

ACTIVE

SCIENCE

for you

BOOK - 2

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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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PLANTS AROUND YOU

Look around your home and school, in parks and gardens and in the fields. You see plants growing everywhere.

Some plants are so small that they are hard to see. Some are so big that they seem to touch the sky!

You can also see that plants come in all shapes and sizes. Let us visit a garden and learn more about the plant world.



TREES

Here are some plants. They are called **trees**. Trees are the biggest plants of all. They live for many, many years.



mango tree



neem tree



coconut tree

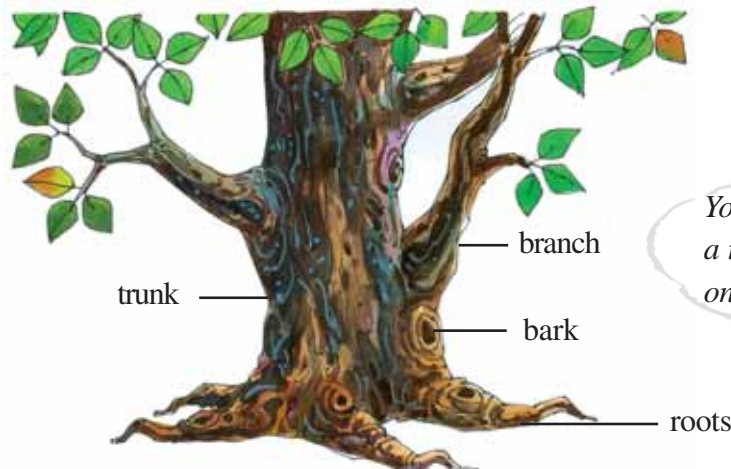
Did you know? 

Some trees live for 4,000 years!



banyan tree

A tree has a strong and woody stem called the **trunk**. The trunk is covered with **bark**. The bark protects the stem. The roots of a tree go very deep inside the ground to find water.



Did you know? 

You can tell the age of a tree by counting the rings on a tree stump.

A tree has many **branches**. The branches bear leaves, flowers and fruits. Some trees keep their leaves all year. They are evergreen. Some trees lose all their leaves in winter.

SHRUBS

Now look at this plant. It is a small, woody plant having several stems arising from the base, with leafy branches growing close together.

Do you know what it is called? It is called a **shrub**.

Here are some more shrubs.



rose

Did you know?

Most shrubs have colourful flowers.



bougainvillea



hibiscus

Did you know?

A banana plant is not a tree. It is a herb.



jasmine

HERBS

Let us now look at another plant.

It is the coriander plant.

It is a small plant with a soft and green stem.

The roots are very small. The plant lives only for one season.

Such a plant is called a **herb**. Here are some more herbs.



coriander



rice



mint



spinach



wheat

CLIMBERS

Here is a plant that you see around your home. It is called the money plant. It grows on a support.

Do you know why?

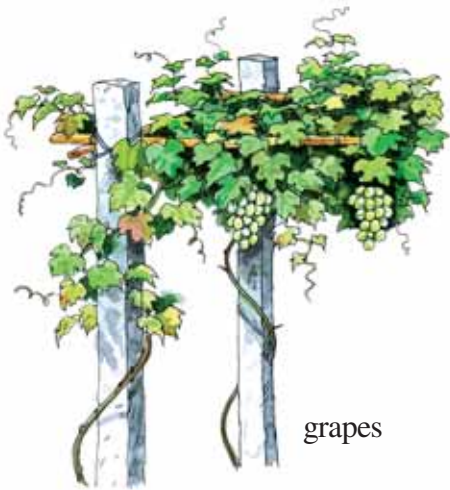
It is because the stem is very weak.

Plants with weak stems that need support to grow are called **climbers**.

There are many other climbers. Here are some of them.



money plant



grapes



peas

CREEPERS

Here are some more plants. They grow and spread along the ground. They are also weak-stemmed. They are called **creepers**.



watermelon



pumpkin



bottle gourd

So, you have seen that plants are of so many types.

You will learn more about them in the next lesson.

KEY WORDS



trees

leaves

herbs

trunk

stem

shrubs

bark

flowers

creepers

branches

fruit

climbers

KEY POINTS



- * Trees are big and strong plants.
- * A tree has a strong and woody stem called the trunk.
- * The trunk is covered with bark.
- * A tree has many branches.
- * The branches bear leaves, flowers and fruits.
- * Shrubs are small, woody plants having several stems with leafy branches.
- * Herbs are very small plants having soft and green stems and small roots.
- * Plants with weak stems that need support to grow are called climbers.
- * Plants with weak stems that grow and spread along the ground are called creepers.

CHECK YOUR PROGRESS



1. Answer the following questions.

1. What are trees? Name two trees.

2. What are shrubs? Name two shrubs.

3. What are herbs? Name two herbs.

4. Why do climbers need support to grow?

5. Where do creepers grow?

II. Write (✓) or (x) in the brackets.

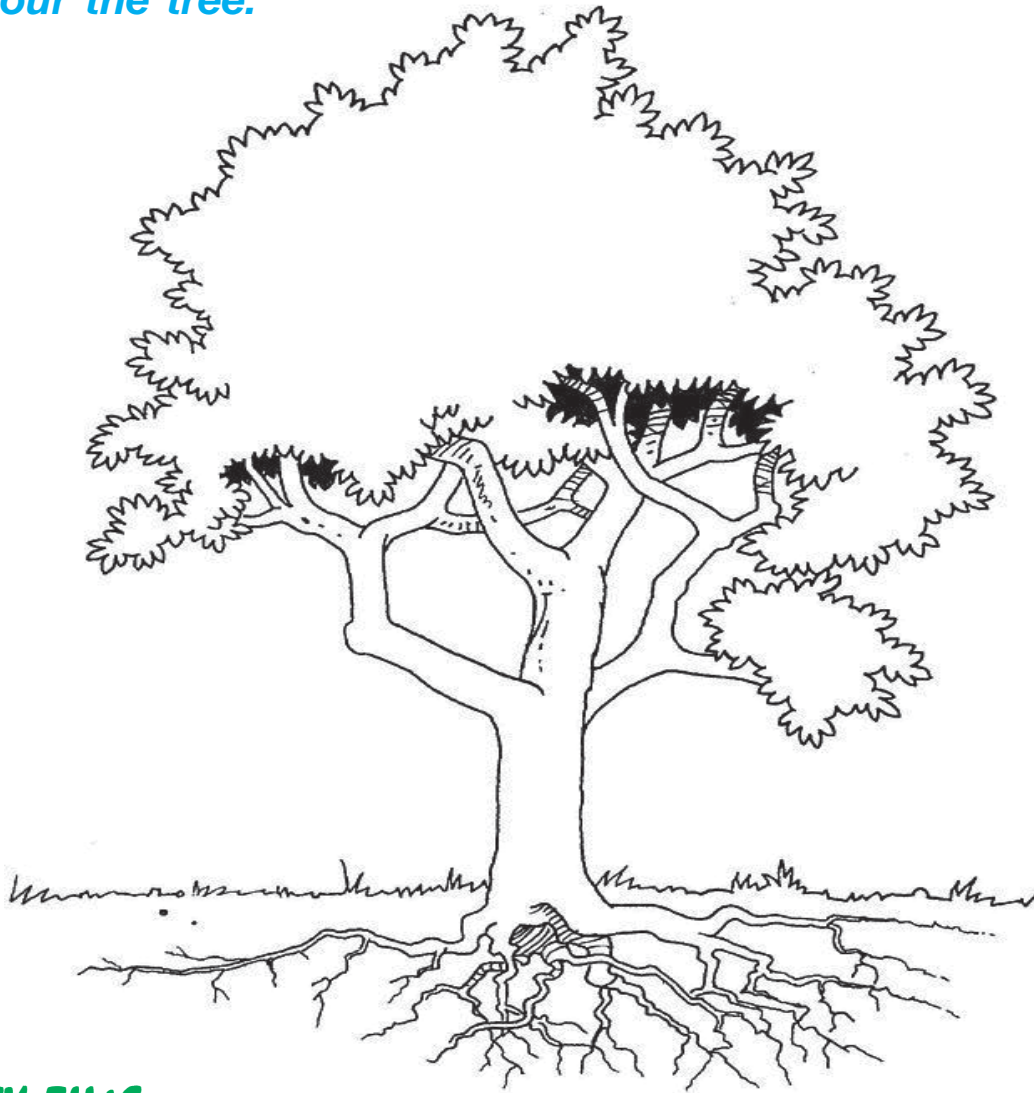
1. Trees live for many years. []
2. The roots of herbs grow deep inside the ground. []
3. Herbs live only for one season. []
4. Rose plant is a shrub. []
5. Creepers have strong stems. []

III. Match the following.





I. Colour the tree.



ACTIVITY TIME

- * Paste pictures of some trees, shrubs, herbs, climbers and creepers in your scrap books.
- * Visit a garden and write down the names of five plants you see.

QUIZ TIME

A plant that grows in the desert :



cactus