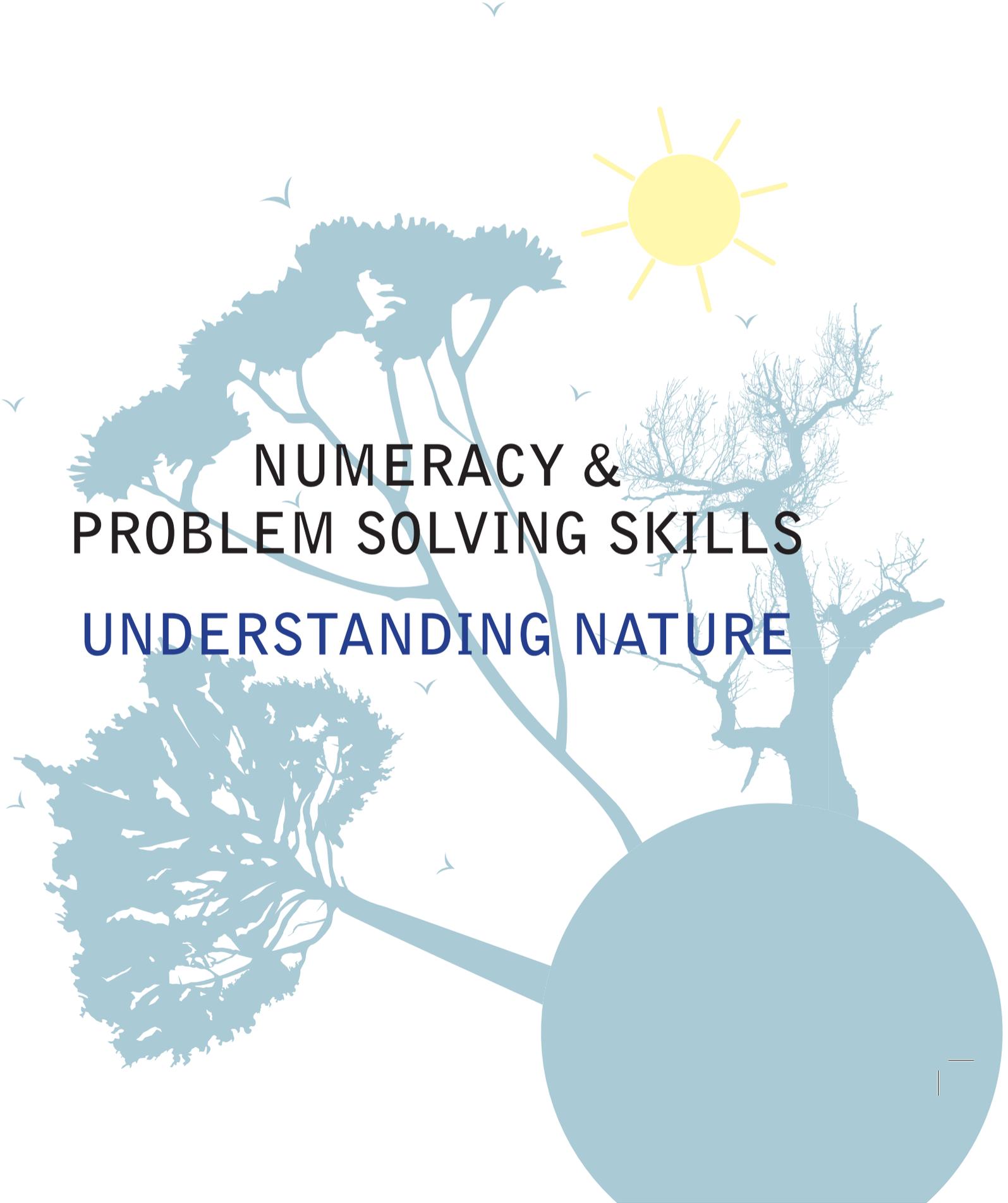


# PREVOCATIONAL PROGRAMME

FORM 2  
Part 1



NUMERACY &  
PROBLEM SOLVING SKILLS  
UNDERSTANDING NATURE

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*Designed by*



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The Government Printing Office

## Foreword

In view of the reform of the PreVocational Education at Secondary level, we are pleased to provide to Educators and PreVocational students teaching and learning materials in line with the new Curriculum Framework-Secondary (PreVocational) which will now comprise of four years of schooling.

The objective of the PreVocational education is to provide opportunities to learners to obtain a formal qualification after four years of schooling. It will also provide learners with opportunities to branch out in either, further training in a number of vocational areas or to join the world of work or even to reintegrate the academic stream.

This project necessitates a well-planned teaching based on a set of carefully designed materials. The MIE is providing the pedagogical support and appropriate materials for both teachers and pupils. We believe that all children are educable and we have incorporated in the text materials that would provide learning experiences appealing to a diversity of learners. We wish that teaching is based on a collaborative and consensual approach with the students as well as with the support of the home.

We also hope that these materials will help everyone to obtain a clear idea of the PreVocational project. You will surely notice that the materials can benefit any learner and a much wider group of students than just the PreVocational stream. It will be followed by other more exciting ones to cover the whole of the four years.

I wish to thank all the staff of MIE under whose guidance these materials have been produced and the team of MIE graphic designers who have produced a wonderful piece of work. My thanks also go to the staff of the MITD who have been associated with the writing of the materials, the Educators from secondary schools who have contributed in various panels and the PreVocational Inspectors for their constructive comments.

***Sheela Thancanamootoo***

***Director, MIE***

## Introduction

As for the year I workbook, this book is also based on the new curriculum framework for Pre-vocational Education in the Republic of Mauritius. It integrates as closely as possible, aspects of our everyday life. Learners are encouraged to observe what is happening around them and to draw the scientific ideas from these contexts. The examples cited from their everyday life will enable learners to engage into fruitful group discussions, leading to meaningful learning. The diagrams provided in this book illustrate various aspects of our routine activities. Most of the time we are involved in these activities so we need to understand their implications, benefits and also how they impact on our environment.

Through group discussions, students will learn about air and water and their relations to our life. Students will have indoor as well as outdoor experiences to reinforce the learning process. Through the activities proposed in this book learners are expected to develop cognitive, psychomotor as well as affective skills. Teachers are encouraged to explore the prior knowledge of learners, identify strengths and weaknesses and then to proceed towards the development of these concepts. Teachers are also strongly encouraged to carry out all the activities proposed so that learners get the best of hands-on and minds-on learning experiences. In so doing learners' communication skills (oral and written) will also be reinforced and the mastery of language will be improved. Along with the activities proposed teachers are also encouraged to reinforce students' communication skills through the Role Play activities. These kinds of activities are very beneficial to learners as they also provide opportunities for development of self confidence, team spirit, tolerance and other affective skills.

The colourful illustrations, the simple language, ICT usage, innovative pedagogy and the opportunities for ample discussions and activities, including project works, are expected to arouse the curiosity of learners and motivate them to further learn the science involved in everyday life.

A list of websites has been provided for teachers and learners to obtain additional materials to support the learning process.

### **Understanding Nature Panel**

## Panel members

**Coordinator:** M. Cyparsade, *Senior Lecturer, MIE*

**Assistant Coordinator:** Dr A. Rumjaun, *Associate Professor, MIE*

- D. M. G. Bahadoor, *Educator*
- A. S. Baulum, *Educator*
- N. Goinden, *Educator*
- G. Sumessur, *Instructor, MITD*

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# Air

### Introduction

We have learnt in year 1 that 'air' is present around us.  
We cannot see air. In this unit you will study more about air.



Indicates the instruction that the teacher will give before the start of any activity and help students



LESSON 1



This icon indicates that the teacher should read and explain the activity to students, then guide them through the activity



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**ACTIVITY 1:** Demonstrating the existence of air in an empty bottle.

**Materials required:**

- an empty plastic bottle

**Instructions**

- Hold the empty plastic bottle in one hand
- Remove its top
- Place the other hand near the opened end of the bottle
- Now squeeze the bottle as shown in figure 1



Fig 1

**Observation**

What do you feel on your hand placed at the opened end of the bottle?

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.....

**Conclusion**

When we squeeze the plastic bottle briskly, we can feel air coming out. This air is present in the bottle though we cannot see it.



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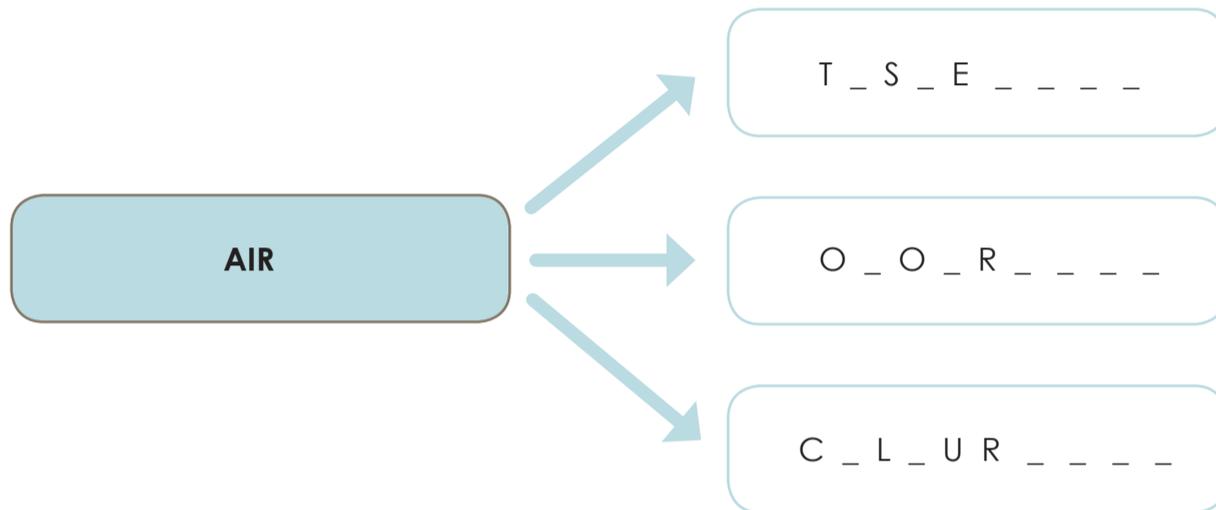
explain  
activity



## ACTIVITY 2: Recalling the properties of Air

### Instructions

The diagram below shows the properties of air. Discuss in groups about the properties of pure air and fill in the blank spaces below with appropriate letters.



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## ACTIVITY 3a: Observing air in motion

### Materials required:

- Electric fan (available in all classes; or paper fan made by students can be used)

### Instructions

- Switch on the fan
- Stand in front of the fan as shown in the figure 2
- Answer the questions below

.....

.....



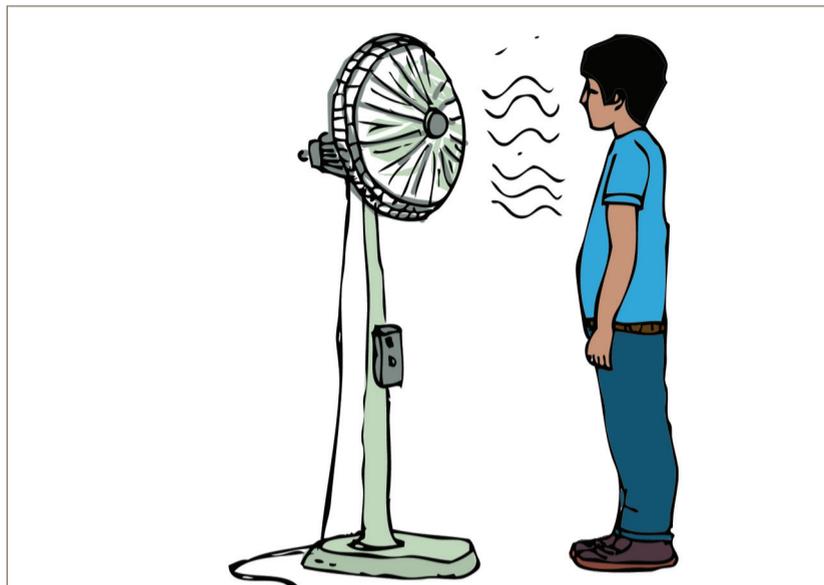


Fig 2

**Observation**

1. What do you feel on your face?. Explain your answer.

.....  
.....

2. Will you feel the same effect if the fan is switched off?

.....  
.....

**Observation**

We have observed in the above demonstration that the fan blows air on our face and body. We can feel that air is moving around us.

We can try another activity to understand the effects of moving air.

- Tear pieces of paper and keep these on the table
- Using a book cover or a note book or with your mouth, blow air briskly on the pieces of paper

What happens to the pieces of paper? What causes this to happen?

.....  
.....

**Conclusion**

Moving air is known as **wind** or **breeze**. On windy days we feel the breeze blowing. Breeze can even move things that are light.



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Fig 3

**Obse**

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- ii)
- iii)

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### ACTIVITY 3b: Modelling formation of wind

Let us now try to understand how wind is produced.

#### Instructions

- Observe carefully figure 3 below
- Discuss in groups about what you see

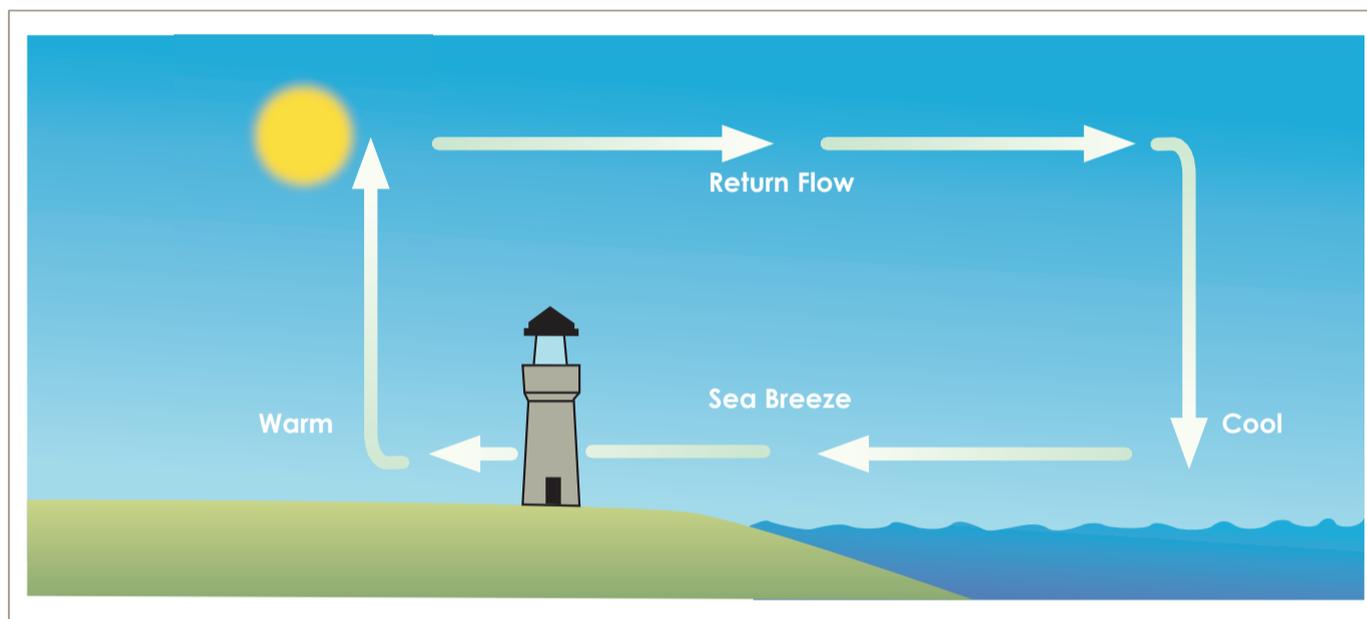


Fig 3

#### Observation

- Is it daytime or night time?
- In what direction is the breeze?
- What is happening to the air?

.....

.....

#### Conclusion

When air is heated by the sun it becomes 'lighter (less dense)' and it rises. Cold air flows in to replace rising warm air.

This continuous flow of air is what is called wind or breeze.



To prove that warm air rises, we can try a simple activity with the help of the teacher.



Instru  
Obse

**Instructions**

- Light a candle and place it on a stand on the table
- Take a strip of light paper and place it above the flame (take precautions)

It is seen that the paper strip dances above the flame. This is because the warm air is rising and it is causing the paper to move.

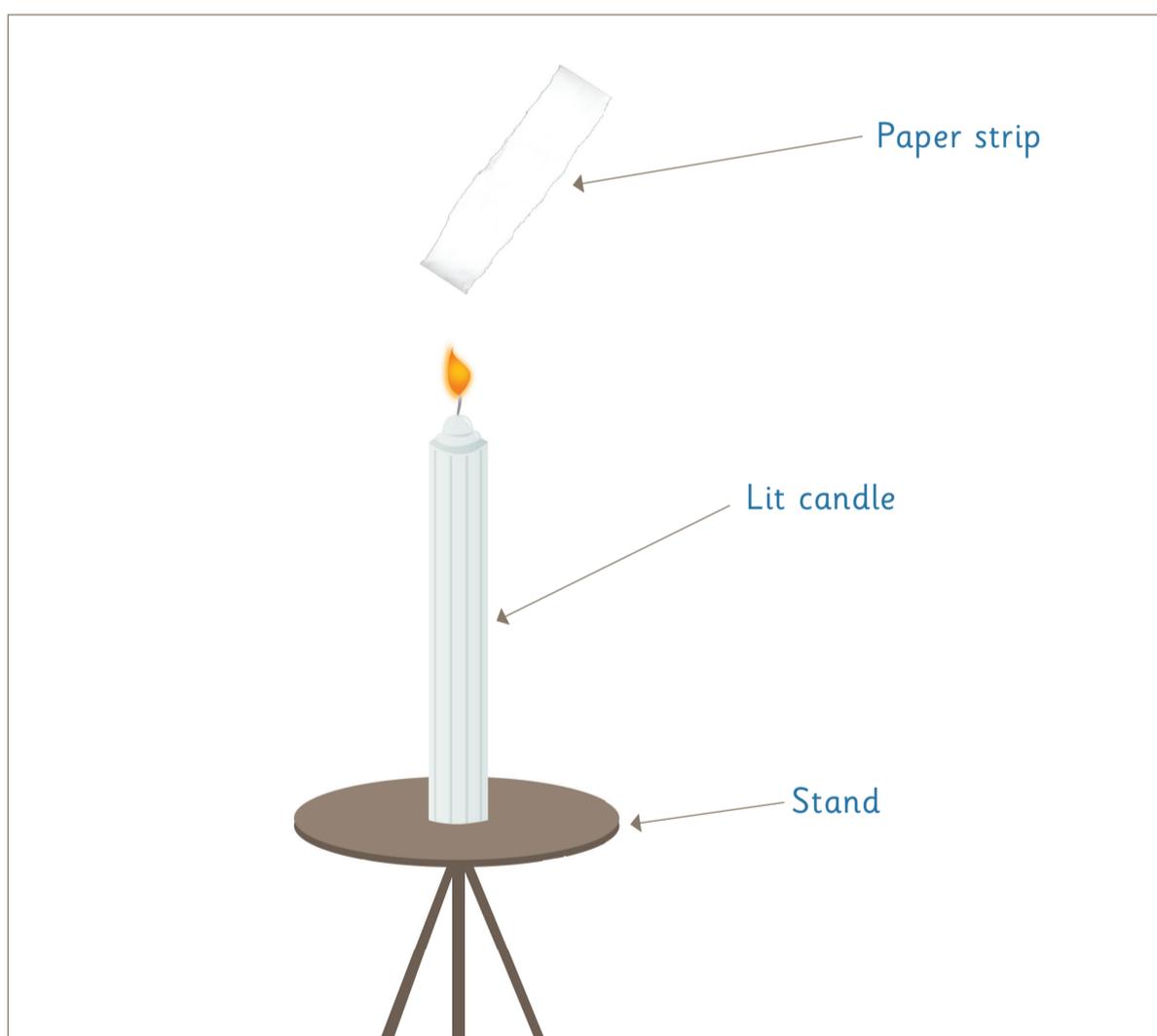


Fig 4

1. Ch  
sail

- i.
- ii.
- iii.
- iv.
- v.



### ACTIVITY 4a: Observing the direction of the wind

**Instructions**

Observe carefully figure 5 below and complete the exercise that follows

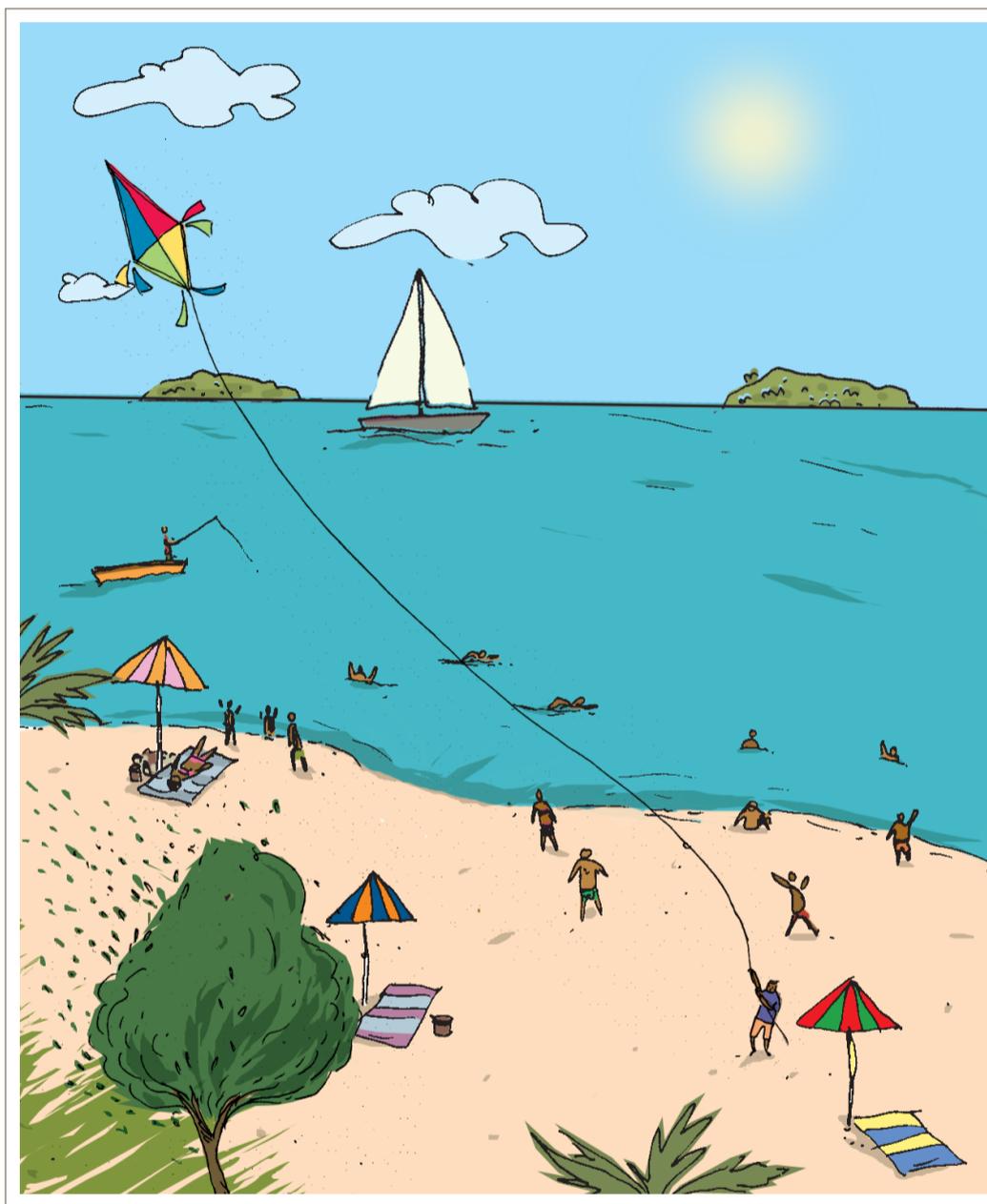


Fig 5

1. Choose from the given list of words to complete the sentence below.

sail    day    windy    land    rainy    wind

- i. The picture shows a sunny .....
- ii. The children can fly their kite because of the .....
- iii. The kite is flying towards the .....
- iv. The wind also helps the boat to .....
- v. So we can say that it is a ..... day.

2. Draw an arrow to indicate the direction of the wind in the picture. Label the arrow W.

**Conclusion**

During the day cool air blows from the sea towards the land.  
This cool air blowing from the sea is known as sea breeze.

**Sea breeze blows from sea to land during day time.**

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**ACTIVITY 4b:** Observing the direction of the wind

**Instructions**

Observe carefully figure 6 below and complete the exercise that follows

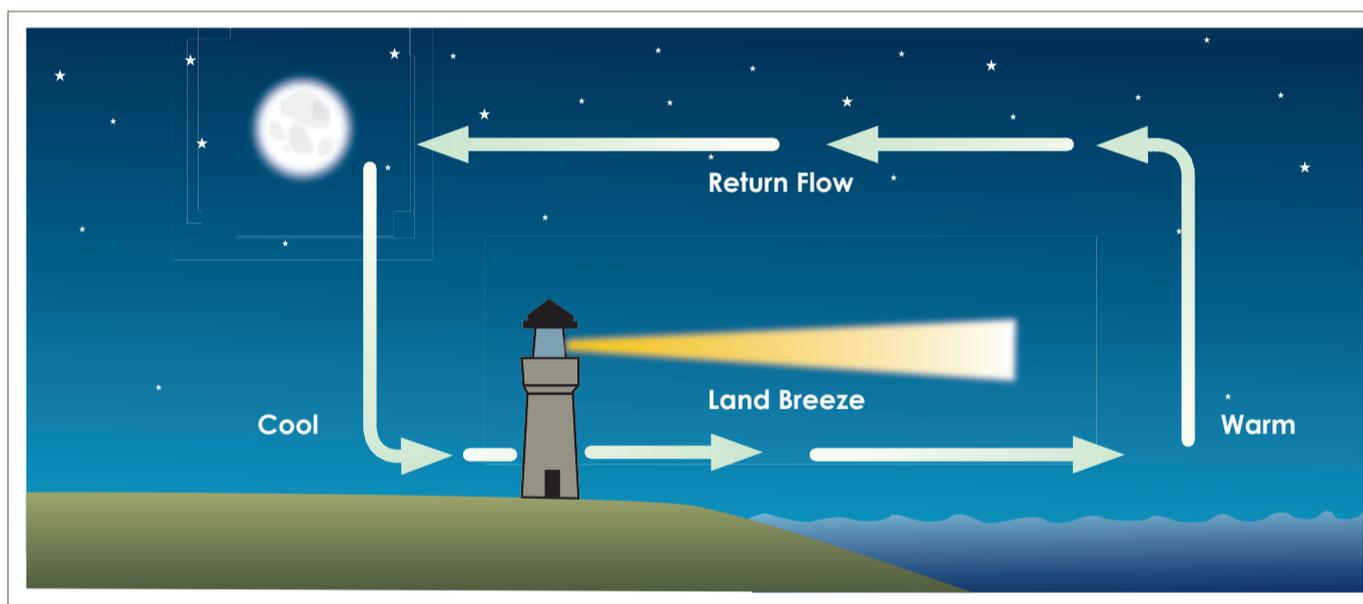


Fig 6

**Observation**

Complete the sentences.

In this picture we can say that it is ..... time because of the moon and stars seen. It is seen that the ..... is blowing towards the sea, from the land, so it is called .....

.....  
.....

w W.

**Conclusion**

During the night the sea is warmer than the land. As the air on the sea is warmer it rises. Cool air blowing from the land replaces the rising air.

This cool air blowing from the land is known as **land breeze**.

**Land breeze blows from land to sea during night time.**



To prove that air is able to move an object, we can take pieces of paper and drop these outside the class (do not forget to pick them later). Observe how these pieces of paper fall to the ground. Do they fall at the same place where you are standing?

.....

.....

It is seen that the pieces of paper are carried away by air. So we can say that air can move objects. This is how kites fly in the air, boats sail in the sea and surfers enjoy their holidays.



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LESSON 2

Wind as a source of energy



**ACTIVITY 1:** Finding out how wind can be used to produce useful energy

**Instructions**

- Look at the pictures below and discuss on each of them
- Write two sentences on each of them



Fig 1

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Fig 2

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Fig 3

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Fig 3

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**Conclusion**

- Wind can be used to grind grains in the windmill.
- Wind can be used to produce electricity in the Eolian (wind generator).
- Wind can be used to move boats having sails.

In fact, wind is a source of energy and it can be used to do many things.



## ACTIVITY 2: Use of wind in the production of electricity – Role Play

### Instructions

- Observe fig 4 below and answer the questions that follow



Fig 4

1. How do we produce electricity in Mauritius and Rodrigues?

.....  
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2. Do you think the ways that we produce electricity are environment friendly?

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3. Do you think that the figure 4 shows us a good way of producing electricity?

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4. Give two reasons.

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**Conclusion**

Today wind energy is used to generate electricity. Wind is a renewable source of energy.



**Oral Presentation**

**Following the above questions, one or two students will be chosen to express orally about the benefits of using air to produce electricity.**

This activity can be organised like a competition. Students have to ask teachers, parents and others about this mode of electricity production. Then they have to present orally using diagrams about the benefits of this method of electricity production. The best presentation will be chosen by teacher and students.



1. What have you observed in the pictures?

.....  
.....

2. Is there a strong wind or a light breeze?

.....

3. Do we have such kind of weather in Mauritius?

.....

4. How do we call this type of weather?

.....

5. During which season does it occur?

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.....

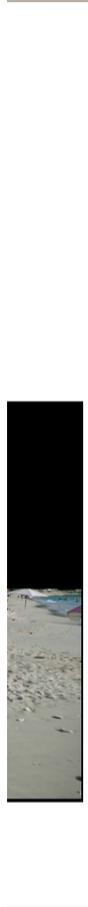
6. List down some necessary precautions we normally take when a cyclone is approaching our island.

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7. Name some of the recent or well known cyclones in Mauritius.  
Find out from parents.

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8. In what ways is Mauritius affected by a cyclone?

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**Conclusion**

Although wind is very useful to us in various ways, it can be very dangerous in the form of cyclones.

**Presentation**

Following the above discussions, one or two students will come in front of the class and relate his or her feelings (real or imaginary) on how we experience a cyclone. Under teacher's guidance many aspects of a cyclone may be covered in the discourse. Think about rains, flood, wind, damages, plants(trees), animals, houses, electricity, safety, and so on.



**Hands on activities (development of psychomotor skills)**

**Modelling of a cyclone and its effects**

**Instructions**

- Make a model of a farm, using paper cuttings to show animals, houses, barns, and so on.
- Bring the class fan near this model (hand fans can also be used or air blown from the mouth).
- Observe what happens.
- Discuss in groups about the effects of a cyclone.

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## Hands on activities (development of psychomotor skills)

### Making of:

- Wind vane
- Weather vane (Girouette)

These simple objects can be fabricated in the workshop. Teacher will help you with your project.

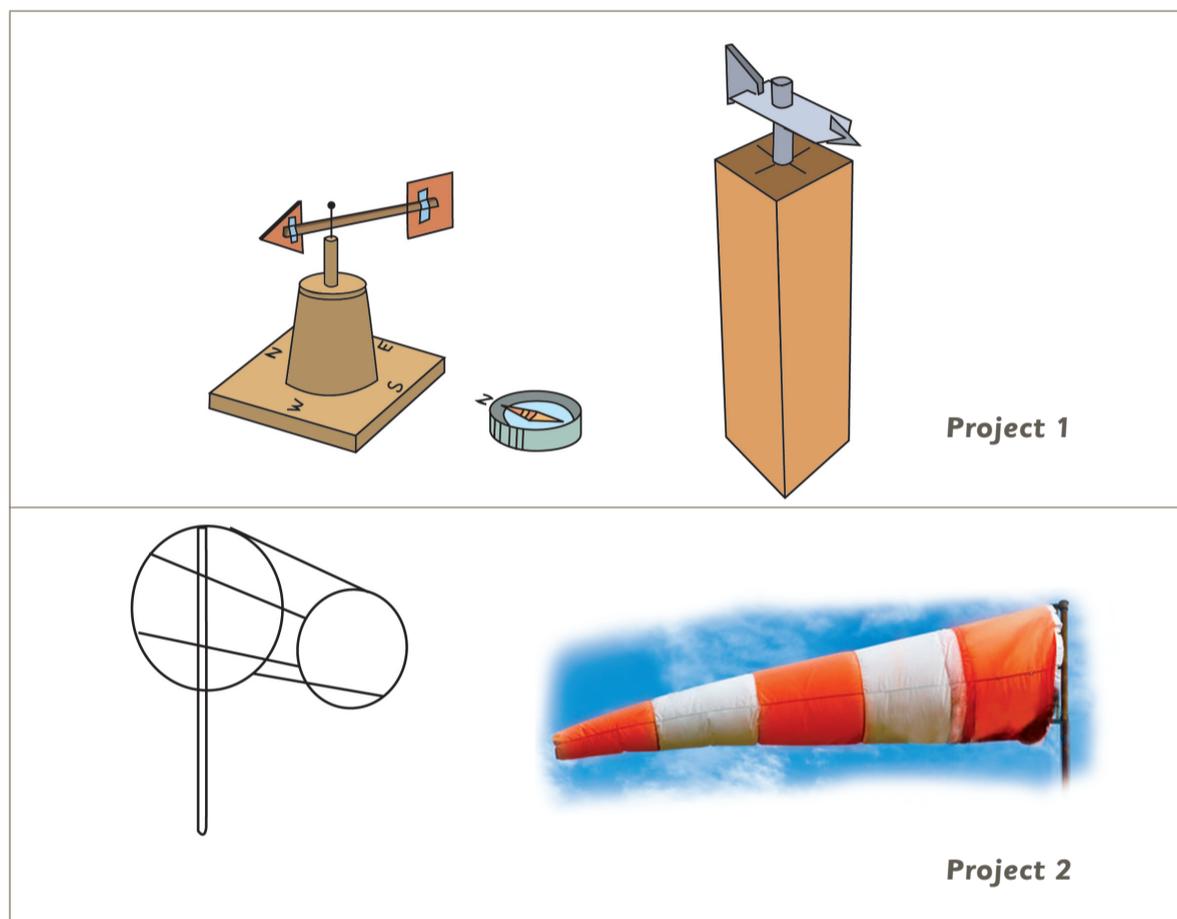


Fig 6

### Instructions

- Students identify their groups (groups of 3)
- Discuss in groups about the tasks given
- Search for additional explanations and diagrams on the Internet or other sources
- Plan for implementation of the 2 projects
- Look for materials
- Make artifacts
- Test the working of the objects constructed
- Record the procedures in terms of diagrams and few words or sentences
- Discuss on how these objects are used in everyday life

## Role Play

After the exercise, pairs of students will be chosen at random one by one, to carry out an interview with each other on what they have done and what they have experienced. This will be performed in front of the class.

## SUMMARY

### In this unit you have studied about:

- Existence of air
- Properties of air
- Air in motion and wind
- Direction of wind and breeze
- Production of electricity using wind
- Effects of strong winds and cyclones on our life

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# WATER



### Introduction

The amount of water that existed on earth long ago is almost the same today. We use so much water but still the same amount of water is available.

Guess how?

We will now study about the above question in detail.



Indicates the instruction that the teacher will give before the start of any activity and help students



### Evaporation and condensation

You have learned in year 1 that water exists in three states: solid, liquid and gas



#### ACTIVITY 1: Conversion of liquid water to water vapour

##### Materials

- Some water (around 2 tablespoons), a piece of kitchen paper

##### Instructions

1. Pour some water on the surface of a desk or any smooth surface (figure 1)

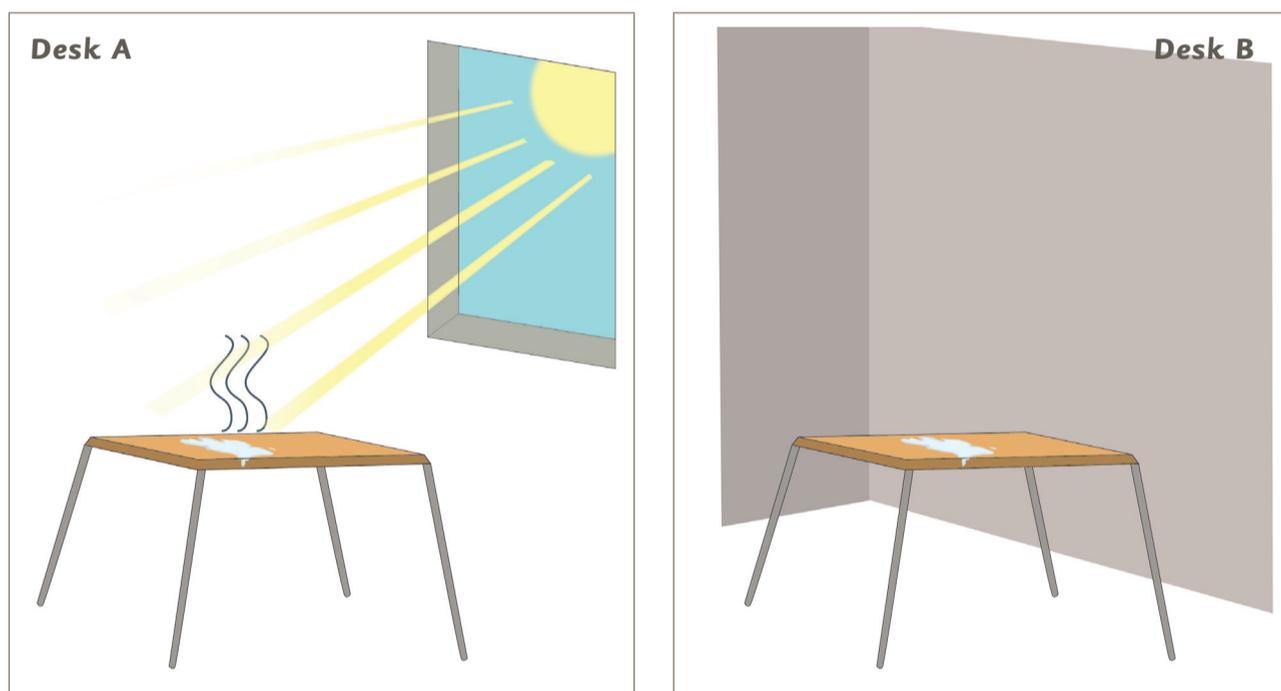


Fig 1

2. Spread the water all over the surface of the desks using the kitchen paper. Write your observation about how the surfaces of the desks were before and after pouring water

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.....

3. Observe the appearance of the surface of the desks continuously. Is the water still there?

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Water

4. Which desk surface dries faster, desk A or desk B?

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5. You must have noticed that eventually both desk surfaces will dry up, but the one exposed to sunlight, dries faster. Explain why.

.....

.....

6. Where has the water gone?

.....

.....

**Conclusion**

The water on the desk changed from the liquid state to the gas state. This process is known as evaporation.

Can you see water vapour in the air around you?

.....

Water vapour is invisible whereas liquid water is visible as in Fig 2



Fig 2



**ACTIVITY 2:** Demonstrating the presence of water vapour in the air

**Materials**

- Two clean glasses, coloured juice (orange) and some ice cubes

**Instructions**

1. Wipe the outside of the glass surface before the experiment
2. Set up the experiment as shown below in figure 3
3. Rub your fingers on the outer surface of each of the two glasses
4. Write down your observation as you proceed with the experiment



Fig 3

**Observation**

1. Is the surface of each glass dry or wet at the start of the experiment?

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Now place some ice cubes in glass A as shown in figure and wait for some minutes.

2. Rub your fingers again on the surface of each glass. Is it dry or wet?

.....

3. Touch the outer surface of each glass. What do you feel? Write your observations.

.....

4. What you see on the outer surface of glass A are droplets of a colourless liquid. Guess what the colourless liquid is.

.....

5. Where did the colourless liquid come from?

.....

.....

### Conclusion

From the above activity you have deduced that the droplets of water on the outer surface of glass A come from the air. This water was present in the air in the form of **water vapour**.

Water vapour present in the air changes (condenses) into droplets of water as it touches the cold surface of glass A. This process is known as **condensation**.

Water vapour  $\xrightarrow{\text{condensation}}$  liquid water

6. Water vapour present in the classroom touches the surface of glass B also, but no condensation takes place. Explain why.

.....

.....

.....

7. Do the ice cubes that you have put in glass A remain the same size and shape throughout the experiment? Explain what happens.

.....

.....

The liquid that is seen on the surface of grass and leaves in early morning is called dew, as in Fig 4. Can you guess where this colourless liquid comes from?



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Fig 6

The ice cubes in figure 5 become smaller and disappear after some time. This process is called melting.

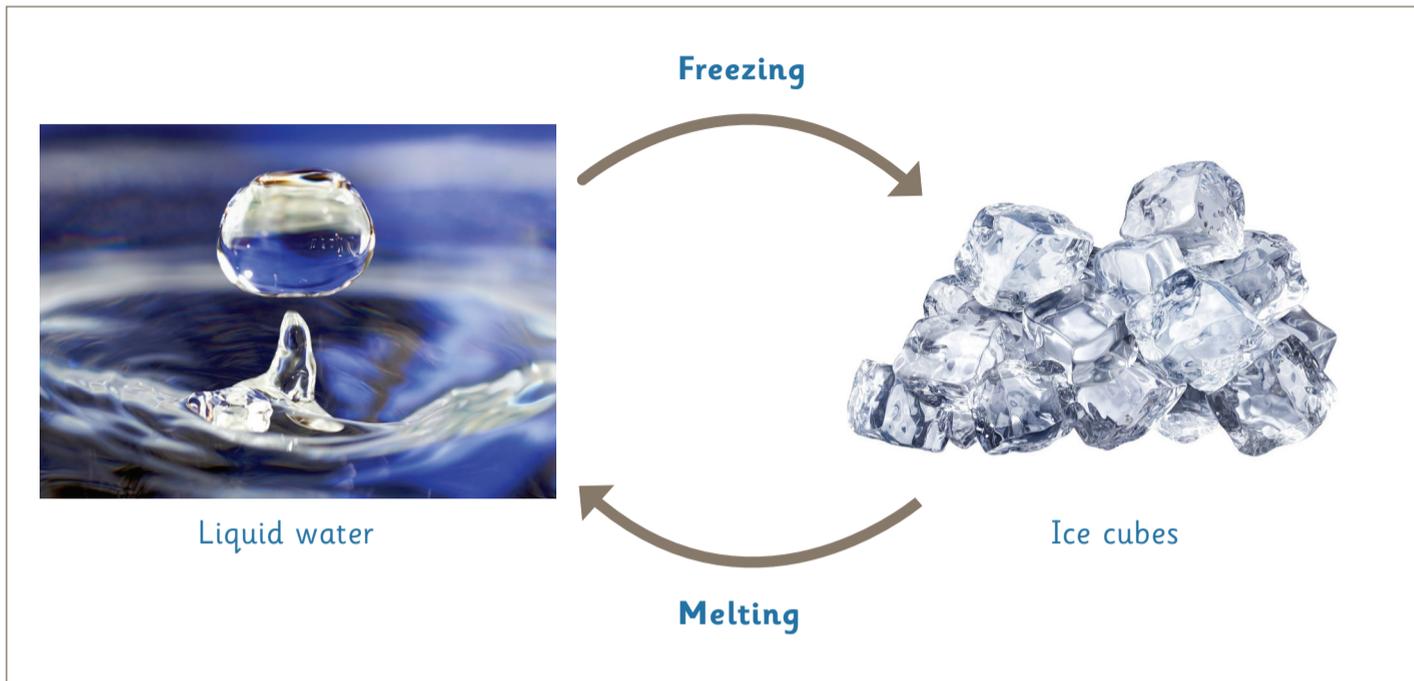


Fig 5

We have seen that liquid water becomes water vapour during evaporation and water vapour becomes liquid water on cooling. This can be represented by the cycle in figure 6.

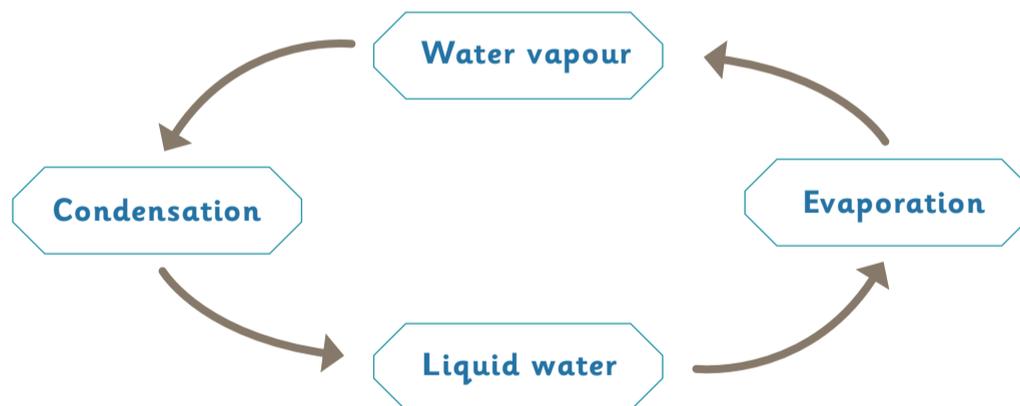


Fig 6

This is how rainwater is continuously recycled between the atmosphere and the ground. It is called the water cycle (figure 7).

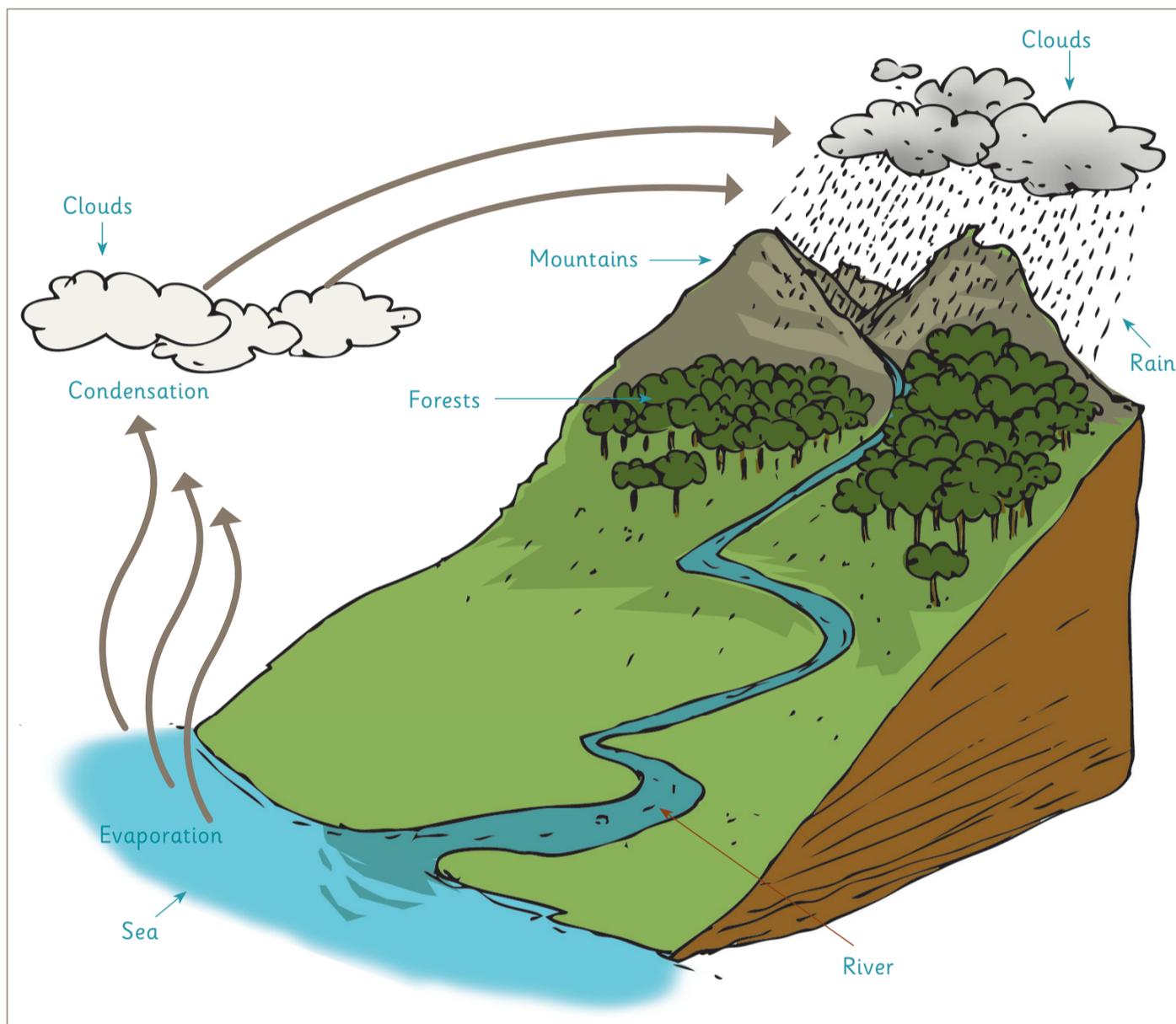


Fig 7



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### ACTIVITY 3: Read and understand – the Water Cycle

The sun heats water found on the surface of the soil, rivers, lakes and reservoirs, seas and oceans as in figure 7. When water is heated it evaporates and becomes water vapour.

The water vapour rises until it reaches a height where air is quite cold. On reaching the cold region, it condenses into tiny droplets forming clouds. These droplets join together to form bigger droplets which then fall as rain.

Most rainwater flows back again into rivers, lakes and the oceans, while some water is retained by the soil and collect as underground water.

On heating by the Sun, water in the rivers, lakes, oceans and ponds evaporate. This is a never ending process and of a cyclic nature. It is called the Water Cycle.



#### Follow up exercise

Fill in the blanks with the list of words given below

source    sea    liquid    gas    colourless

1. Steam is water in the ..... state.
2. Pure water has no colour, it is .....
3. Water is in the ..... form when it comes out of the tap.
4. The place where a river starts is known as the .....
5. Rivers bring back water to the ..... to complete the water cycle. This is known as the water cycle. This process repeats itself over and over again.



#### Role Play on water cycle

A group of students will stage a play and behave as water, as it moves from the sea to the air, to clouds, to falling rain, to rivers and back to the sea. They will have to express orally at the same time, where they have reached in their journey and make appropriate body gestures all the way to imitate water in motion.

**The teacher will summarise the process finally.**

## Drought



Fig 8



### ACTIVITY 4: Understanding what is drought

#### Instructions

1. Observe figure 8 and explain what is it and what has caused this to happen.

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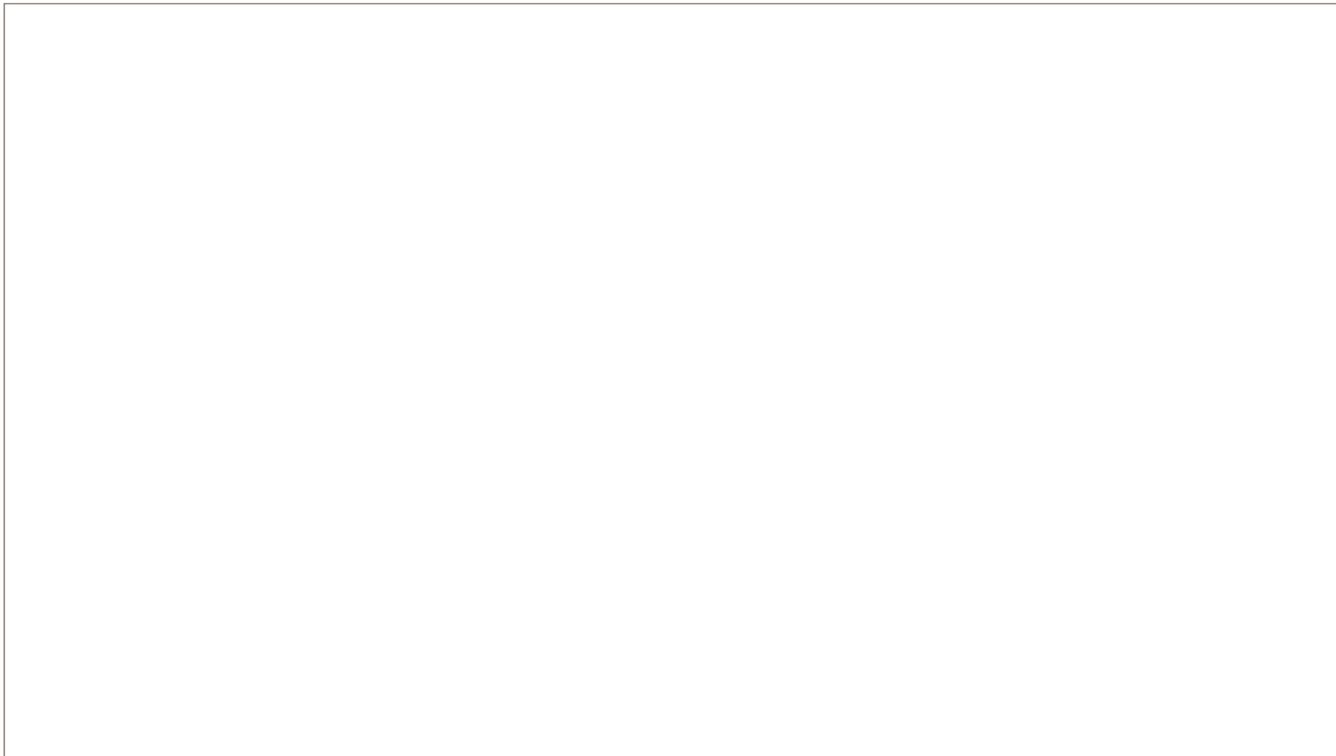
2. Discuss in groups about what happens when there is too little or no rainfall for a long time. Note your responses in the space given below or draw to show your response.

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**Observation**

When it does not rain for a long period of time, the amount of water in our reservoirs becomes less.

There is frequent water cut in our water supply. The soil becomes dry and animals are affected. This condition is known as drought.



**ACTIVITY 5:** *Discussing the effects of drought*

A drought is a long period of time when a region does not receive enough rainfall. This has impacts on the plants, animals and agriculture.

Look at the figure 9 (i, ii, iii, iv and v) below, discuss in groups and write down how humans are affected from conditions of drought.



Fig 9 (i)



Fig 9 (ii)



Fig 9 (iii)



Fig 9 (iv)



### ACTIVITY 6: Discussing factors affecting the water cycle and the consequences

#### Instructions

Look at the figure 10 below which shows a region which is affected by drought. Answer the following questions.



Fig 10

1. Is there enough water in this area shown?

.....

2. How are the trees or any other vegetation present there?

.....

.....

3. What will happen to plants and animals in these regions?

.....

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4. Can human beings survive in such conditions? Explain your answer.

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**Conclusion**

Droughts cause:

1. Reduced crop growth
2. Reduced harvest
3. Destruction of habitats of land and aquatic animals



**ACTIVITY 7: Read and understand – importance of rain**

Rain is very important for plants, animals and man.

It provides us with fresh water.

It fills our reservoirs and lakes.

Rain water washes all dust present on leaves and plants.

Rainwater causes all dust in air to settle down on the ground.

**Discuss in groups to find out other consequences of lack of water for a long time.**

.....

.....

.....

.....

.....



### ACTIVITY 8: Making of a poster to show the consequences of droughts

#### Instructions

1. Form groups of 3 students
2. Discuss in groups about the consequences of drought on humans, animals, plants
3. On a sheet of Bristol paper make colourful drawings to illustrate the consequences of droughts. Appropriate pictures can also be obtained from cuttings of magazines and newspaper
4. Then there will be a class presentation by each group

The best poster is chosen by students and teacher.



### Rainwater Harvesting

#### Introduction

Rainwater harvesting is a common practice. It is the collection of rainwater that falls on flat and hard surfaces. This water is normally wasted but with the rain water collection system it is filtered and stored in a tank.



### ACTIVITY 9: Discussing about rainwater harvesting

Figure 11 illustrates how rain water can be collected from the roof of a house. Study it carefully and answer the questions which follow.



Fig 11

1. ....
- .....
2. ....
- .....
- .....
- .....

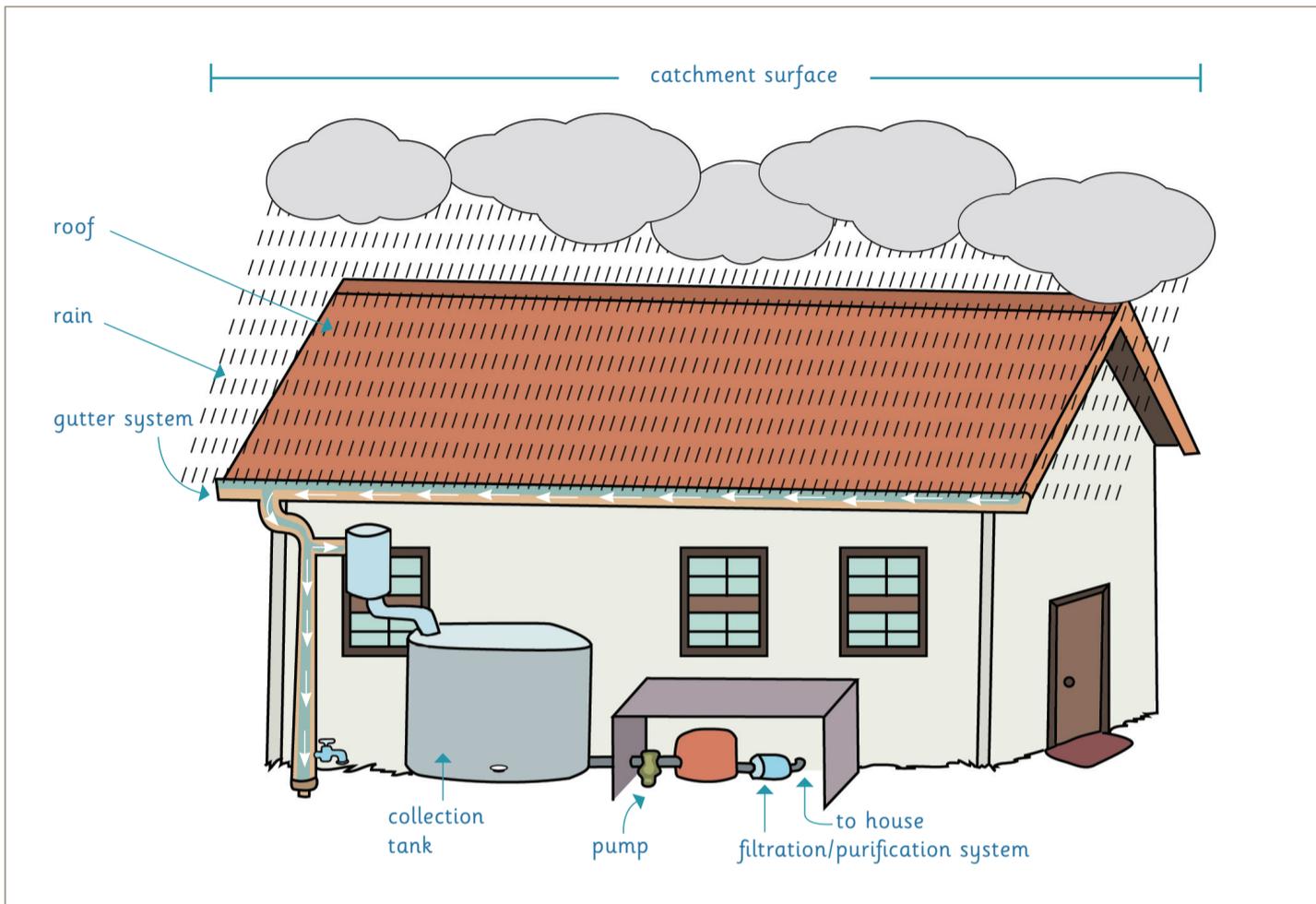


Fig 11 Typical components of a whole-house rainwater harvesting system.

1. Do we have to pay for the water that is being collected in the tank?

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.....

2. How can we use the collected water?

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3. Explain how this practice reduces the cost of water consumption.

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**ACTIVITY 10:** *Read and understand – benefits of rain water harvesting*

We use a lot of water for our domestic purposes.

Discuss the various ways in which we use water and list them.

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Students are then required to express their answers orally in full sentences; this will reinforce oral linguistic skills.

**Now let us look at the benefits of rainwater harvesting.**

- A household can reduce its cost of water consumption by installing a rainwater harvester.
- Rain water collected can be used for various purposes such as washing pavers, watering plants, flushing, even washing doormats.
- This system is simple to install as it uses the existing gutters and pipes.
- It requires less maintenance works.



**Instru**

1.

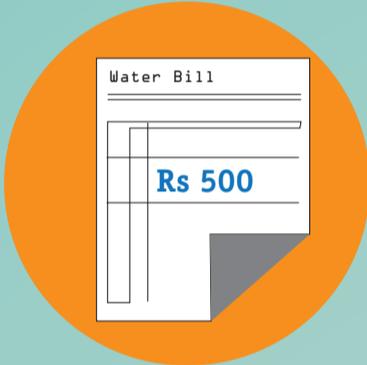


## ACTIVITY 11: Discussing benefits of rainwater harvesting

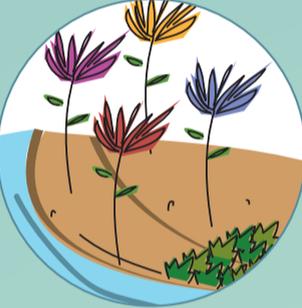
### Instructions

- Figure 12 illustrates some benefits of rainwater harvesting. Observe it carefully in groups.

Benefits of Rainwater Harvesting



**Save money on Water Bills by using your own water sources**



**Watering Gardens**



**No wasting money on water tankers**



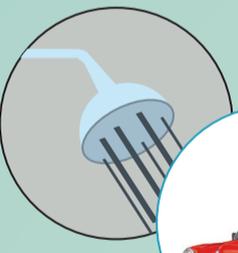
**No water shortage due to water cuts**



**24 hour water supply, no need to depend on water timings**



**Recover installation cost within 2-3 years due to savings in water bills**



**Bathing**



**Cleaning cars**



**Flushing**



**Saving up to 200 litres of water per family per day**

Fig 12

2. Discuss in groups and then list the benefits of rainwater harvesting.

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**ACTIVITY 12:** Understanding different means of rainwater collection.

Look at figure 13 (i, ii and iii) and write down briefly how rainwater is harvested and how it is being used.

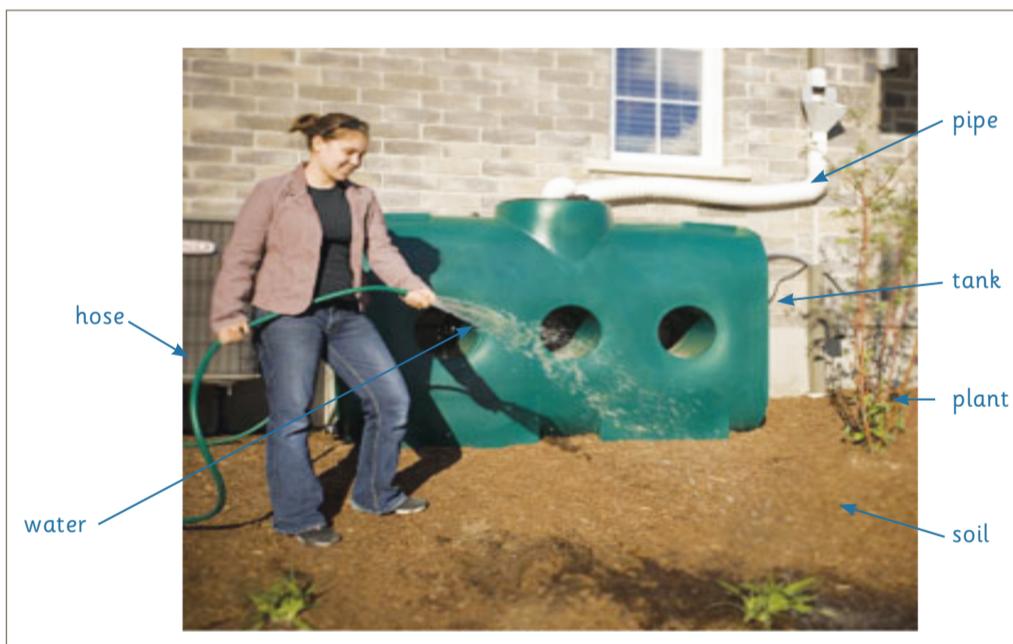


Fig 13(i)

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Fig 13(ii)

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Fig 13(ii)

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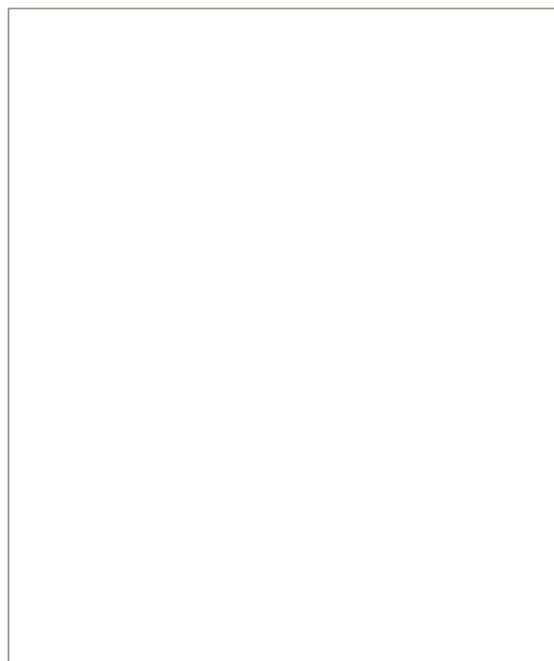
### ACTIVITY 13: Identifying uses of rainwater



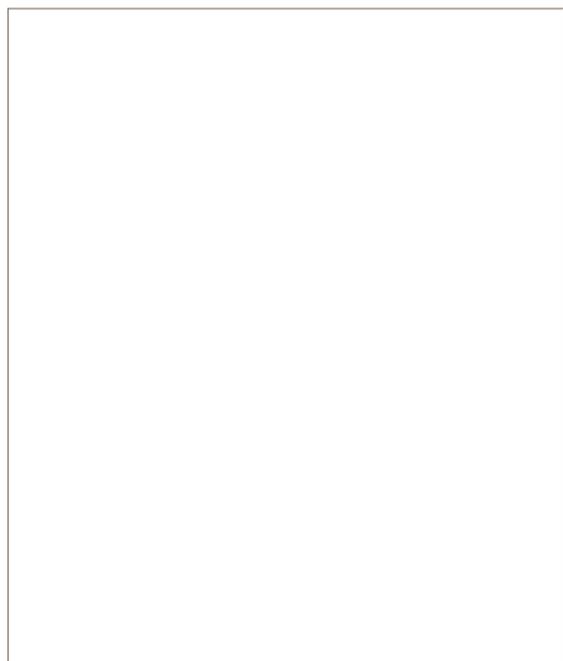
Figure 14 below shows harvested rainwater being used. Illustrate some other ways.



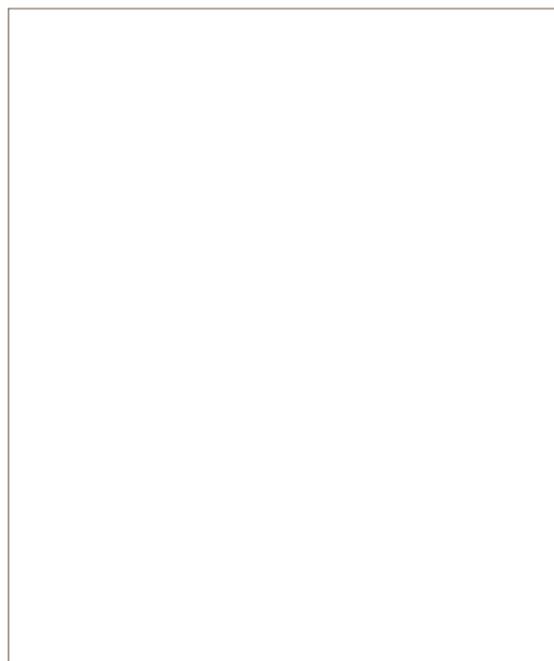
1) Fig. 14: Toilet cistern



2) .....



3) .....



4) .....

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Fig 15



## PROJECT WORK: making of a rainwater harvester

### Materials required

- Plastic sheet (1m<sup>2</sup>)
- String
- Plastic bottle to be used as funnel
- 4 wooden poles
- Plastic container (water collector)

### Instructions

- Put yourselves in groups of 3
- Search for information on the Internet, encyclopaedia or any other sources about rainwater harvesters
- Make a summary of your findings
- You will then study figure 15 below to guide you
- With the help of the teacher make a simple rainwater harvester using easily available materials
- Test your model by spraying water on it; record all your findings in a note book in terms of drawing and text
- Present your findings to the class(using PowerPoint if possible)

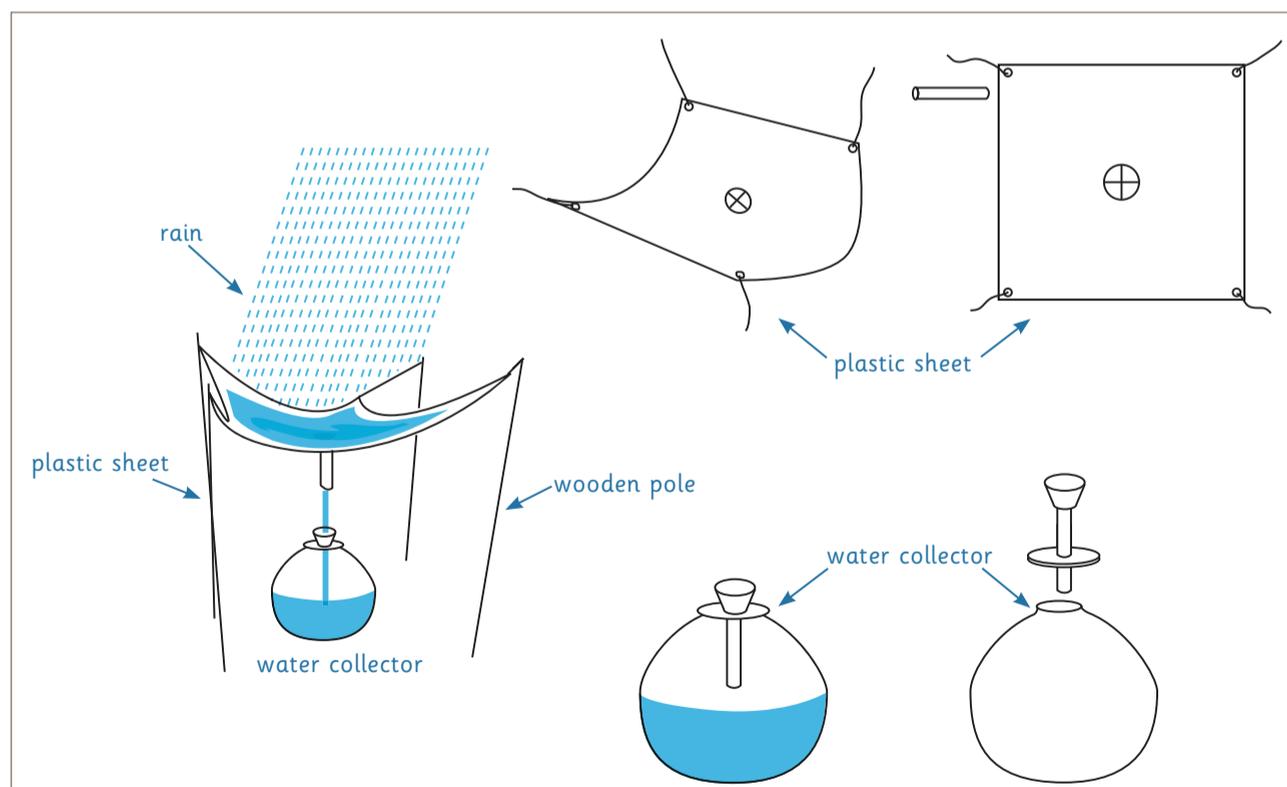


Fig 15



### ROLE PLAY: hot seating

After the discussions on drought and its consequences, and after learning about rain water harvesting, few students will be chosen to stage a play on this theme.

One person will take the role of a person who has just come from a village or city where there is severe drought. He will be on the hot seat and other students will be asking him questions on what happened, what did he see, how did he help people there, how people were affected, how much damage has taken place and about the status of plants, animals, humans, crops, rivers, lakes and so on.

**Teacher will then summarise the discussions.**

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## Floods



### Introduction

Usually when there is too much rain for a long time or a sudden torrential rain fall, the level of water on land tends to rise. This overflow of water covers part of land that is normally not covered by water. This is called flood.



### ACTIVITY 14: Discussing about floods and their effects – TV reporting

#### Instructions

Figure 16 (i, ii, iii, iv and v) shows the consequences of floods. Observe them carefully, discuss in groups and then express in few words what you see (orally and then in written); then one or two students will report these issues orally, as a TV reporter would do.



Fig 16(i)

.....

.....



Fig 16(i)

.....

.....



Fig 16(ii)

.....

.....



Fig 16(iv)



Fig 16(v)



**ACTIVITY 15:** *Discussing problems related to water*

Discuss in groups about problems related to water and think about whether water can be a cause of problems.

As well as being an essential liquid for life, water can also be the cause of certain problems.

Discuss and then list or illustrate some problems caused by water in the spaces below.

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Now imagine what will happen if rain falls continuously for a few days



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3 .....

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List the dangers and harm that may occur to animals, plants and even humans

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**Read and understand - water as a carrier of diseases**

Water is the medium through which certain diseases may be spread.  
Some of these diseases are dysentery, cholera, gastroenteritis and typhoid fever.

**Follow up exercise**

Discuss in groups and give examples of few consequences of floods that occurred in Mauritius in the past.

1 .....

.....

2 .....

.....

3 .....

.....

## Follow up exercise

1 Match items in column A with that of column B

A
Rainwater collection
Drought
Flood
Consequences of drought
Consequences of flood

B
Overflow of water which submerges land
Poor harvest of crop due to lack of water
Food spoilage
Long period of time without rainfall
A simple way to collect water

### Conclusion

When rain does not fall for a very long period of time, it provokes dryness everywhere. Plants and animals die due to lack of water. This phenomenon is known as drought. However, when heavy rain falls for a long time, there is an overflow of lakes and rivers, water rushes everywhere and this is known as flood. Both drought and flood are related to water and are very dangerous. They cause devastating harms to our country.

## SUMMARY

In this unit you have studied about:

- Air
- Formation of wind
- Water cycle
- Rain water harvesting
- Flood
- Drought

Use of ICT in the teaching and learning of science / Understanding Nature



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This is a list of websites where specific notes, animations and images can be obtained by students, as well as teachers, for better teaching and learning of the topics in Understanding Nature.

Foll

A

**Unit 1: Air**

[http://wiki.answers.com/Q/What\\_are\\_the\\_4\\_properties\\_of\\_air](http://wiki.answers.com/Q/What_are_the_4_properties_of_air)

1.

<http://sciencenetlinks.com/lessons/properties-of-air/>

A

<http://kids.britannica.com/comptons/article-195768/air>

B

[http://answers.askkids.com/Fun\\_Science/what\\_are\\_the\\_three\\_properties\\_of\\_air](http://answers.askkids.com/Fun_Science/what_are_the_three_properties_of_air)

C

<http://www.kidsbuilder.com/FunFactsForKids/air.html>

D

<http://eo.ucar.edu/kids/sky/air1.htm>

2.

**Unit 2: Water**

A

<http://ga.water.usgs.gov/edu/>

B

<http://www.sciencekids.co.nz/sciencefacts/water.html>

C

<http://encyclopedia.kids.net.au/page/wa/Water>

D

[www.kidzone.ws/water/](http://www.kidzone.ws/water/)

<http://www.kidcyber.com.au/topics/floods.htm>

3.

<http://library.thinkquest.org/10136/drought/droutq.htm>

A

[www.en.wikipedia.org/wiki/Water\\_cycle](http://www.en.wikipedia.org/wiki/Water_cycle)

B

[www.rainwaterharvesting.org/](http://www.rainwaterharvesting.org/)

C

[www.environment.nationalgeographic.com/environment/.../floods-profile/](http://www.environment.nationalgeographic.com/environment/.../floods-profile/)

D

<http://water.epa.gov/learn/kids/waterkids/kids.cfm>

4.

**Apart from the above websites, the following ICT related sources can be consulted:-**

A

- Encarta Encyclopedia, including Encarta Kids

B

- Wikipedia.org

C

- Google\_images.com

D

- Movies from MCA on specific topics like “Air” and “Water”

- Youtube.com

5.

- Phet.colorado.edu

A

B

C

D

## Follow up exercises based on Units 1 and 2

**A Multiple Choice questions****Encircle the correct answer****1. When rain does not fall for a long time there is**

- A flood
- B drought
- C tsunami
- D earthquake

**2. Which one can be a cause of flood?**

- A Torrential rain
- B Sunshine
- C Wind
- D Warm temperatures

**3. One advantage of rainwater harvesting is**

- A the cost of setting up the equipment is very high
- B the water obtained is free
- C the water is muddy
- D the water cannot be used for drinking

**4. The process of melting happens when**

- A ice changes to water
- B water changes to water vapour
- C water changes to ice
- D water vapour changes to water

**5. Condensation takes place when**

- A water vapour touches a hot surface
- B water touches a cold surface
- C water vapour touches a cold surface
- D water reaches a hot surface

**B True – false questions**

State whether each of the following statements is true or false.

1. Water can be a carrier of diseases. \_\_\_\_\_
2. Drought can cause death of animals and plants due to lack of water.  
\_\_\_\_\_
3. Rainwater harvesting does not help to reduce the cost of water bills.  
\_\_\_\_\_
4. Freezing is when water changes to water vapour. \_\_\_\_\_
5. The habitats of plants and animals are not destroyed during floods.  
\_\_\_\_\_

**C Fill in the blank questions**

Fill in the blanks with the correct words given

**sun    rainwater harvesting    crops    food    furniture    water droplets**

1. On the surface of a glass containing ice, \_\_\_\_\_ is seen.
2. The heat energy which changes water to water vapour in the environment comes from the \_\_\_\_\_.
3. The collection of rainwater on a hard flat surface is known as \_\_\_\_\_.
4. One use of collected rainwater is to water \_\_\_\_\_.
5. One disadvantage of flood is that \_\_\_\_\_ and \_\_\_\_\_ of people are damaged.

**D**

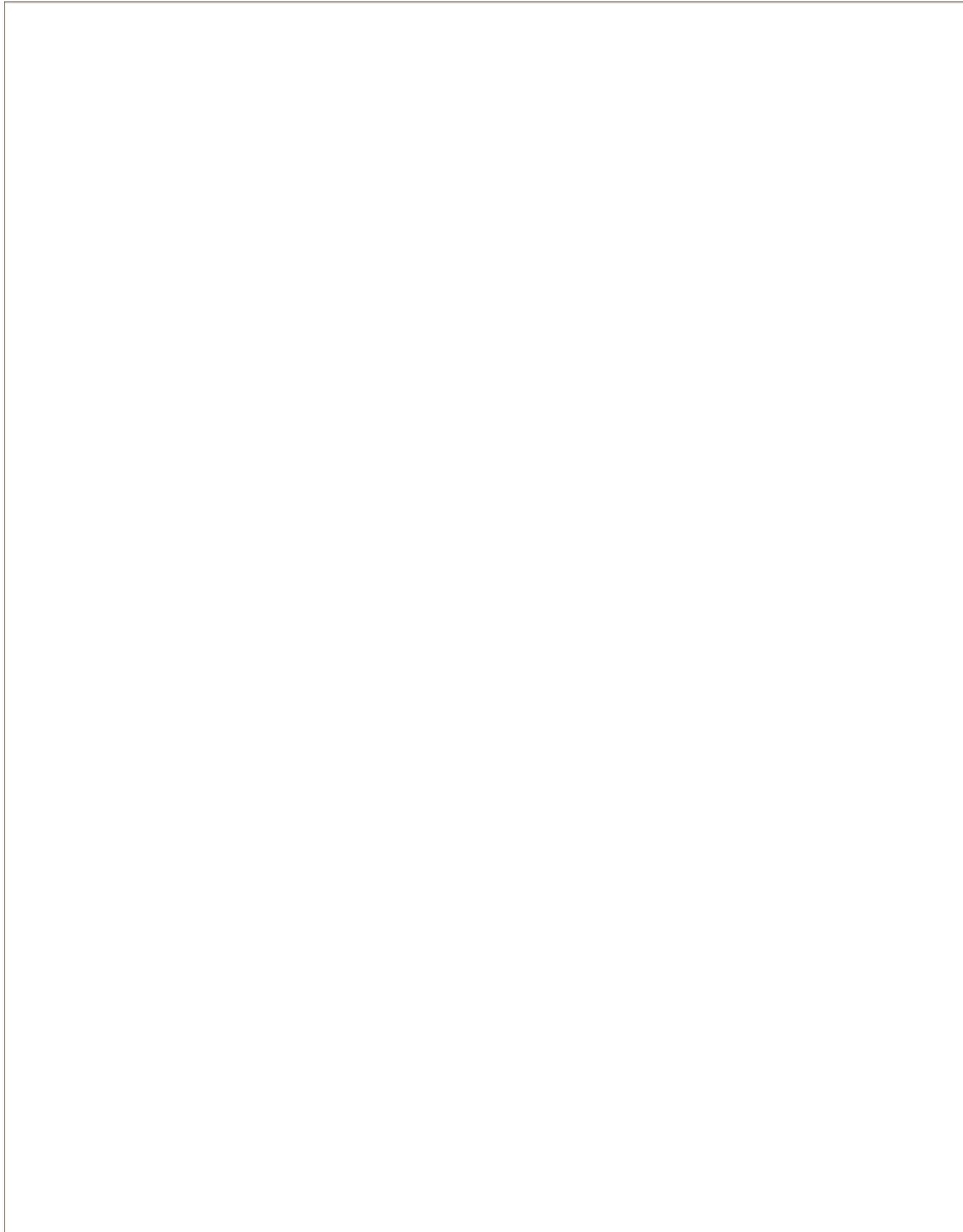
**Draw**

**1.**

**D Illustrating ideas**

**Draw diagrams to illustrate the following**

- 1. A village affected by drought**



are

2. A town affected by flood

3.



3. A rainwater harvester and few uses of the water



**4. The school compound affected by strong winds**



