

Science Around US

Book 1



Easy Path Series



A GOG/EFA-FTI Project

Acknowledgements

The Ministry of Education wishes to acknowledge the work done by the following persons who were involved in the production of the first edition:

Rookmin Bisnauth

Jennifer Cumberbatch

Elizabeth Mangar

Dwarka Shivraj

Pamala Wong

Bibi Young

Maylene Duncan

Nadia Lockhart

The work of the following persons who were involved in the production of the second edition is also acknowledged

Sybil Blackman

Melcita Bovell

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission of the copyright owner.

Published by the Ministry of Education Georgetown, Guyana

Printed by VonHoffmann Corporation

Revised 2004

Revised 2013

SCIENCE AROUND US

BOOK 1

WRITING TEAM:

Rookmin Bisnauth

Jennifer Cumberbatch

Elizabeth Mangar

Dwarka Shivraj

Pamela Wong

Bibi Young

SUBJECT SPECIALIST: Jennifer Cumberbatch

ILLUSTRATOR: Maylene Duncan

GRAPHICS PLACED BY: Nadia Lockhart

DESIGN BY: Nadia Lockhart

COVER DESIGN BY: Maylene Duncan

NOT FOR SALE

PRINTED FOR THE MINISTRY OF EDUCATION

GOVERNMENT OF GUYANA

A COG/EFA-FTI Project

Easy Path Series

FOREWORD

One welcomes the publication of this series of textbooks as part of the Primary Education Improvement Project funded by the Inter-American Development Bank and the Government of Guyana.

This series of texts has been long in planning, writing and producing. In the process however, many Guyanese have developed skills in textbook writing and publication. This will serve Education well in the future.

We congratulate all those responsible for the production of these texts. They have done a good job. Guyanese children at the Primary level, and, indeed, the society as a whole, will be the beneficiaries of their labour.

Thanks to the Inter-American Development Bank for its financial support. Primary Education in Guyana will benefit considerably with the availability of relevant reading material.

Hon. Priya Manickchand
Minister of Education

NOT FOR SALE

TABLE OF CONTENTS

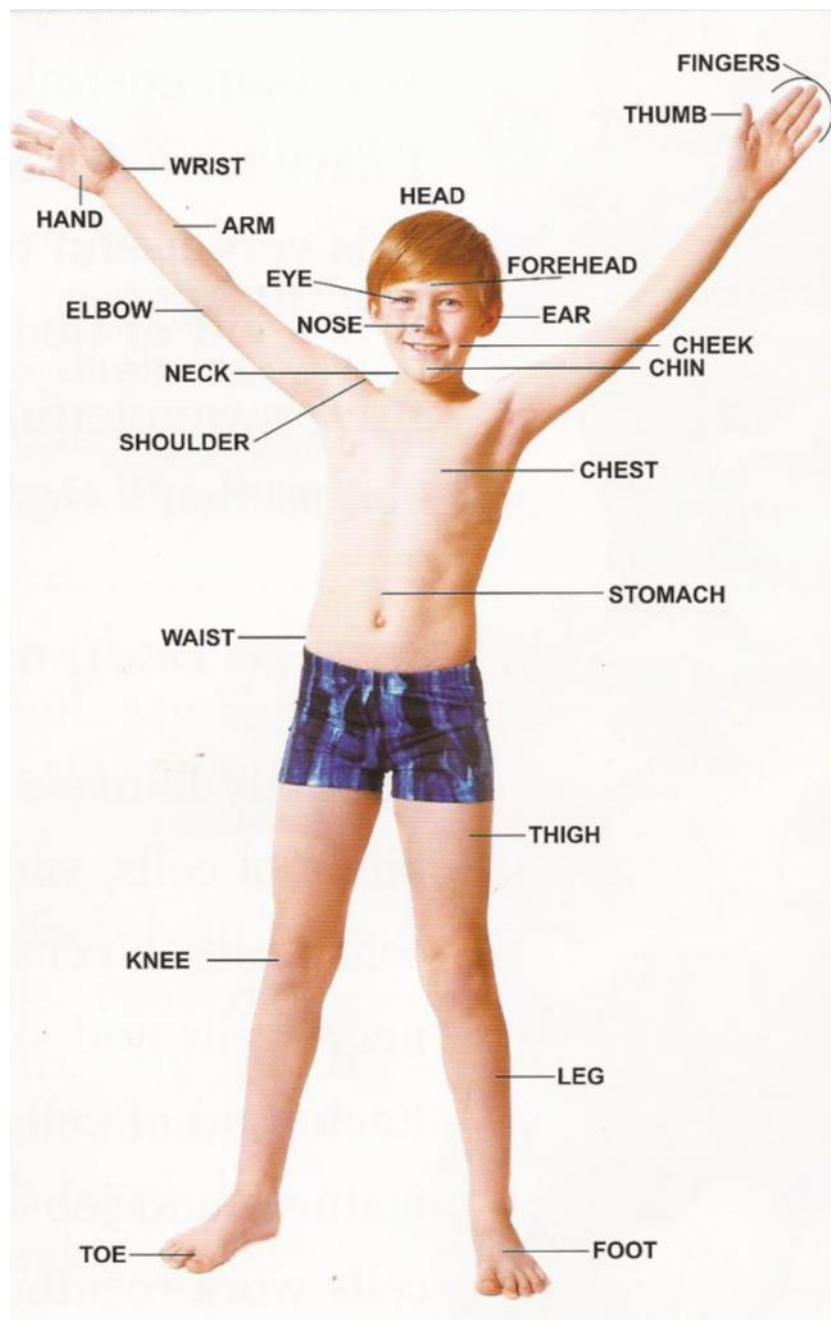
Chapter 1 Human Body	1
Body parts are useful	3
Caring for our body	9
Chapter 2 Looking at Animals	11
Common animals in the environment.....	12
Animals have many body parts too!	15
Caring for our animals.....	18
Chapter 3 Plants we know	20
From seed to plant.....	22
Keeping plants alive	24
Plant Parts.....	26
Plants are useful.....	27
Chapter 4 Weather	29
Chapter 5 Sources and uses of water.....	32
Using water wisely	34
Term One Review.....	35
Chapter 6 The Environment.....	39
Life Processes.....	41

Chapter 7 Materials	44
Colours we know.....	49
Some shapes we know.....	51
Term 2 Review	52
Chapter 8 Earth and Space.....	54
Chapter 9 Energy	55
Chapter 10 Force.....	59
All about forces	60
Term Three Review	63

CHAPTER 1 HUMAN BODY

Our body is made up of many parts. Some parts are found outside of our body. These parts are called external body parts. Not all body parts are found on the outside. Some are found on the inside of our bodies as well. Body parts that are found on the inside of our bodies are called internal body parts.

Let's learn the names of our **EXTERNAL** body parts. Take a look at the diagram on the next page to help you name the parts. Can you name these parts?

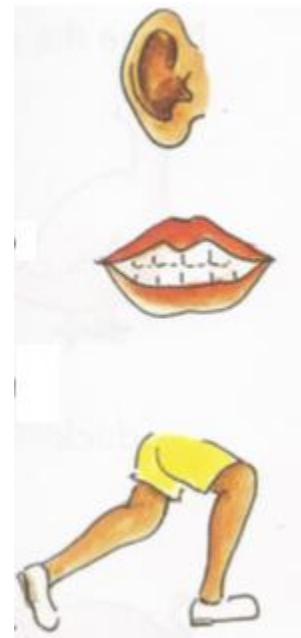


BODY PARTS ARE USEFUL

Let us read this poem to find out the uses of some of our body parts.



Eyes to see all things around,
Ears to hear the smallest sound,
Nose to smell and tongue to taste,
Sweets from shops on our streets.



Our Nose

We smell with our nose. Talk about the smell of these things.



Fish



soap



food



curry Powder



perfume



banana

Pleasant and unpleasant smells

We like pleasant smells.

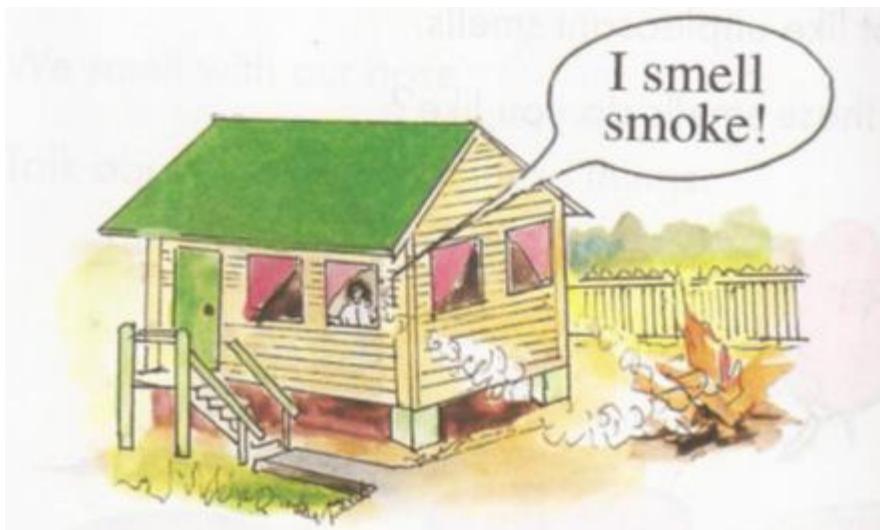
We do not like unpleasant smells.

Which of the smells above did you like? Place a tick [✓] next to your choice.

	Fish	soap	rotting garbage	perfume
pleasant				
unpleasant				

Moving smells

How do smells move?



Moving smells can warn us.

Tasting things around us

There are many tastes.



We taste with our tongues.

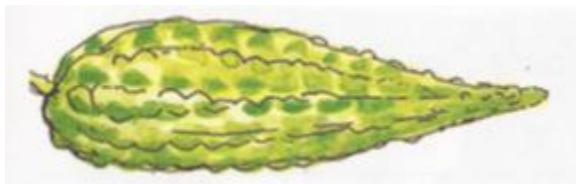
Some foods taste sweet.

An illustration of a wrapped candy bar with yellow and red horizontal stripes.	An illustration of a triangular slice of cake with a yellow base and a red top layer.
Sweet	cake

Some foods taste sour

An illustration of a long, orange-brown tamarind pod with a textured surface and a small stem at one end.	An illustration of a single, bright green mango fruit.
tamarind	green mango

Some foods taste bitter



Corilla

Some foods taste salty

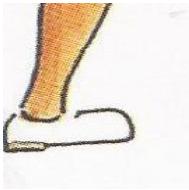


Cheese

Activity

What can the parts of my body do? Look! I can do these.

Complete the table:

Body Part	Name	Number
		
		
		
		
		
		

CARING FOR OUR BODY

We need to keep our body healthy. Some of the ways we can keep our body healthy are:



Exercising



Resting



Eating healthily

Activities

1. Make a scrapbook about the external body parts and their uses.
2. Complete the paragraph below by using the appropriate words from the box below.

mouth, many, eye, nose, eat, exercise, keep

Our body has _____ parts. Some of these external body parts are _____, _____ and _____. To keep our body healthy and strong we must _____ a balanced diet, _____ regularly and _____ our environment clean.

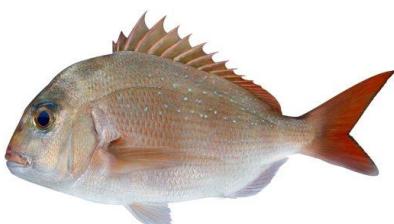
3. Complete the table below by placing the words given in the box under the correct headings.

sour, cold, salty, hot, sweet, bitter, soft, fresh, rough, loud

See	Taste	Hear	Smell	Touch

CHAPTER 2 LOOKING AT ANIMALS

Boys and girls do you know that we are not the only ones that live on planet earth! Many animals live on planet earth. Can you name the animals shown in the pictures below?



Snake, caterpillar, dog, duck, otter, cat, fish, bird, horse

COMMON ANIMALS IN THE ENVIRONMENT

Name the animals in the picture.



Name some other animals.

Animals live in different places. Some places where animals live are on land, in water, trees and in the soil. These places are called **habitats**.

Let us read the story below to find out more about animals and their habitats.



: You look very different from me! I have lovely brown hair.
What has happened to yours Mr. Eagle?



: I do not need brown hair! I have feathers. My home is the beautiful rainforest. I am very pleased to meet you. My friends – frog, snake and jaguar enjoy living in the rainforest. We live in different homes such as water, nests, trees and soil.



: Oh, you mean your habitat!



: What is a habitat?



: Habitat is another name for the place where you live.



: I have learnt something new. Thank you.

Here are some places where animals live.



Activity

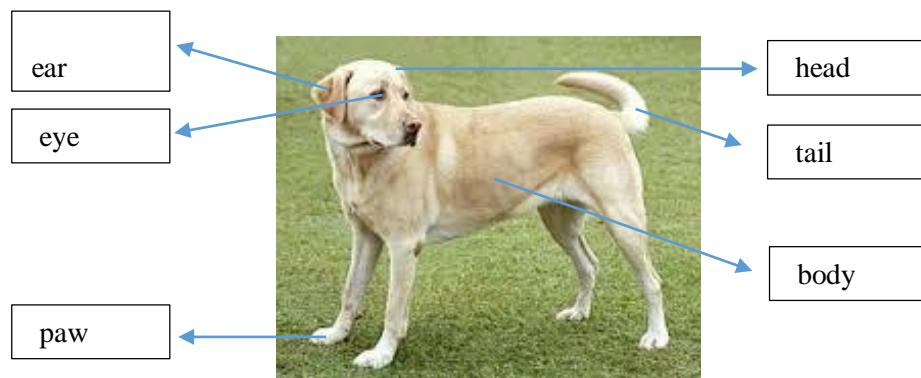
Write the name of each animal under the name of their correct habitat.

cat, dog, snapper, cow, snake, worm, alligator, trout, frog, parrot, caterpillar, hassar, bird, iguana, lizards, patwa

Land	Water	Tree	Soil	Swamp

ANIMALS HAVE MANY BODY PARTS TOO!

Look at the animal below. Can you name the body parts?





Take a look at the fish and bird above. Are they different?

Complete the table below by using a tick (✓)

Parts	Bird	Dog	Fish
Beak			
Feather			
Hair			
Tail			
Eyes			
Head			
Feet			

Animals use their body parts for different things. Can you tell what the following body parts are used for?



CARING FOR OUR ANIMALS

Animals need to be cared for too. Look at the pictures below. Can you tell which picture shows that the animal is cared for?



Some ways in which we can care for our animals are by feeding them, taking them to the vet, bathing them and keeping their surroundings clean.

Activity

1. Put an X on the animals that are uncommon to your environment.
2. Look at the habitat and illustrate the animal that lives in each.
3. Give two reasons why we should care for animals.



Bird



CHAPTER 3 PLANTS WE KNOW

Plants are all around us! They help to keep the air we breathe clean.

Plants provide us with the food we need. Plants help to make our surroundings beautiful. Can you name the plants below?



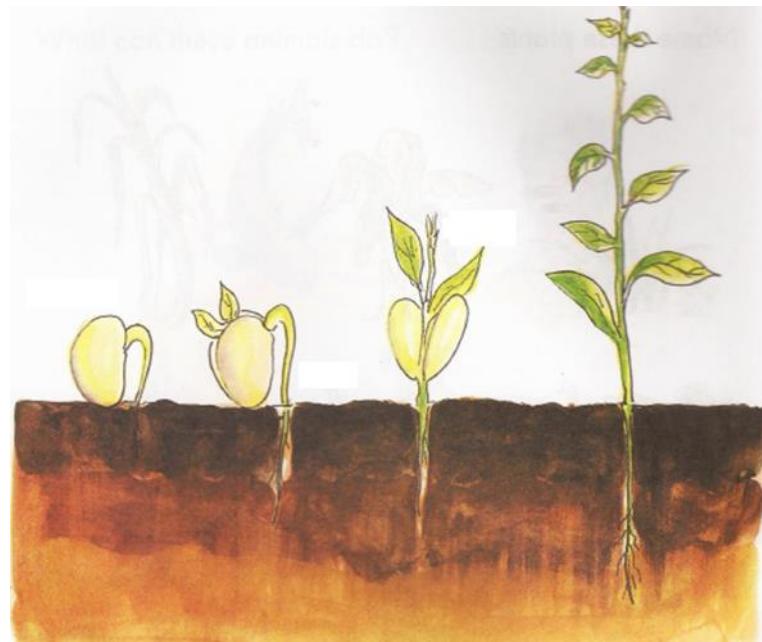
Do you know of other plants? Can you name two others?

Plants are everywhere. Some plants are found on land. Some plants are found in water. Some plants are found on things in the air.

		
land	water	air

FROM SEED TO PLANT

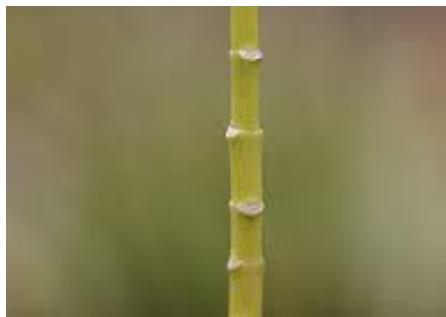
All plants grow. Children, do you know that seeds grow into plants?



Take a look at the picture above. Can you see that the seed has grown into a plant? This is called **germination**. When a seed **germinates** the root grows down and the green shoot grows up. Seeds need water, light and air to grow and stay alive.

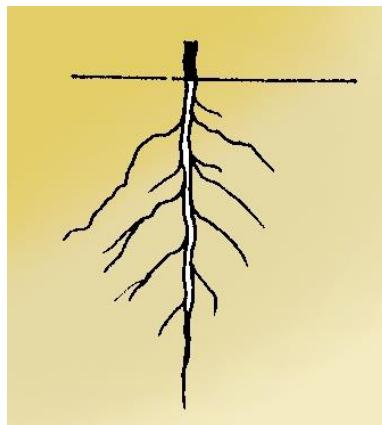
We can also get new plants from other parts of a plant.

Let us look at the parts of a plant that new plants can grow from.



Stem

Leaf

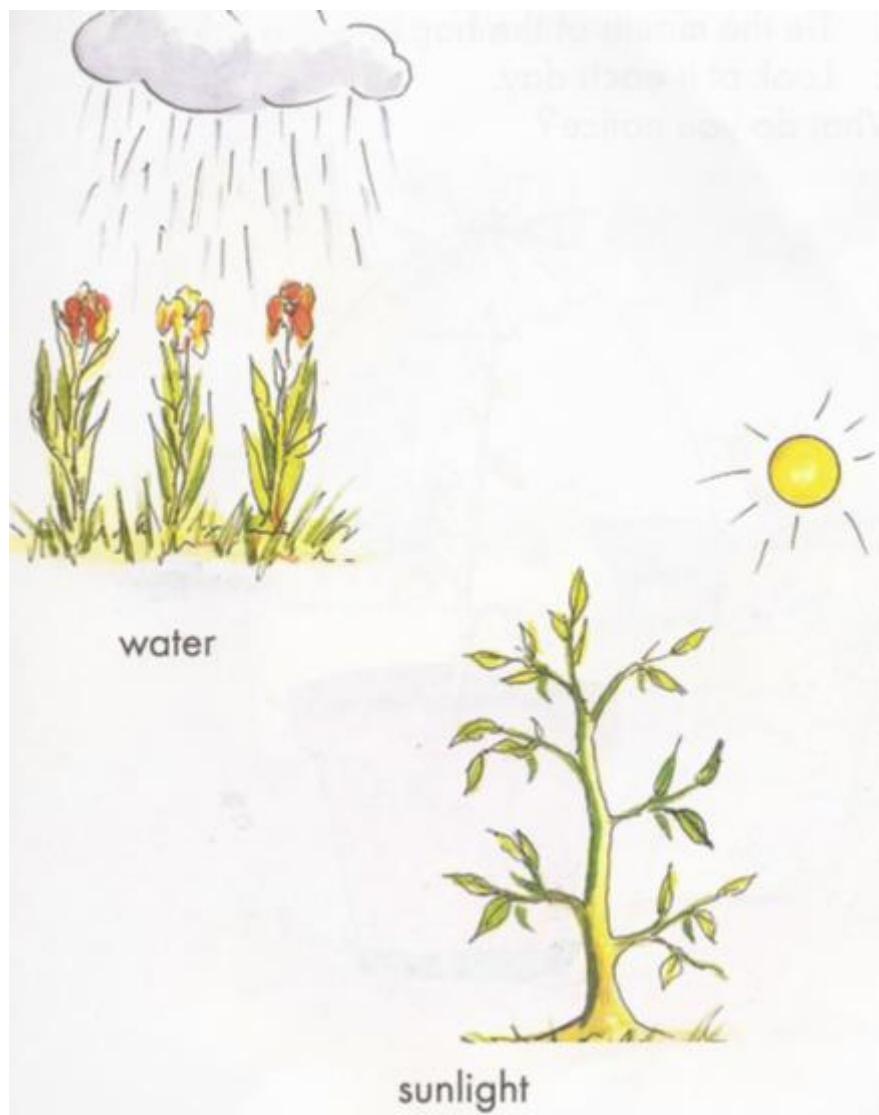


Root

Talk to a friend or neighbor. Find out the names of some plants that grow by leaf, stem or root.

KEEPING PLANTS ALIVE

What do plants need to remain alive?



Plants also need air.

Find out more about this.

1. Place a plant in a plastic bag.
2. Tie the mouth of the bag.

3. Look at it each day.

What do you notice?



PLANT PARTS



leaf

stem

root

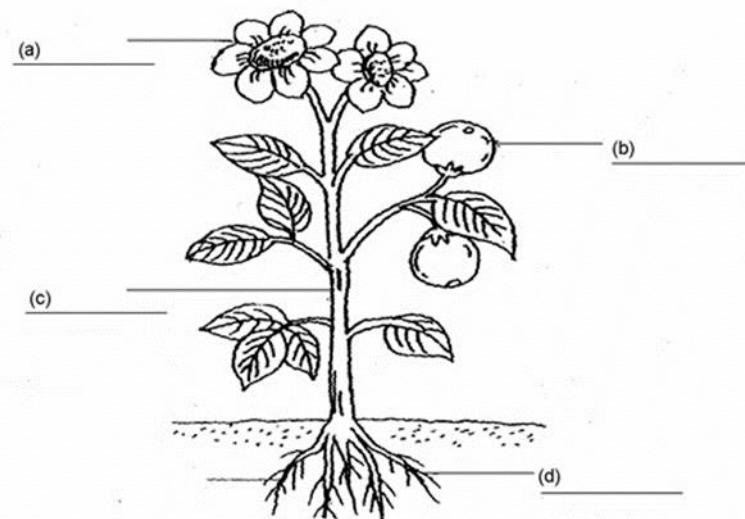
flower

fruit

Plants have different parts. Look at the diagram below. Name the parts.

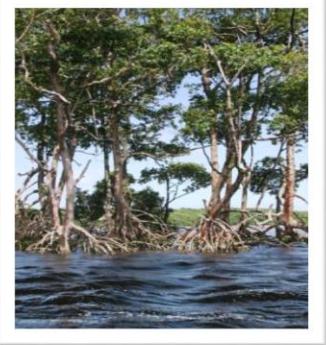
Activity

Now let us take a look at the diagram below. Label the plant parts.



PLANTS ARE USEFUL

Do you know that plants are important to us? Let us look at the plants below.

		
Mangrove	Greenheart	Pawpaw

Can you say how these plants are useful to us?

Mangroves
protect
Guyana's
coastline

The greenheart
tree provides us
with wood for
buildings.

Papaw is a fruit
that we eat.

Plants are used for food.

Plants are used for protection.

Some plants are used for decoration.

Some plants are used for medicine.

Plants are used to provide wood for buildings such as houses.

Activity

Rearrange these letters to form words that tell what plants are used for.

1. dofo _____
2. soueh _____
3. denimice _____
4. tadroecion _____

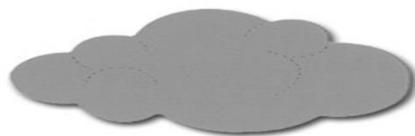
CHAPTER 4 WEATHER

In this chapter we will find out about weather. Study the pictures below. Can you identify the different types of weather?



sunny

rainy



windy

cloudy

Weather tells us about the different conditions of the air at the places where we live. These conditions last for a short time. The weather can be sunny, rainy, windy or cloudy.

Let's read the weather for each day.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						

Let's have some fun reading this poem.

WHAT'S THE COLOUR?

Skies are blue when there is sun

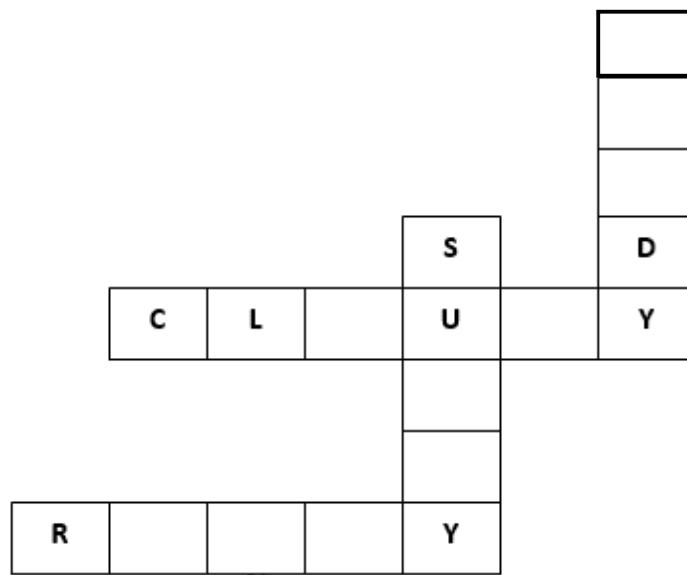
And grey when it rains

When it's cloudy I'm not so sure

But windy! I know much more.

Activity

Fill in the missing letters for the different weather conditions



CHAPTER 5 SOURCES AND USES OF WATER

Water is important for life.

We can get water from:



the tap

the rain



the lake

the river

We use water everyday. Some things we use water for are:



cooking

watering plants



washing dishes

bathing

Water song

Water, water everywhere, everywhere, everywhere,

Water, water everywhere, everywhere, everywhere,

Water here and there

Water is life, it keeps us alive

Water, water everywhere, everywhere, everywhere,

Water, water everywhere, everywhere, everywhere,

(sung to the tune of *Mary had a little lamb*)

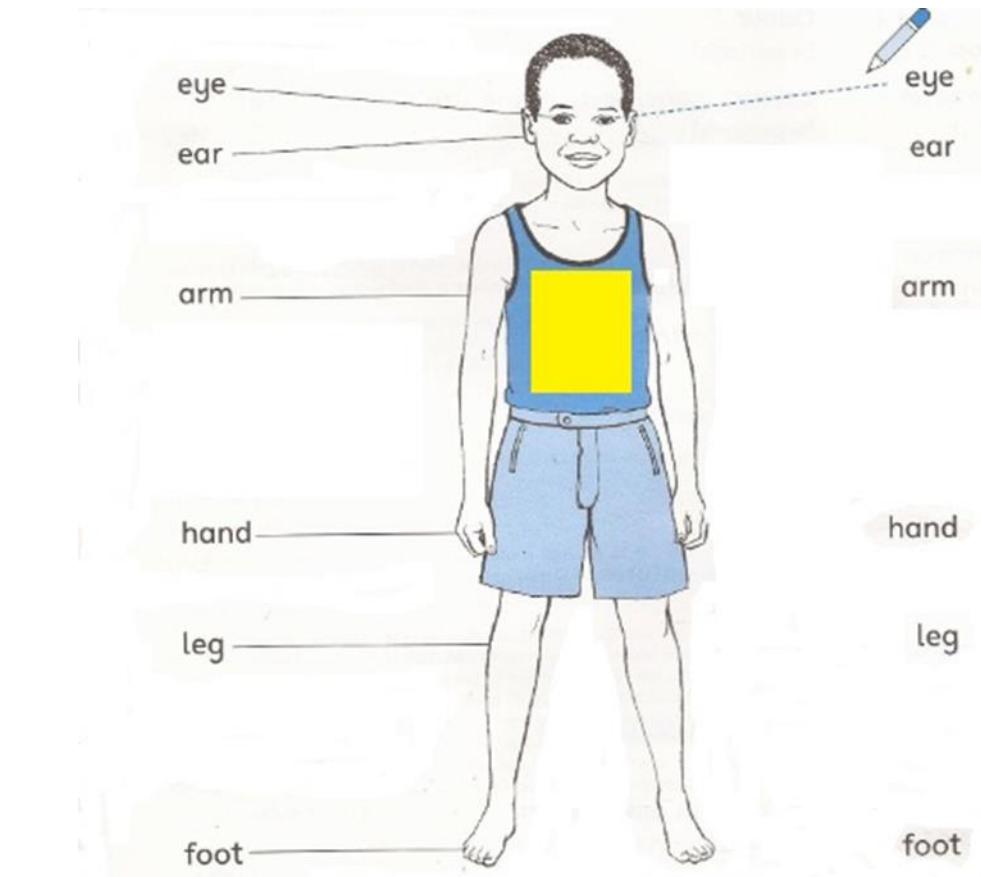
USING WATER WISELY

Only a small amount of the earth's water is available for drinking, washing, bathing, cleaning and cooking. We must therefore use water wisely. Look at the pictures shown in the chart. Can you identify ways in which we can save water?

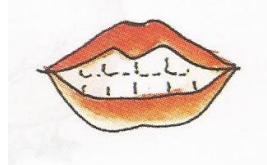
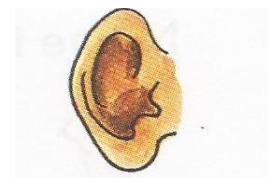
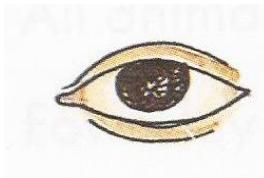
	Use a bucket when washing the car
	Turn off the tap after use
	Collect rain water

TERM ONE REVIEW

1. Draw a line to connect the body part to its name.



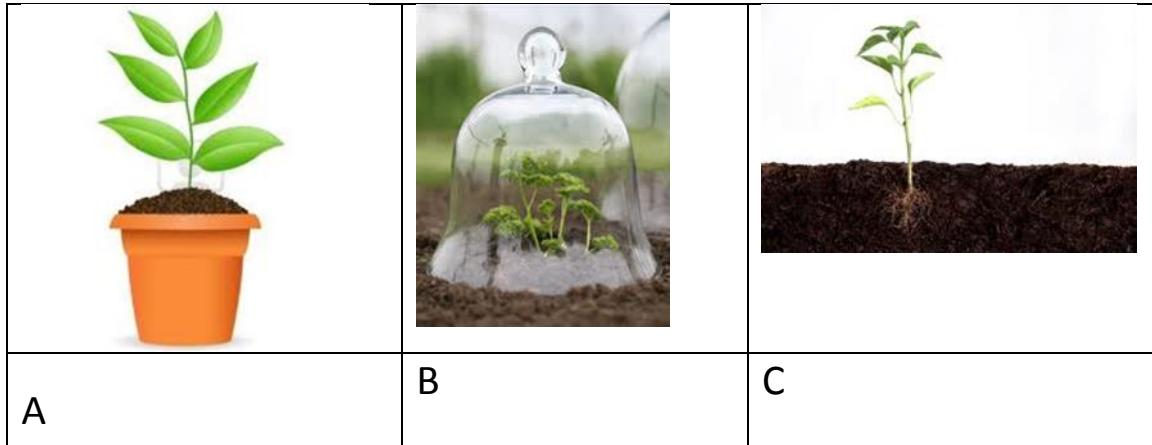
2. (a) Name the body parts.
(b) Say what they are used for.



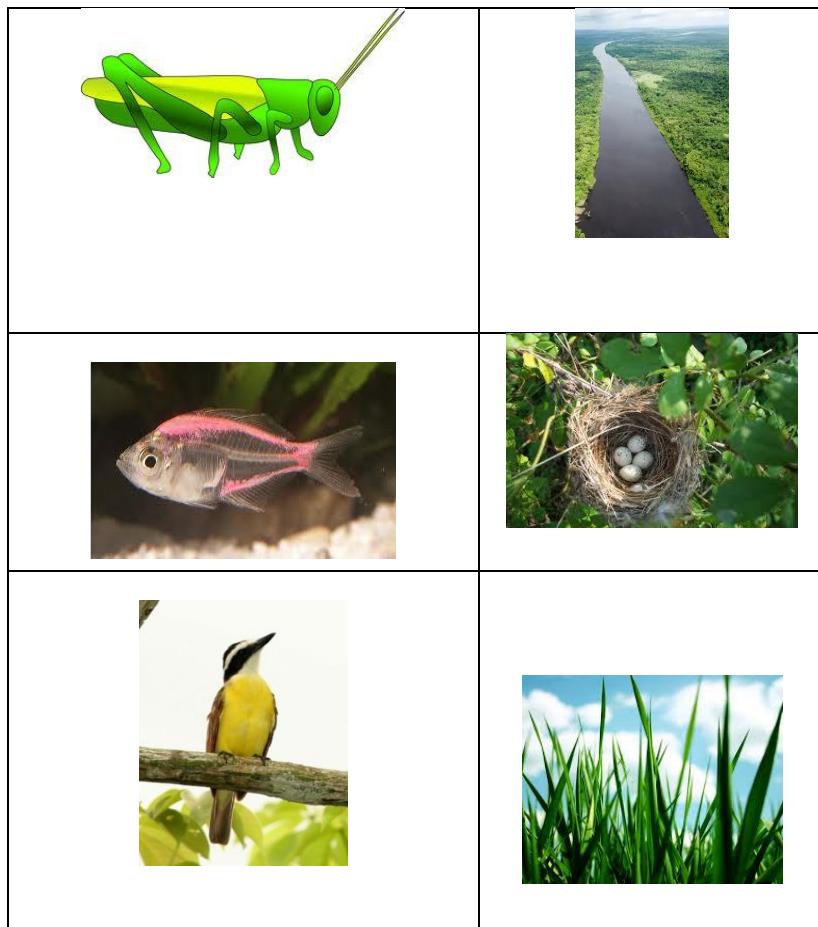
Match the body parts with their functions

Part of the body	Use
Mouth	hearing
Eye	eating, speaking
Fingers	seeing
Ear	holding

3. Which of the following plants will soon die?



4. Connect each animal to its home



5. Match the weather symbols with the weather conditions

Sunny	Windy	Rainy	Cloudy
			

CHAPTER 6 THE ENVIRONMENT

Our environment is the place in which we live. Study the pictures below.



Can you name some things found in each environment above?

Types of environment	Things found in the environment
Our home and surroundings	
Our school and surroundings	
Our community	
Water area around us	

We use the things found in our environment to help us to provide food we eat and work for us to survive. Different environments provide different types of food and work. Some plants and animals are also different in each environment.

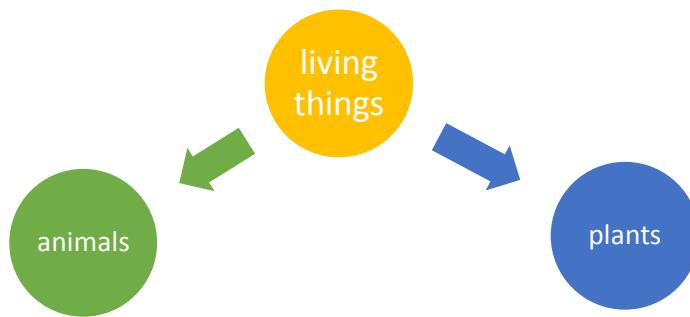
What are some foods found in your environment? What work do people do in your environment? Tell your teacher.

LIFE PROCESSES

Some things around us are alive. Name the living things in the pictures below.



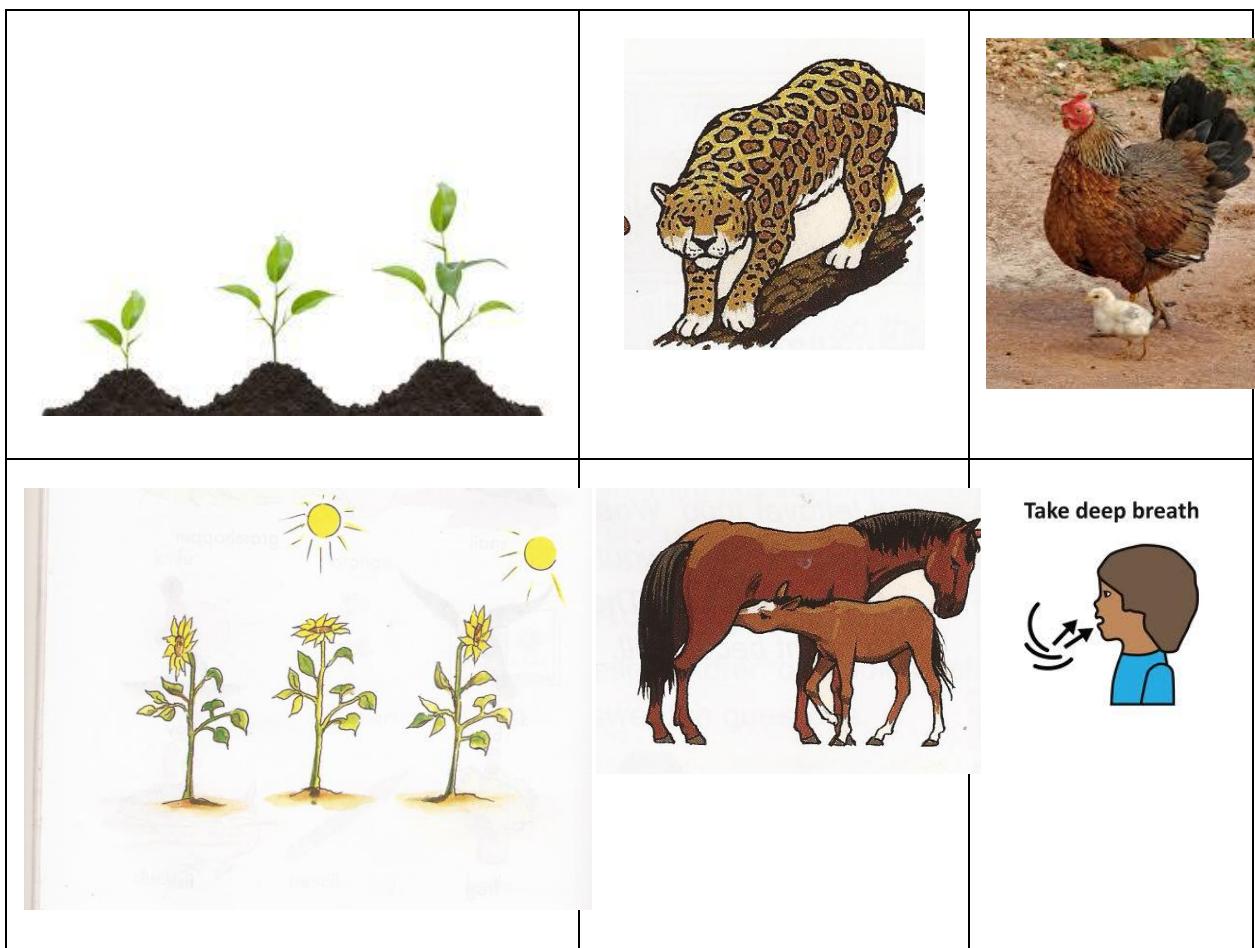
Living things are of two groups. These groups are plants and animals.



The in the picture is a living thing. It eats food, grows and moves.

All living things breathe in air and reproduce one of its own kind. Living things also give off waste.

Can you name the activity done by each living thing as shown in the pictures below?



Some living things are very small and cannot be seen with the eyes

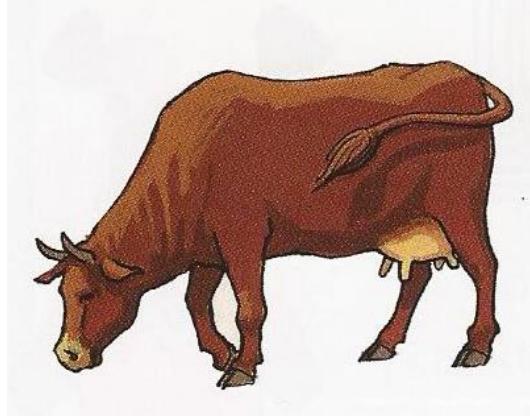
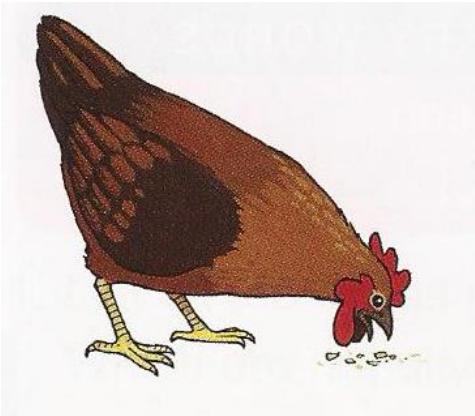
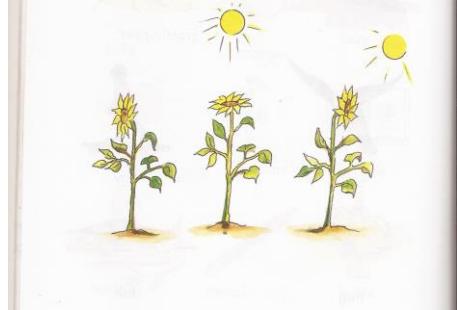
Activities

1. Can non-living things move?

Yes No

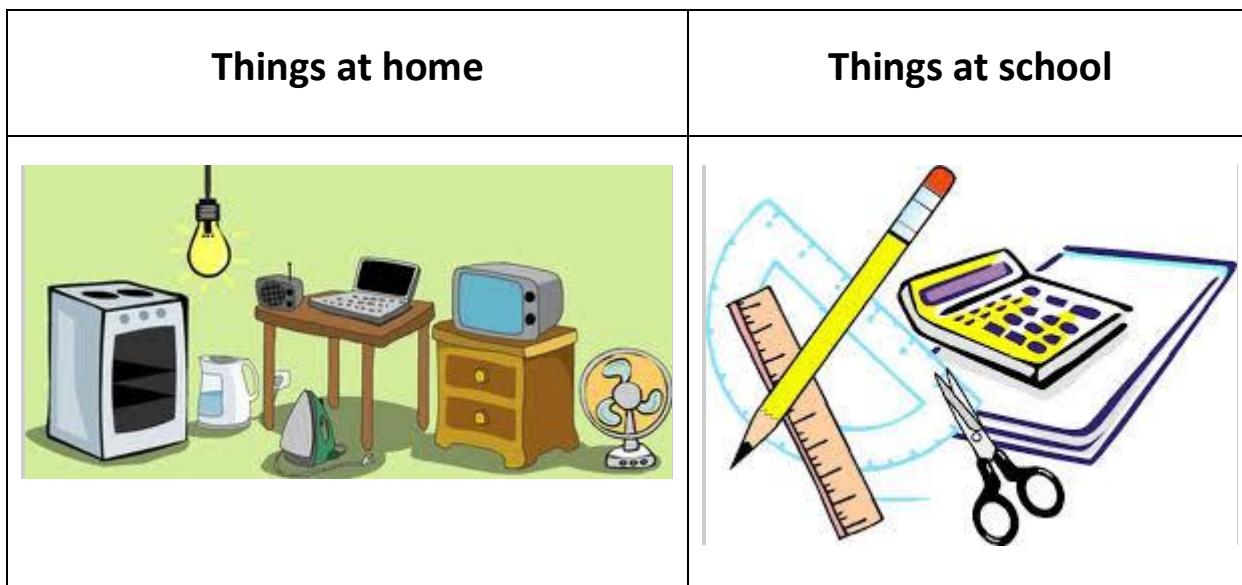
2. Match the words in the box below with what the pictures show.

feeding, moving, breathing



CHAPTER 7 MATERIALS

Things around us are made up of one or more types of materials. These materials are found in our environment. Different materials are found in different types of environments. For example, at home we have different things from the ones at school.



Can you name the things in the picture above?

Some common materials are:

Wood	Cloth	Plastic	Glass	Rubber	Metal
					

The picture below shows an environment. Do you remember that we learnt a lot about environment in chapter 5?

Now let us look at this picture.



Can you identify some common materials from this picture?

Boys and girls, where do you think these things in our environment come from?

Activities

Complete the table below by indicating the materials from which the items are made.

Items	Made from
Tins	
Chair	
Paper	
Cloth	
Sponge	
Wire	
Slippers	

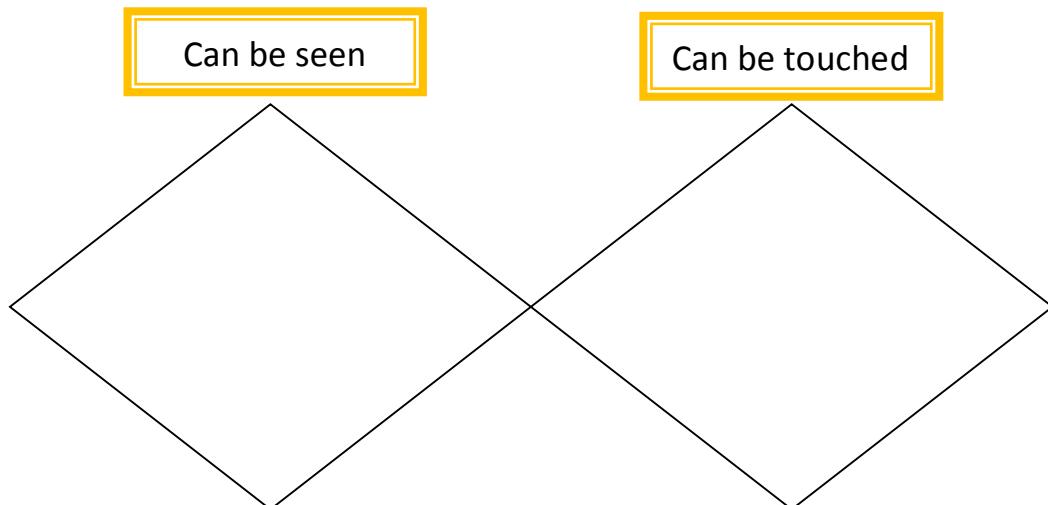
The materials in our environment are of two types:

- living and
- non-living.

Some of these materials were once alive.

Group the list of materials below into those that can be seen and those that can be touched.

colours, wood, plastic, cloth, light



Materials in our environment are used for many purposes. Would you like to tell a friend what are some of these uses?

Complete the table below.

Name of materials	Uses
Wood	Furniture, ornaments,
Plastic	Basins, bucket, bags,
Leather	
Metal	
Paper	
Cloth	
Sponge	

Here's a riddle for you to solve.

I come in different colours. People wear me on their bodies when it rains.
I am made of plastic. What am I?

COLOURS WE KNOW

Let's read this poem

Colours! Colours! Colours!

Colours everywhere

Umbrellas have many colours and so do shoes

Some are red, pink and even yellow too

While trees are green and the blue sky clean

Look around, colours could be seen.

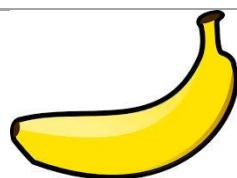
What colours does this poem talk about? Can you find these colours below?



a red rose



a blue car



a yellow banana

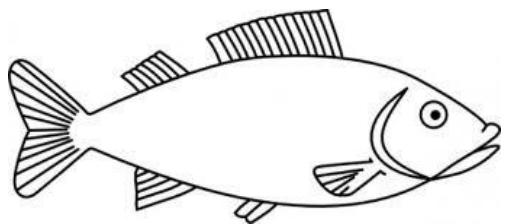
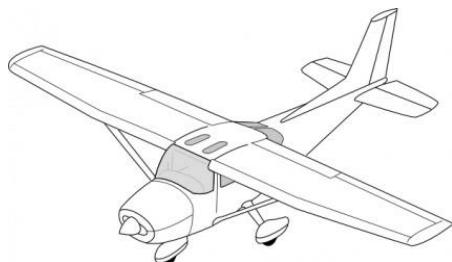
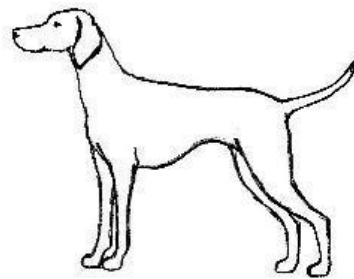
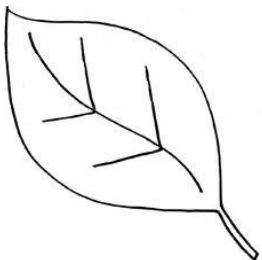
Some other colours



Name an object and its colour found near to you.

Activity

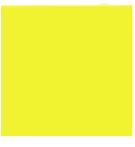
Draw these pictures and colour them.



SOME SHAPES WE KNOW

Things around us have different shapes.

Look at the shapes below. Let us name them.

					
Circle	Triangle	Rectangle	Square	Cone	Cylinder

Activities

1. Match these shapes with their names.

Shape



Name

cone

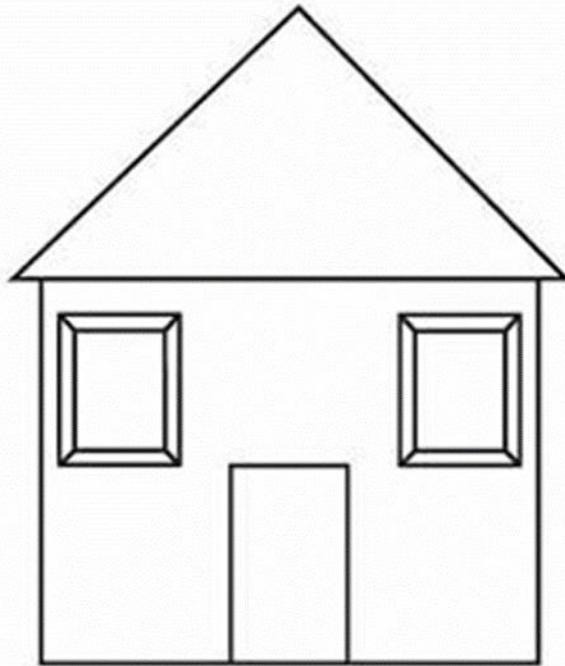


triangle



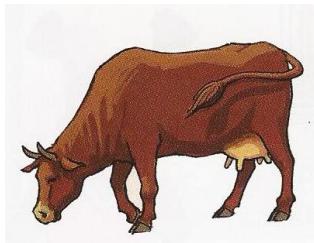
cylinder

2. Can you name the shapes in the picture below?



TERM 2 REVIEW

1. Draw two non-living things.
2. Look at pictures below.



- (a) Which cannot move from place to place by itself?
- (b) Which moves by flying?

3. Which of these moves but is a non-living thing?

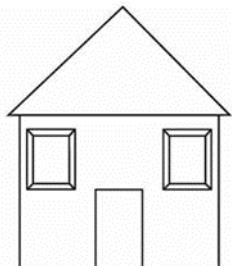


A

B

C

4. How many squares do you see in the diagram below?



5. Which of the following is made from metal?



A

B

C

CHAPTER 8 EARTH AND SPACE

Have you ever looked at the day or night sky carefully? Let us do so by looking at the two pictures below.



**Picture of the
day sky**



**Picture of the
night sky**

Day is followed by night. During the day the sky appears light blue. During the day the sun is seen. At night the sky appears dark blue. The moon and stars can be seen at night. Sometimes clouds can be seen during the day and at night.

Activities

1. Make your own drawing of the picture of the night and the day skies. Now compare these drawings.
2. Can you name some of the activities that occur during the day and at night?

CHAPTER 9 ENERGY

Things we can do



Some things that we do are eating, playing, dancing and sweeping. These actions cause us to use energy. Can you name other actions that we do?

Where do we get energy from?

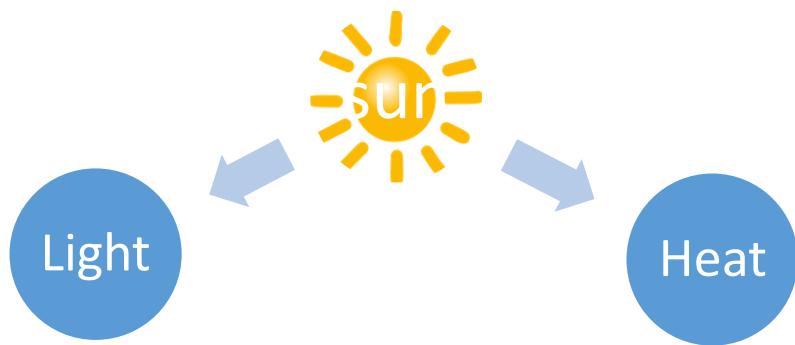
The sun supplies us with all the energy we need. Did you know that energy is stored in the foods we eat? Plants make food using energy from the sun. When we eat our food our body gets energy to do work. We need energy every day to survive.

Some foods we should eat to get energy are shown in the pictures below.
Can you name them?



Forms of Energy

The sun gives us light and heat. These are forms of energy. When you go out in the sun what do you feel?



Can you name the items from the pictures below that provide us with light and heat?



The bulb, candle and the torch give us light and heat energy.

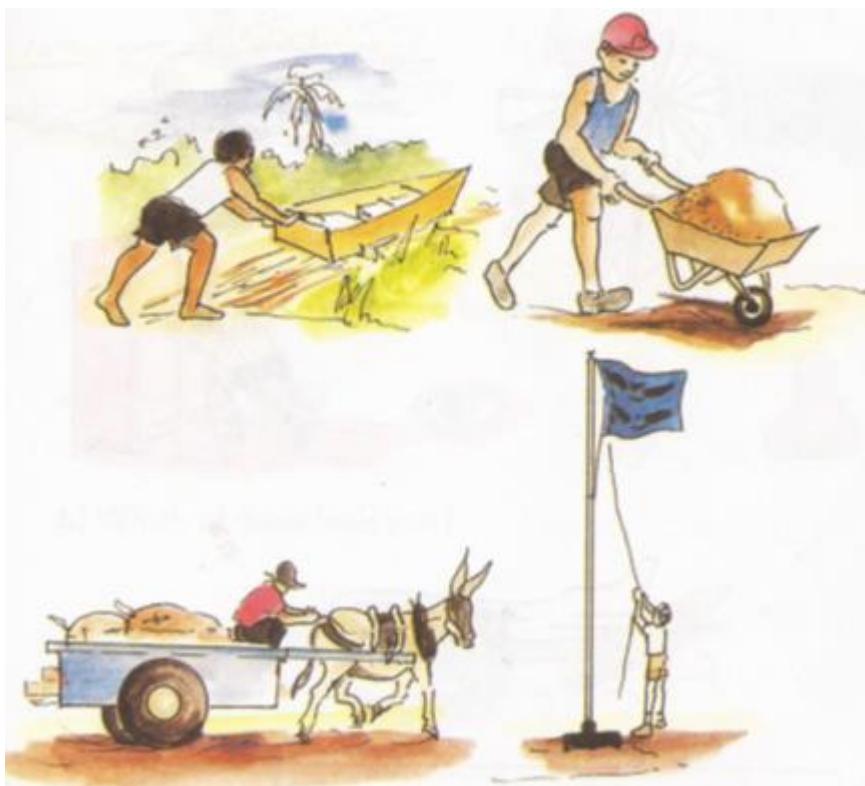
Activity

Complete the table below by placing a tick (✓) in to indicate what type of energy is produced by the listed items

	Item			
	Lit candle 	Sun 	Electric kettle 	Bell 
Light				
Heat				

CHAPTER 10 FORCE

The pictures below show things being moved. Can you identify the ways in which these things are moved?



Some things need a **push** or a **pull** for it to move. A push is movement away from you and a pull is movement towards you. Some other actions that cause things to move are a **twist**, a **turn** and a **lift**.

ALL ABOUT FORCES

Look at how these things move.

Forces are used to move them.

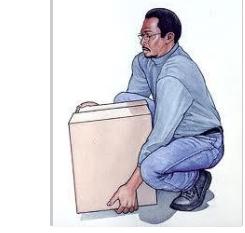
Where do the forces come from?



wind muscle fuel

Activities

1. Match the types of forces used in the table below with the correct pictures.

Picture	Force
	pull
	twist
	lift
	Turn
	Push

2. Fill in the missing letters in the boxes below to name the types of forces. No letters must be written in the blue boxes.

L		F	T		N	G	
T	W		S	T	I		G
P		S	H			G	
T			N	I		G	
P		L		I		G	

TERM THREE REVIEW

1. Which of the pictures below shows the night sky?

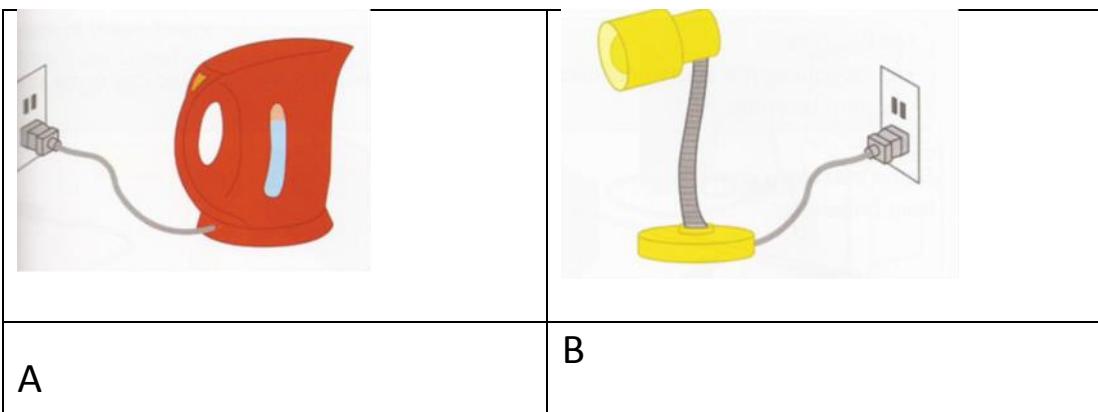


2. Place an X under the picture that shows a pull.



3. The sun provides us with _____ and _____.

4. From which appliance will we get heat energy?



'Science Around Us'
is a series of six pupils' books
with corresponding teachers' manuals.

This series helps pupils to develop and apply process and content skills as they explore and come to understand their environment.

Each pupil's book contains review exercises which can be used to evaluate pupils' progress.

'Science Around Us Book 3'

focuses on

- Animals
- Plants
- Matter
- Forces
- Space
- Light

NOT FOR SALE
PRINTED FOR THE MINISTRY OF EDUCATION
GOVERNMENT OF GUYANA.

ISBN 976-8198-03-6

www.education.gov.gy