball



Parrot



Child



Chair



Toy Car

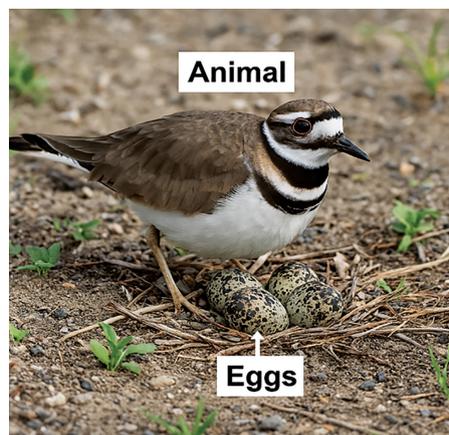


Dog

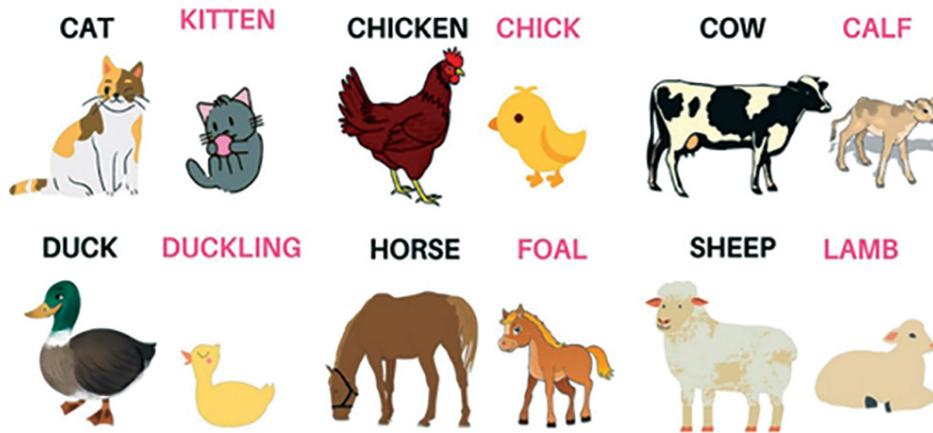
LIVING THINGS	NON-LIVING THINGS

## Recognising that living things reproduce

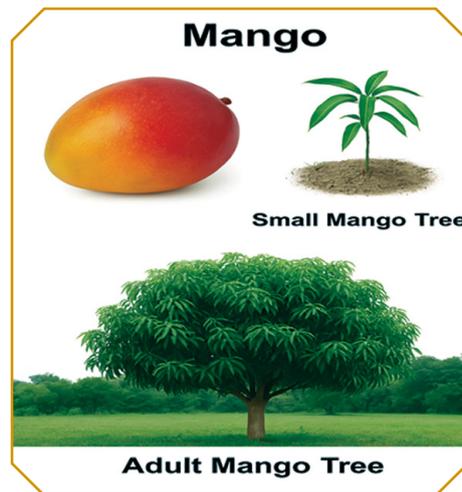
### 1. Laying eggs



## 2. Giving birth to young ones



## 3. Producing seeds



**Question 2: Choose the correct answer and fill it in the given chart.**

1. by laying eggs      2. by producing seeds      3. by giving birth

	LIVING THINGS	How it reproduces
(a)	Apple tree	
(b)	Cow	
(c)	Hen	
(d)	Female dog	
(e)	Ducks	
(f)	Crocodile	

## Recognising that human beings and animals move from one place to another

- Animals and human beings have the ability to move by themselves from one place to another. They can move it in various ways: **walking**, **running**, **swimming**, **crawling** and **flying**.

Figure 1 below shows different ways animals and human beings move.



**Question 3** Complete the table below with the corresponding way each living thing moves.

walking - swimming - crawling

	Living thing	How it moves
(a)	Human being	
(b)	Shark	
(c)	Snake	
(d)	Cat	
(e)	Duck	
(f)	Lion	
(g)	Turtle	
(h)	Giraffe	
(i)	Snail	

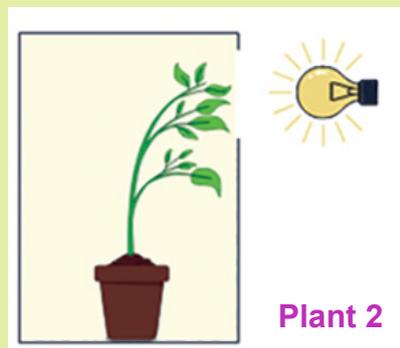
## Finding out whether plants move

- Unlike human beings and animals, plants do not have the ability to move by themselves from one place to another.
- Only certain parts of a plant have the ability to grow, and these parts grow specifically towards light. However, the movement is very slow.

To have a better understanding of how plants grow towards the sun, have a look at the pictures



We can observe that plant 1 grows in a straight path towards the source of light.



However, plant 2 grows in a curved path towards the source of light. This proves that plants grow in the direction of light.

## Comparing plants and animals

### Similarities between plants and animals

1. Living things: Both plants and animals are living things. This means that they grow, reproduce and later on die. They both also need certain things like food, water and air to survive.
2. Responding to the environment: Both plants and animals have the ability to respond to what is happening around them. For example, plants grow towards the light, and animals move towards or away from something that interests or scares them.

## Difference between plants and animals

1. Movement: Animals can move from one place to another on their own. They do so by various means; walk, swim or even fly. However, whole plants cannot move from one place to another even though some parts of plants (leaves and flowers) move towards sunlight to get the energy they need.

### Question 4:

Complete the following sentences by choosing the correct words given below.

**calf - seed - laying - giving**

1. A cow produces a young one called \_\_\_\_\_ .
2. A hen reproduces by \_\_\_\_\_ eggs.
3. A mango tree grows from a \_\_\_\_\_ .
4. A dog reproduces by \_\_\_\_\_ birth to puppies.

### Question 5: Fill in the blanks with the correct words.

1. All living things need \_\_\_\_\_ to breathe.
2. Plants need \_\_\_\_\_ to grow.
3. Animals and humans need \_\_\_\_\_ to drink.
4. Both plants and animals need \_\_\_\_\_ to get energy.

### Question 6: Match the animals below to the way they move.

walking

swimming

flying

crawling

hopping



**Question 7: Fill in the blanks with the correct words.**

1. Unlike animals, plants do not \_\_\_\_\_ from one place to another.
2. Plants grow towards \_\_\_\_\_ to get the energy they need.
3. The growth of plant parts towards light is a type of slow \_\_\_\_\_.

**Question 8 Answer the following questions.**

1. Name one similarity between plants and animals.

\_\_\_\_\_

2. Explain why plants cannot move from one place to another like animals.

\_\_\_\_\_

3. Why do animals move from one place to another ?

\_\_\_\_\_

4. What do both plant and animals need to survive ?

\_\_\_\_\_

**Question 9 Write “True” or “False” next to each statement.**

1. Plants can move from one place to another. \_\_\_\_\_
2. Both plants and animals need water to survive. \_\_\_\_\_
3. Animals can respond to their environment, but plants cannot. \_\_\_\_\_
4. Seeds are how many plants reproduce. \_\_\_\_\_

Question 10 Study the diagram below and then answer the questions.



(a) Give two similarities among the dog, the plant and the bird.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) What is the difference between

(i) the dog and the bird?

\_\_\_\_\_

(ii) the plant and the dog?

\_\_\_\_\_

(c) The bird lays eggs. Name two other animals which reproduce by laying eggs.

\_\_\_\_\_

\_\_\_\_\_

**Question 11:** Study Table 1. Then, put a tick (✓) in the correct box to show whether they are living things or non-living things.

	Living thing	Non-Living thing
 <b>Boy</b>		
 <b>Ball</b>		
 <b>Plant</b>		
 <b>Teddy bear</b>		

**Question 12** Write True or False in each box.

- (i) Living things produce young ones similar to them. ....
- (ii) All living things reproduce by giving birth to young ones. ....
- (iii) All living things need energy. ....