

# **SCIENCE FOR US**

*Textbook 3*



# Introduction

This is the third book of the "Science For Us" series. It consists of six units.

Each unit begins with a summary of the main learning outcomes for students.

Each unit consists of investigation activities, keywords and simple information presented along with pictures to support the student's understanding of the concepts.

Some pages have a link to the workbook to give students an opportunity to apply what they have learnt.

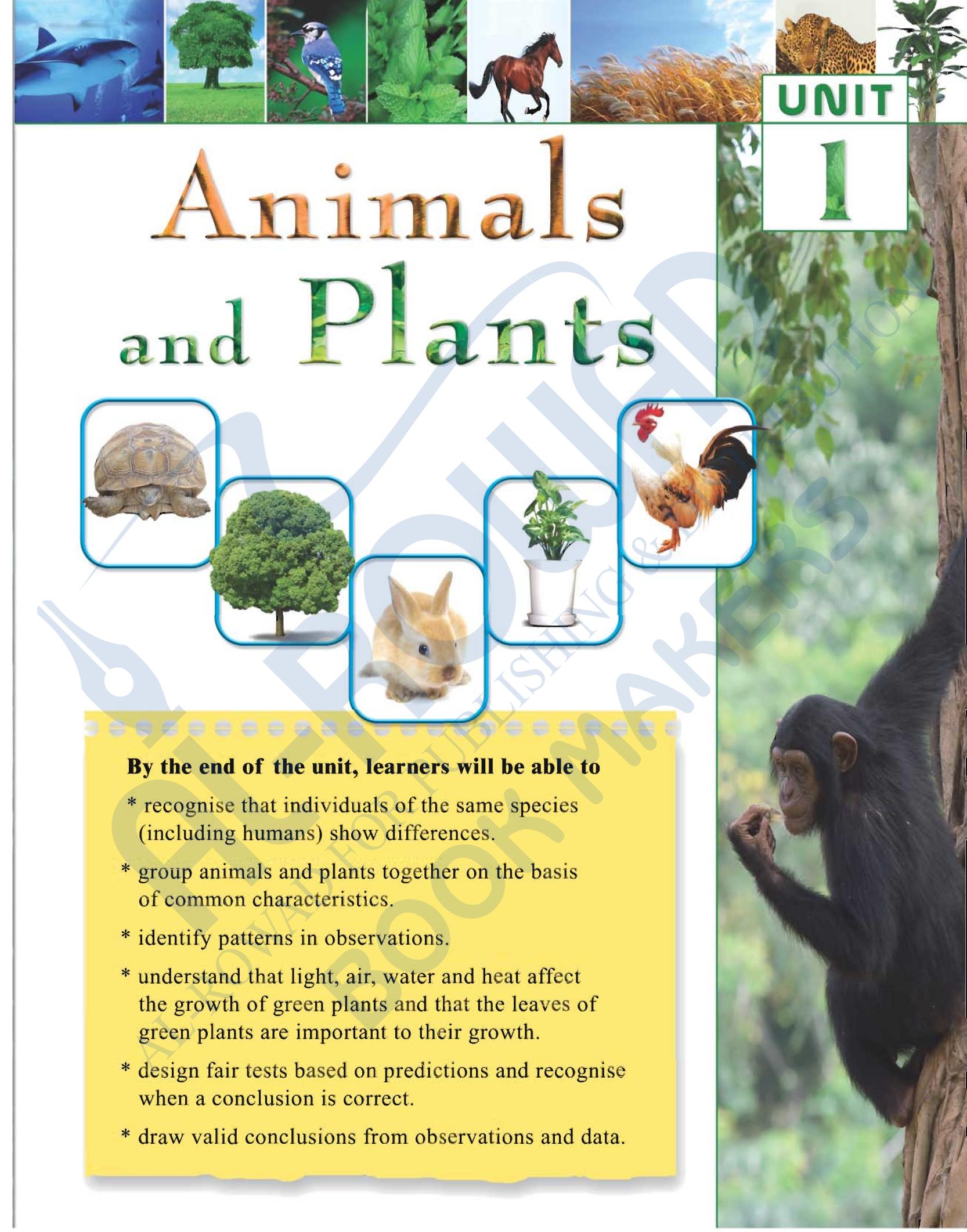
This book is designed to meet the needs of schools that choose to teach Science in English, and aim for a high level student understanding.

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When you see this →  
go to the workbook.





# Animals and Plants

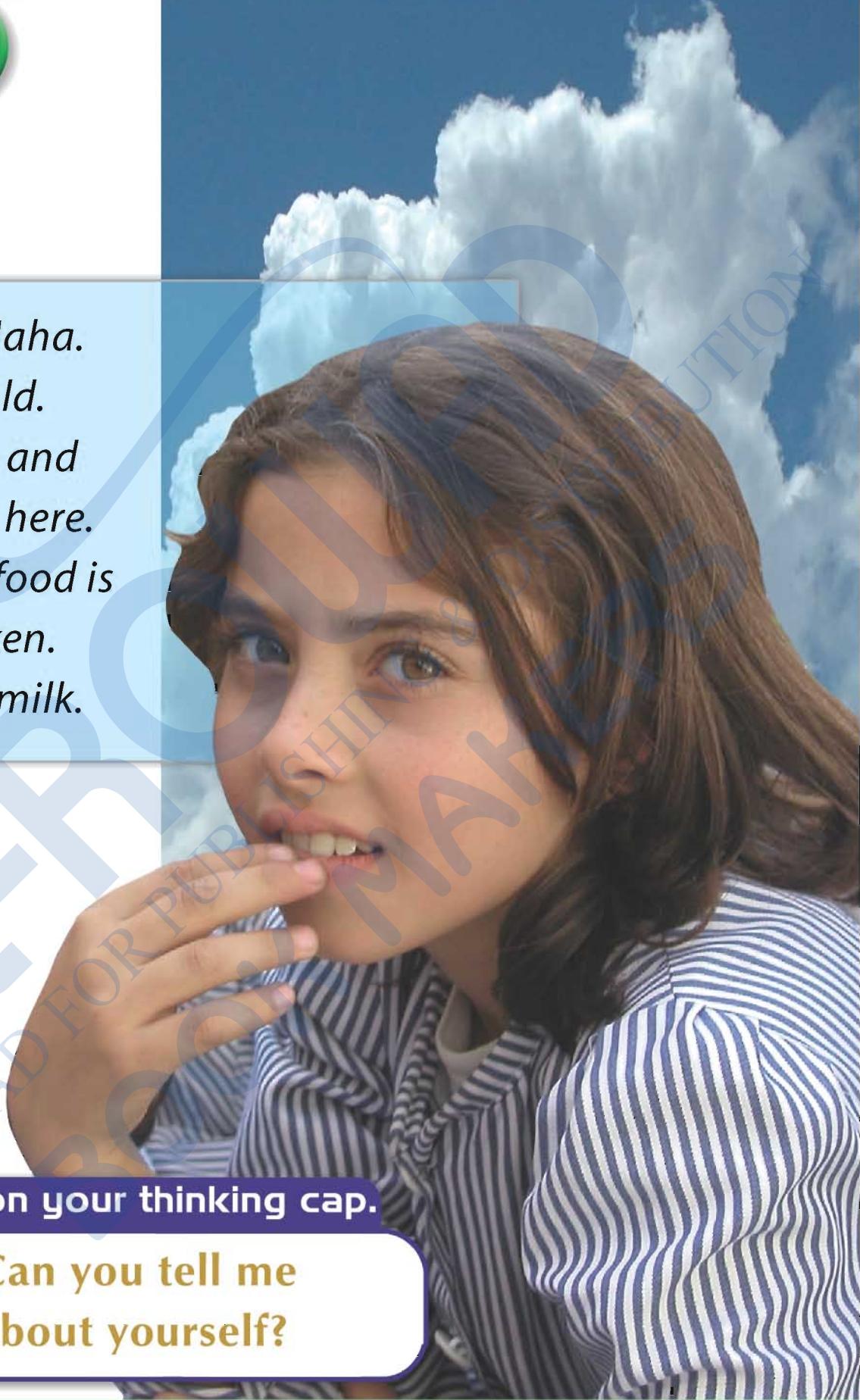


**By the end of the unit, learners will be able to**

- \* recognise that individuals of the same species (including humans) show differences.
- \* group animals and plants together on the basis of common characteristics.
- \* identify patterns in observations.
- \* understand that light, air, water and heat affect the growth of green plants and that the leaves of green plants are important to their growth.
- \* design fair tests based on predictions and recognise when a conclusion is correct.
- \* draw valid conclusions from observations and data.

## Who Am I

My name is Maha.  
I am 9 years old.  
I live in Doha, and  
I go to school here.  
My favourite food is  
rice and chicken.  
I like to drink milk.



Put on your thinking cap.

Can you tell me  
about yourself?



# Comparing Friends

Sara

Aisha

Hi, I am Sara, and she is Aisha. We are best friends. One day we compared ourselves, and we found some differences between us. For example, I have brown eyes and she has blue eyes. I am also smaller than her. We also found some things that were the same about us. She likes to watch cartoons, the same as me.

**Put on your thinking cap.**

**Now compare yourself with a friend. It's fun!**





## Who Am I



*Animals are living organisms. This means they breathe, grow, move, eat, and have babies.*

*Plants are living organisms too. But are they like animals?*

*Think! No, they are not!*

*Plants cannot move, but animals can move from one place to another.*

*Plants can make their own food, but animals cannot.*

*Animals need shelter, but plants do not need shelter.*

*One thing they both share is that they need water, air, and food to live.*

*Can you classify plants and animals in different groups now? Try it!*





## Animals and Plants

# Classifying Plants and Animals

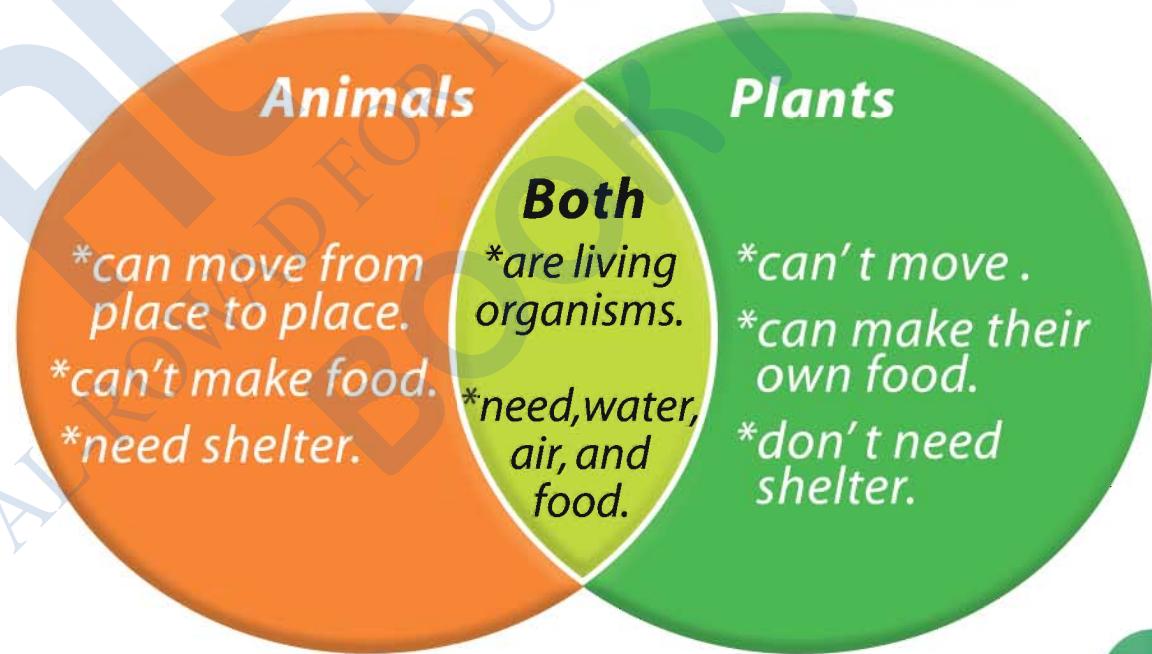
### Animals

are living things.  
can move.  
can't make food.  
need shelter.  
need air, water,  
and food.

### Plants

are living things.  
can't move.  
can make food.  
do not need shelter.  
need air, water,  
and food.

We can use a venn diagram like the one below to look at how plants and animals are alike and different.



## Estimating and Me



*How can we estimate different lengths?*

*We can estimate lengths by using our hands, feet, and other objects.*

*What can we estimate?*

*We can estimate our height, shoe size, hand span (how wide our hand is), arm span (how long our arm is), head circumference (the distance around our head), and lots of other things. Try it!*



## Animals and Plants

Mom, can we measure  
and compare ourselves?

## Comparing

Yes, we can .Let's try

my height

my arm span

my arm span

my height

my foot

my foot

# Animals and Plants



*Mom, you are taller than me and you have a bigger hand span.*

*Yes, dear. Your hand span is smaller than mine.*

*Mom, measuring is fun.*





# Animal Characteristics

In this world there are many kinds of animals, some animals have the same characteristics.

For example: some have beaks, some have no legs, some have tails, some have arms, some fly, some run, some walk, some have fur, some have feathers or scales, some have wings, some have shells, some are tame, some are wild, and some live in water.

## Animals With Wings



## Animals With Feathers



## Animals With Fur





## Animals and Plants

### Animals With Scales



### Animals With a Shell

