

MANGROVE REPLANTING PROGRAMME

Wow! So many young plants.

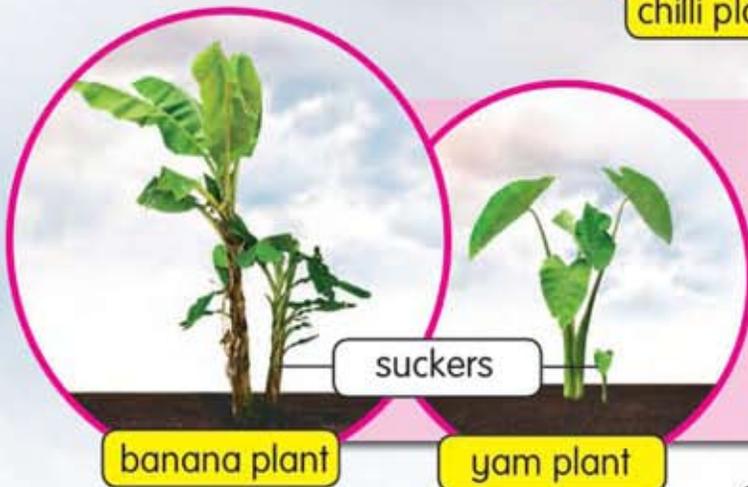
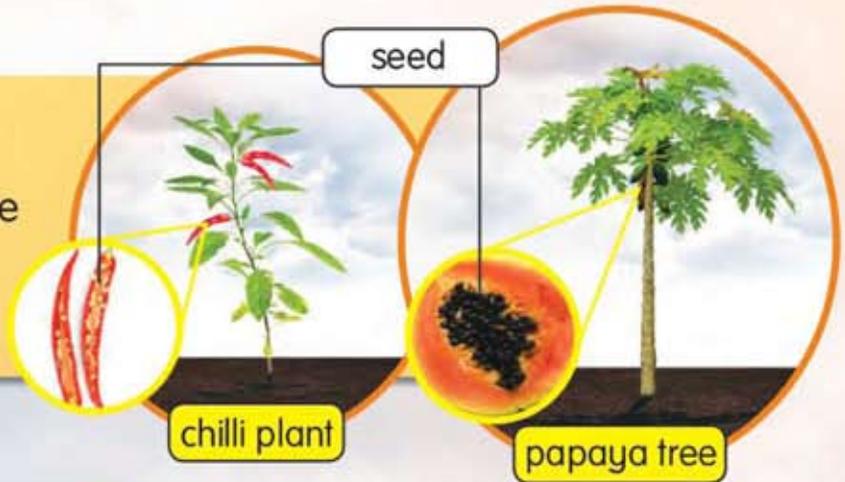
Why do they need to replant the young plants?

Ways of Reproduction in Plants

Plants need to reproduce to avoid extinction.
Plants can reproduce in various ways.

Seeds

Plants that produce fruits reproduce through **seeds**.

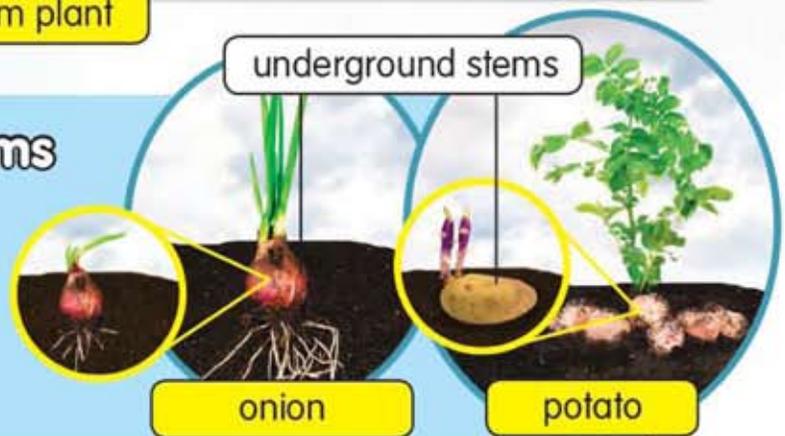


Suckers

Suckers are young plants that grow near their parent plants. They can grow into new plants.

Underground stems

Underground stems are the parts of plants that will grow into new plants when planted.



TEACHER'S NOTES

5.1.1

- Examples of underground stems are rhizomes, corms, tubers, and bulbs.



ferns



mushrooms

Spores

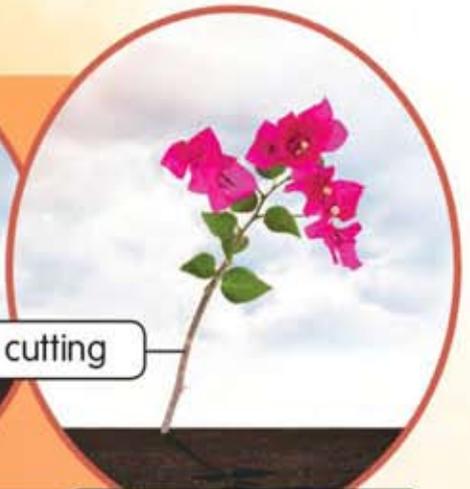
Non-flowering plants reproduce through **spores**.

Stem cutting

When a **stem cutting** of a plant is planted, it will grow into a new plant.



tapioca



bougainvillea



snake plant



setawar

Leaves

There are also plants that reproduce through their parents' **leaves**.

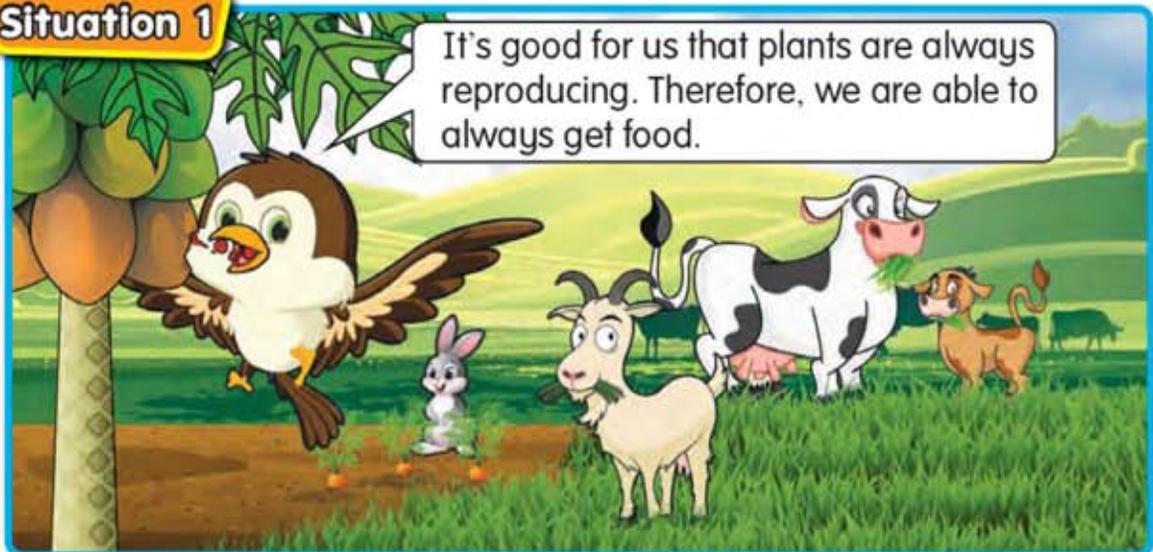
Give other examples of plants that reproduce in the ways stated above.

Importance of Plant Reproduction

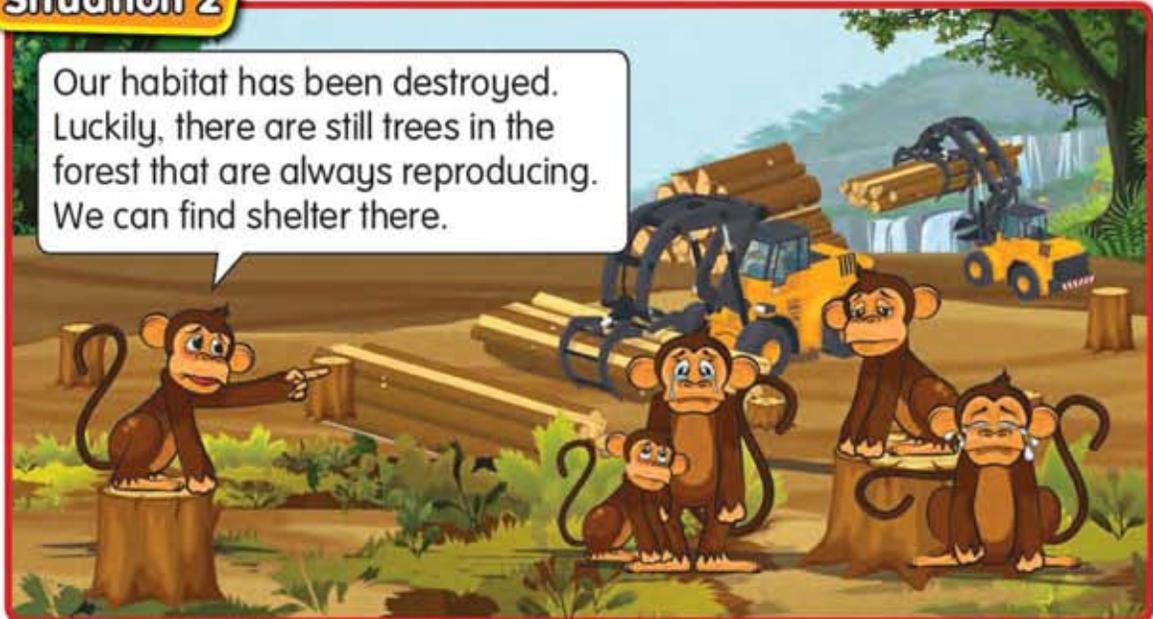
Plants always reproduce to increase their numbers and maintain their species. Why?

Observe the situations below.

Situation 1



Situation 2

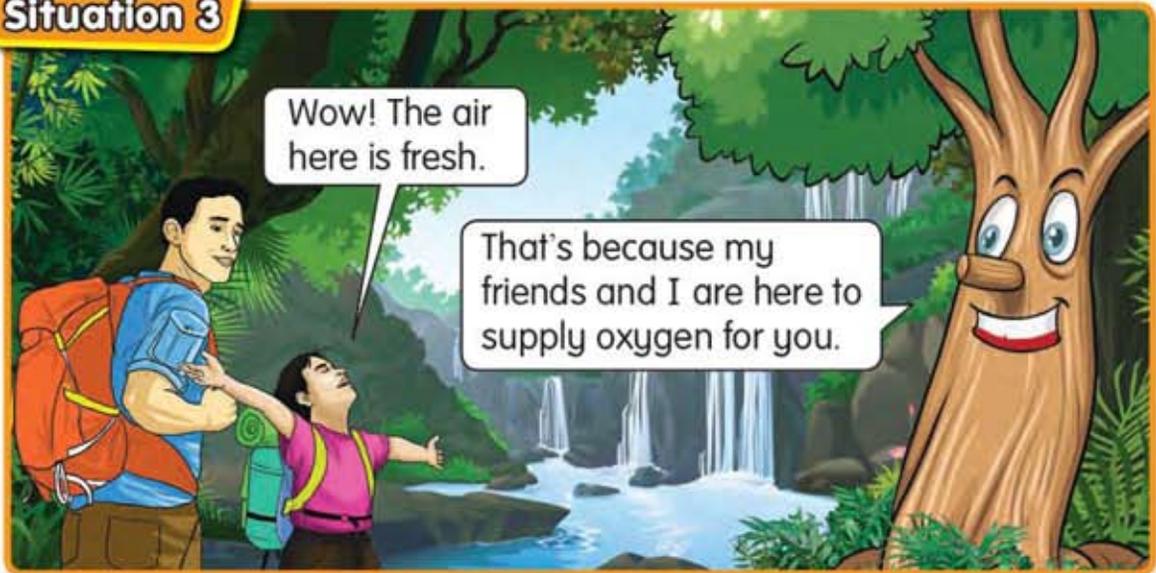


TEACHER'S NOTES

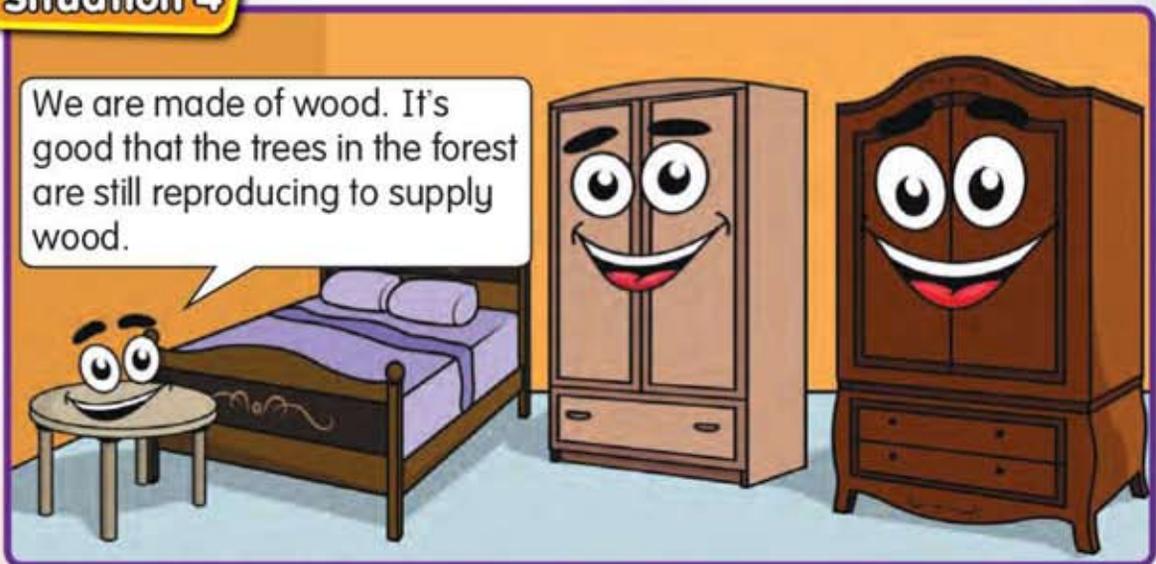
5.1.2

- A species is a group of living things that are of the same type and have the same characteristics.

Situation 3



Situation 4



Why is reproduction of plants important to life?



Reproduction in plants is important to life because it helps in conserving and maintaining our food source, habitat, oxygen supply, and wood supply.

Activity Book
Pages:

47-48

Single Plant, Different Ways of Reproduction



Let's Test Ways of Water Spinach Reproduction



Apparatus and Materials



- water spinach seeds



- water spinach stem cutting with the roots



- plastic container



- soil



- water

Steps

Stem Cutting

1. Put the stem cuttings with the roots in a plastic container with water.
2. Make observations of the growth of shoots every day.
3. Record your observations as in Table A.



Seeds

1. Plant water spinach seeds in a plastic container with soil.
2. Water the seeds every day.
3. Make observations of the growth of shoots every day.
4. Record your observations as in Table A.



Table A

Ways of Reproduction	Shoot Growth	
	Yes	No
Stem cutting		
Seeds		

Question

Is the water spinach able to reproduce in more than one way? Explain.

TEACHER'S NOTES

- Basil can be used instead of water spinach for this activity.
- Sweet potatoes also have two ways of reproduction, by stem cutting and underground stems.

Activity Book
Pages:

50-51

5.1.3

Technology in Plant Reproduction

Do you know that we can also reproduce plants using technology such as tissue cultures and marcottage?

Tissue Cultures

Tissue cultures can produce new plants from tissues of a parent plant that are placed in a nutrient medium. Examples are banana plants and orchid plants.



Marcottage

Marcottage can increase the number of plants without planting seeds. Examples are mango trees and lime trees.



Identify examples of other plants that can be reproduced using technology such as tissue cultures and marcottage.



Leisure Science

Hanging Garden

Steps

Create a hanging garden using your creativity with used objects such as plastic bottles.



Activity Book
Page:

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Let's Remember

- Plants reproduce through various ways such as:
 - seeds
 - stem cuttings
 - leaves
 - underground stems
 - suckers
 - spores
- Plant reproduction is important to ensure that plants are always there to provide:
 - food sources to other living things
 - habitats as shelter to other living things
 - oxygen supply to living things
 - wood supply
- There are certain plants that have two ways of reproduction such as water spinach, basil, and sweet potato.
- The reproduction of plants can also be done using technology such as tissue cultures and marcottage.



Let's Answer

Answer all the questions in the Science exercise book.

- (a) Identify the ways of reproduction for the plants below:



(i) bougainvilleas



(ii) onions



(iii) mushrooms

- (b) State other examples of plants with the same ways of reproduction as above.
- What is the importance of plant reproduction?
- State two examples of plants that are able to reproduce in two different ways.
- Give two examples of plants that can be reproduced using tissue cultures.