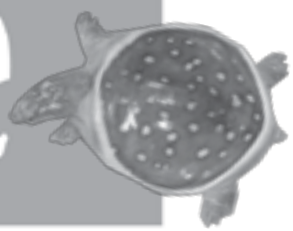
Starter

PARVEEN ARIF ALI

Teaching Guide

Revised Edition

Amazing Science



OXFORD
UNIVERSITY PRESS




Contents

OXFORD UNIVERSITY PRESS



Introduction

How to teach science

The content of science is a wonderful tool for helping children develop their reasoning skills; helping them to develop intellectually by presenting them with the opportunity to think problems out independently and to test out their ideas.

Our job as early childhood educators is not to give an intense course in science, but rather to open doors and plant seeds of knowledge that will grow and will continue to excite our students' interest in the wonders of their environment. We need to encourage them to be curious, to ask questions, to experiment, to learn, and to integrate knowledge from their own experiences.

Young children should learn about science through a multitude of hands-on experiences and real physical objects or models. The objects, ideas, and concepts presented should be placed in a meaningful context, so that the desire to know more is created within the child. If a topic can be related to the child's daily life, the learning is more likely to be remembered.

- **Teaching by contrasts and similarities**

  The easiest way to help students understand or learn something new is to expose them to sharp contrasts, so that differences will be obvious. They can then try to find the similarities between objects that are different.

- **Teaching with a topic and a sequential plan in mind**

  Decide on a science unit that you would like to investigate, and then carry out activities related to the topic so that a relevant context for the experiences can be created and built upon.

- **Teaching by encouraging the students to think and make discoveries**

  Ask the students lots of questions rather than giving them information. Encourage them to think in order to provide the answers. Allow children the opportunity to feel, manipulate, and discover on their own, and then encourage them to share their thoughts.

Concepts for improving science education

- **Organization**

  Encourage the students to classify by colour, size, shape, kind, similar properties, etc.

- **Changes**

  Encourage the students to observe and talk about changes: cycles in nature, the water cycle, the lunar cycle, the seasonal cycle, the day/night cycle, the growth cycle of a seed into a plant, etc.

- **Systems**

  Draw the students' attention to systems. A system is a whole that is composed of many parts which interact in some way.

- **Cause and effect**

  Encourage the students to consider the relationship between cause and effect.

- **Models**

  Models represent something real. Models can make it possible to examine real objects or systems that are too big, or too small to see. They also allow us to create images of what we see by drawing pictures of our observations. All illustrations, diagrams, maps, and pictures are representations of reality.

- **Variation**

  No living things are exactly alike. Encourage the students to observe and discuss variations.

- **Diversity**

  The natural world is filled with diversity. The world consists of innumerable kinds of animals, plants, and objects. Encourage the students to observe, discuss and record the diversity in nature that surrounds us.

How to organize a science unit

When introducing a new unit it is necessary to establish a context for the unit. Children understand new ideas better if they can relate them to a familiar context. It also helps them to remember what they learn.

Basic approaches:

- Move from the familiar to the less familiar.
- Move from the beginning of a process to a result.
- Arrange information in logical order to establish a direction, a focus, and a relevancy

Skills to be developed through teaching science

Observation skills

Classification

Measuring

Communication

Prediction

Lesson plan

Date: Time: 40 mins

Unit 1 **Topic: Living and non-living things**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Living and non-living things	• to explain the difference between living and non-living things	• distinguish between living and non-living things by comparisons	Pictures of living and non-living things including human beings, assorted natural objects such as seeds, leaves, flowers, rocks, soil, feathers, bones, etc., assorted man-made objects such as nails, bottle caps, paper, pencil, scissors, clips, rubber bands, etc., paper bags	Reading: p 2 CW: Activity 1 HW: Activity 2

Key words: living thing, non-living thing

Method: Place all the objects in a container and then spill them onto the floor. Ask the students to find objects that grow on plants or can be found in the soil, and place all these objects into a pile.

Give each student a paper bag and take them on a nature walk to collect living and non-living things in paper bags. When they return to the classroom, ask them to look carefully at the items they have collected and sort them into two piles: living and non-living items. NOTE: make sure that all students wash their hands thoroughly after this exercise. **Ask**: How are living things different from non-living things?

List on the board the characteristics of living things: living things eat, breathe, grow, make new living things, get rid of waste materials from the body, move, and feel pain and other sensations.

Ask: What do living things need to stay alive? Write a list on the board: living things need food, air, and water to stay alive. Discuss why living things need food, water, and air.

Name: _____ Date: _____

1. Draw a green circle around the plants, a red circle around the animals, and a blue circle around the non-living things.

Name: _____ Date: _____

1. Put a tick or a cross to show whether or not the actions listed below are performed by animals and/or plants.

Activity	Animals	Plants
move		
eat		
run		
breathe		
grow		
make new animals or plants		
get rid of waste matter		
cry		

2. Draw a circle around the things that are alive:










Lesson plan

Date: Time: 40 mins

Unit 2 **Topic: Flowers**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Flowers and flowering plants	• to introduce the names of some common flowers	• identify some common flowers according to their shape, size, and colour	Specimens of some common flowers, pictures of flowering plants Stencils for differently shaped petals, coloured paper, glue, scissors	Reading: p 5 CW: Activity 1 HW: Activity 2 Press some fresh flowers and stick them in your science journal. Find out their names.

Key words: flower, flowering plant

Method: Ask the students to name their favourite flower and say what colour it is. Ask them to construct their own flowers using the material listed in the resources column. Write the number of petals it has.

Activity 1: To identify the parts of a plant

Materials: white paper, cut-outs of the parts of a flowering plant, pencils, crayons or markers, glue

Glue the stem, petals, and leaves on the sheet of paper. Colour the plant with crayons or markers. Draw roots at the bottom. Label the different parts.

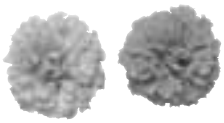
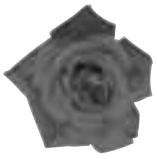
Activity 2: Handprint lilies

Materials: Coloured paper, drinking straws, stapler and pins, pencil

Method: Trace the outline of the students' hands onto sheets of coloured paper. Cut them out. Draw pairs of leaves on green paper and cut them out. Form a cone with each hand and staple it to a straw. Staple the leaves to the straw. **Note:** Children will require your help with this activity!

Name: _____ Date: _____

Match each flower to its name.

Flower	Name
	r_____s_____
	mar_____g_____ld
	l _____l y
	sw_____ _____t p_____a
	p_____n s y
	h _____ b_____ sc_____s

Name: _____ Date: _____

Draw and colour your favourite flower. Write its name.

Lesson plan

Date: Time: 40 mins

Unit 3 **Topic: Fruit**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Kinds of fruit	• to explain how to classify and name a variety of fruits	• identify and name different fleshy and dry fruits and count the number of seeds in each	Specimens of different kinds of fruit, poster of fruits	Reading: p 8 CW: Activity 1, 3 HW: Activity 2

Key words: fruit, seed

Method: Show the students specimens or pictures of different fruits. Show them a bean pod and a peanut. Explain that they are fruits. Explain that the part of a plant that contains the seeds is called the fruit. Discuss the differences between dry and fleshy fruits. **Ask**: Do you know how a fruit is produced? Explain the process of pollination and the formation of fruits. Also discuss the role of insects in bringing about pollination and the production of seeds and fruits.

Show the students different kinds of seeds. Explain the importance of seeds. Draw a diagram on the board to show how a seed germinates to grow into a new plant.

Activity

Collect seeds of different colours, shapes, and sizes. Ask the students to choose a seed and glue it to a sheet of paper, draw the fruit from which it came, and write its name.

Name: _____ Date: _____

Match the fruit to its name.

Name	Fruit
mango	
banana	
pineapple	
watermelon	
orange	
grapes	

Lesson plan

Date: Time: 40 mins

Unit 4 **Topic: Vegetables**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Vegetables	• to identify by name a range of vegetables	• identify different vegetables by name • explain the importance of eating vegetables	Specimens and pictures of different vegetables	Reading: p 12 CW: Activity 1 HW: Activity 2

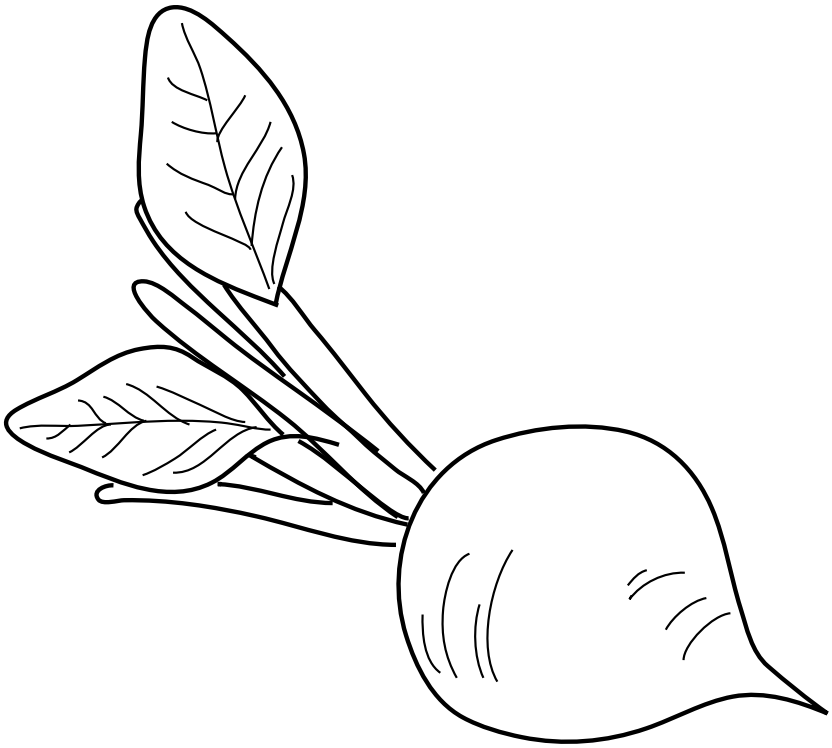
Key words: vegetable

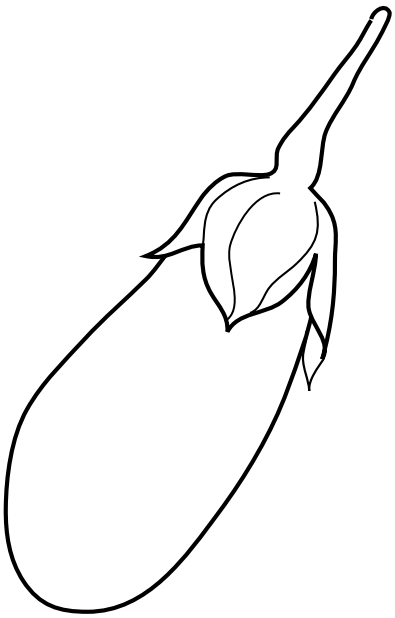
Method: Show the students different vegetables. Ask them to name them. Discuss how some vegetables grow above the ground and some grow in the ground. Vegetables that grow inside the ground are either roots, like the carrot, radish, and turnip, or they are the swollen part of the stem which stores a lot of food. Examples of such stems are the potato, ginger, onion bulb, etc.

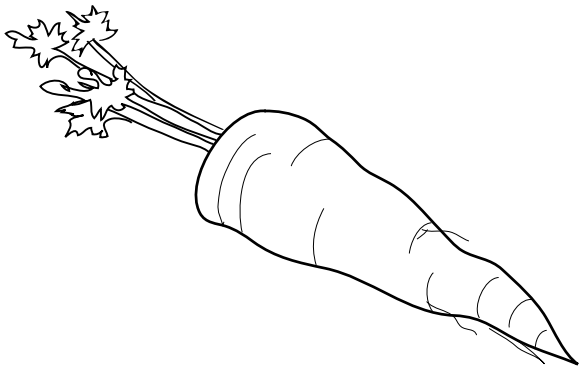
Show the students a bean and a pea pod. **Ask**: Is this a vegetable? Explain that although we use them as vegetables, they are actually fruits because they contain seeds.

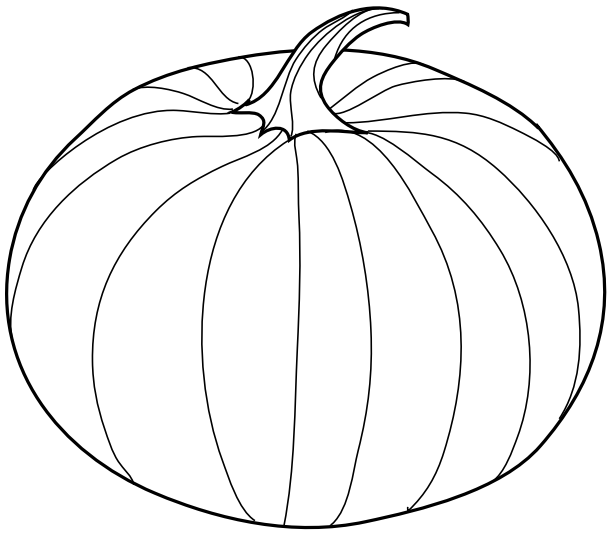
Name: _____ Date: _____

Colour the vegetables.



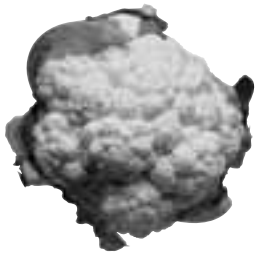






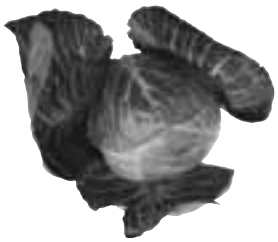
Name: _____ Date: _____

Draw lines from the fruit or vegetable to the correct circle.



Fruit

Vegetable



Lesson plan

Date: Time: 40 mins

Unit 5 **Topic: Birds**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Birds	• to teach the names of some common birds • to teach the parts of the body of a bird	• identify by name some common birds • describe the functions of the parts of the body of a bird • name the foods of birds	Pictures of different flying and running birds	Reading: p 16 CW: Activity1 HW: Activity 2

Key words: wing, feather, beak, claw

Method: Show the students pictures of different birds and identify them by name.

Ask: What is a bird? Can all birds fly? What is the body of a bird covered with? Does a bird have teeth?

Discuss the characteristics of birds with the aid of pictures and drawings on the board. Discuss the functions of feathers, wings, beak, and claws.

Activity: Paper penguin

Materials: white chart paper, black chart paper, pencil, scissors, glue, black marker

Method: Trace around a foot with the shoe on and cut out 3 penguin shapes: two black and one white. Also cut out two penguin feet.

Overlap the two black footprints and glue them onto a piece of chart paper. Next, glue on the penguin's feet underneath the black body. Glue the white footprint over the black footprints, placing it in the centre. Draw the penguin's face with the marker.

Name: _____ Date: _____

Draw a line from each bird on one side of the page to the matching bird on the other side.












Name: _____ Date: _____

Colour the birds.

Lesson plan

Date: Time: 40 mins

Unit 6 **Topic: Animals**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Animals	• to identify some animals by name • to describe the natural habitats of some animals	• identify by name some common animals • classify animals according to their habitat	Pictures of different domesticated and wild animals	Reading: p 19 CW: Activity 1, 2 HW: Activity 3

Key words: animal, wild, pet, forest

Method: Ask if any student has a pet animal at home. Where do they keep it? What does it eat? Which animal would they like to keep as a pet? Show the students pictures of different kinds of domesticated animals. Discuss the homes of domesticated animals.

Show the students some pictures of wild animals. **Ask**: Where do wild animals live? What do they eat? Why do animals have different colours or designs on their skins? Which animals have fur on their bodies? Why do they have fur?

Discuss the size, shape, colour, eating habits, and habitats of wild animals.

Activity: Animal name tags

Materials: Chart paper in assorted colours, scissor, markers

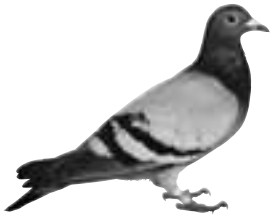
Method: For the teacher: draw simple animal shapes on chart paper. Cut them out and give one to each child. Ask children to colour their animal and write their name on it. They can wear these as name tags. Do this activity before beginning this unit.

Alternatively, the teacher may place a number of cut out animal shapes in a bowl and let children choose one for their friend. They can prepare a name tag for their friend.

Name: _____ Date: _____

Write G for animals that move on the ground.
Write W for animals that swim in the water.
Write S for animals that fly in the sky.

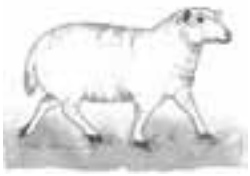






Name: _____ Date: _____

Look at each picture and fill in the missing letters for each farm animal.

 h_____rs_____	 c_____w
 sh_____ _____p	 d_____ck
 g_____ _____t	 ra_____ _____it
 ch_____ck_____n	 r_____ _____st_____r

Lesson plan

Date: Time: 40 mins

Unit 7 **Topic: More animals**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
1. Insects	• to explain what insects are • to identify the body parts of an insect	• describe the structure of an insect • compare the structures of different insects	Pictures of insects, specimens of insects such as a butterfly, fly, cockroach, ant, etc.	Reading: p 12 CW: Draw and colour a picture of a butterfly. HW: Complete the names of the insects: b– –, b– –tle, – nt, f– –.
Key words: insect, wing, leg, feeler, compound eye **Method**: Draw a butterfly on the board and label the parts of its body. **Ask**: How many wings does it have? How many parts is the body divided into? Can all insects fly? Discuss the characteristics of insects with examples. **Ask**: What does a butterfly eat? What does an ant eat? Discuss the habitats and eating habits of insects.				

Lesson plan

Date: Time: 40 mins

Unit 7 **Topic: More animals**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
2. Water animals	• to describe the characteristics of water animals	• describe the structure of water animals	Pictures and specimens of water animals	Reading: p 22 CW: Activity 2 HW: Activity 1
Key words: arm, leg, fin, gills, tail, mouth **Method**: Show the students pictures of different water animals. Draw a fish on the board and label the parts of its body. Discuss the features that help it to live in the water. Talk about different water animals.				

Name: _____ Date: _____

Draw a line from each insect to its name.

bee

spider

butterfly

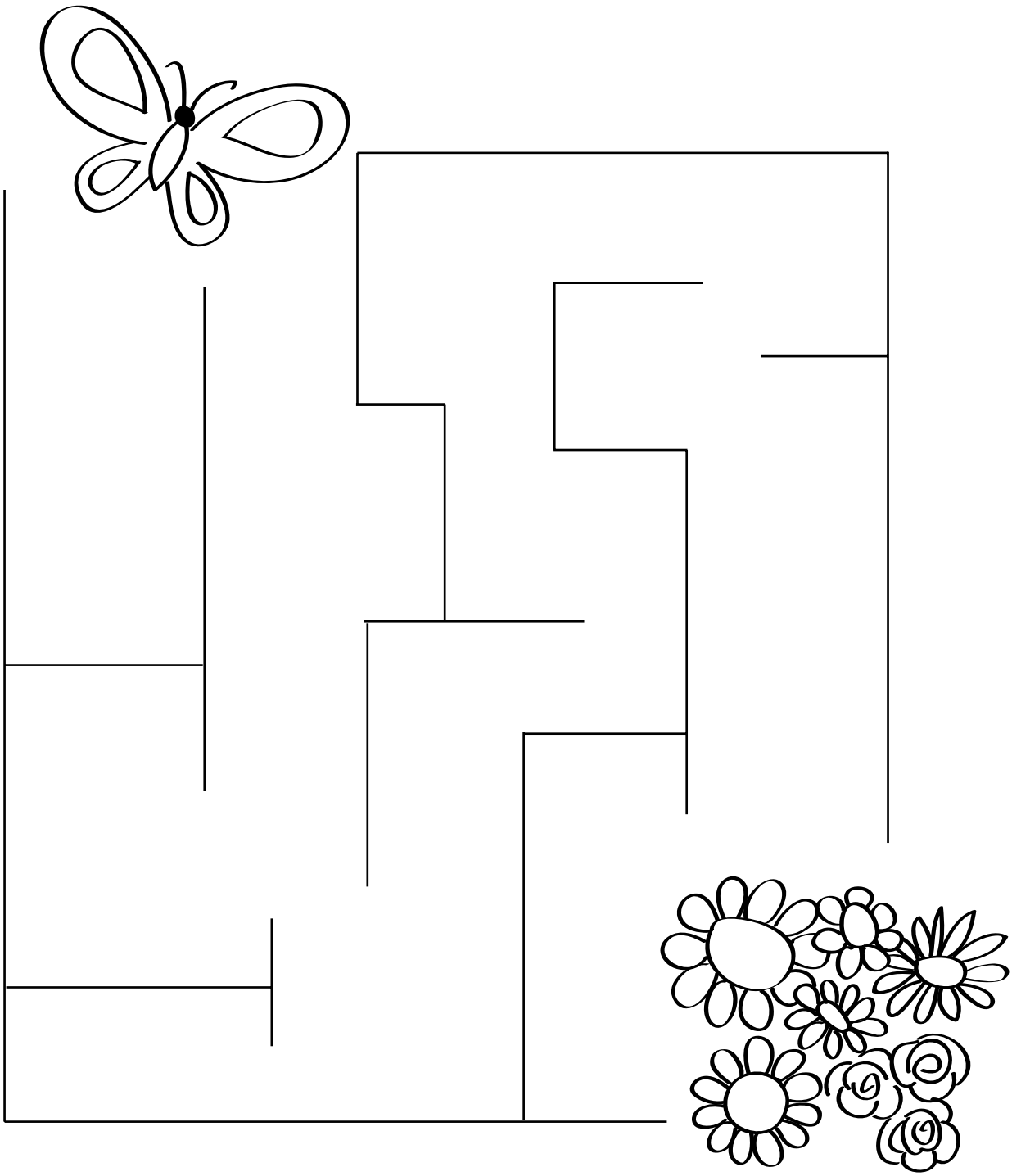
ladybird

grasshopper

caterpiller

Name: _____ Date: _____

Help the butterfly find the flowers. Colour in.



Name: _____ Date: _____

Draw lines to show whether these creatures are animals, insects, or birds.







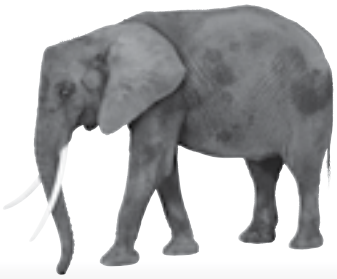
Animals

Birds

Insects





Lesson plan

Date: Time: 40 mins

Unit 8 **Topic: Myself**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Myself	• to identify the parts of the human body • to explain the functions of each part	• identify different parts of the human body • describe the functions of each part	Pictures of the human body, poster showing the parts of the body	Reading: p 25 CW: Activity 1 HW: Activity 2
Key words: body, eye, ear, nose, hand, foot **Method**: Ask a student to come to the front of the class. Ask other students to point to the different parts of the body and name them. Discuss the functions of the different parts of the body.				

Name: _____ Date: _____

Draw something that you can:	see
hear	feel
smell	taste

Name: _____ Date: _____

Match the body part to its function.

Part of the body	**Function(s)**
	hearing
	eating
	seeing
	breathing and smelling
	holding, touching, and feeling
	walking
	biting and chewing food

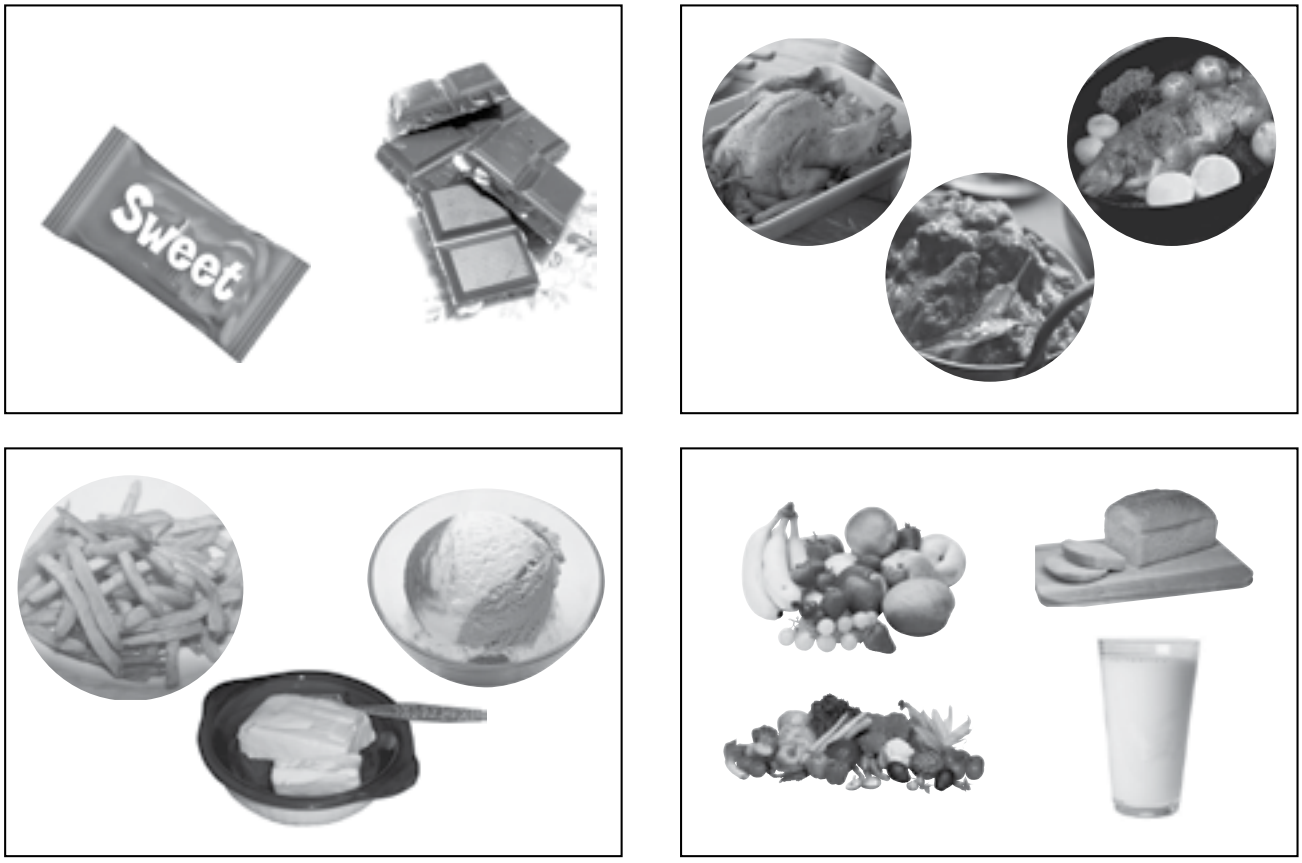
Lesson plan

Date: Time: 40 mins

Unit 9 **Topic: Food**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Food	• to explain what food is • to explain why we eat food	• list the different kinds of food that we eat • explain the functions of the different kinds of food	Samples of different kinds of food such as milk, bread, butter, fruit, vegetables, eggs, rice, meat, etc.	Reading: p 28 CW: Activity 1 HW: Activity 2
Key words: food, live, grow **Method**: Show the students the samples of different foods and discuss the importance of each. Ask them to name the foods that they eat for breakfast, lunch, and dinner. Explain the importance of eating rice, meat, butter, fruit, and vegetables, and of drinking milk. **Ask**: Should you eat lots of chocolates and sweets? Why not? Discuss the harmful effects of eating sweets and chocolates.				

Name: _____ Date: _____

1. Here are four groups of food.



Draw a circle around the foods that you like to eat.

Which foods are bad for your teeth?

_____

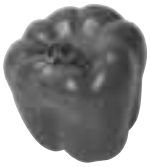
Which foods help you to grow strong and healthy?

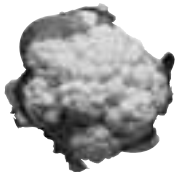
_____

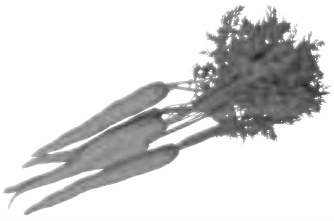
_____

Name: _____ Date: _____

Write F for fruit and V for vegetable.







Lesson plan

Date: Time: 40 mins

Unit 10 **Topic: Colours**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Colours	• to identify the colours by name	• identify different colours in nature • match colours with different objects	Objects of different colours, a paintbox, crayons, coloured pencils, poster of the rainbow	Reading: p 31 CW: Activity 1, 2

Key words: colour, rainbow, light

Method: Show the students objects of different colours and help them to name the colours. Ask them to find a pencil of a given colour. Ask them to talk about their favourite colours.

Ask: Have you seen a rainbow in the sky when it has been raining? Explain that a rainbow is caused by sunlight shining on raindrops. Sunlight looks white but it is really made up of many colours.

Activity 1: To learn the colours of the rainbow

Materials: White paper, crayons, paints

Method: Help the students to half-fill a clear glass with water and place it on a sheet of white paper on a sunny window sill. As the glass is tilted to the left and right, bands of colour appear on the paper. Ask the students to name the colours they see. Ask them to find a coloured pencil or paint of the matching colour.

Help the students to draw rainbows on cardboard. They can cut these out and wear as badges.

Activity 2: Mixing colours

Materials: an eye-dropper, food colourings, ice cube tray, paper towels

Mix drops of food colouring in the tray and see what new colours are produced.

yellow + blue → green red + yellow → orange blue + red → purple

Name: _____ Date: _____

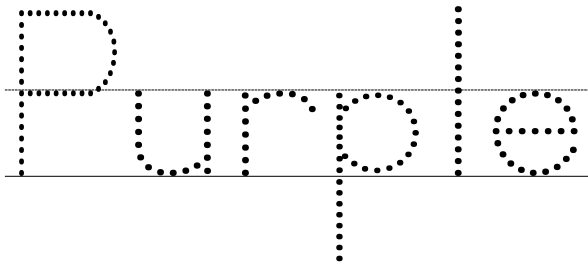
Fill each square with the colour of the object.

Object	Colour	Object	Colour
			
			
			
			

Name: _____ Date: _____

Draw a picture of something purple in the box below.

Trace the word purple and then write the word purple on your own.



Lesson plan

Date: Time: 40 mins

Unit 11 **Topic: Hot and cold**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Hot and cold	• to explain the meaning of the terms *hot* and *cold* • to explain what temperature is	• differentiate between hot and cold objects • explain that temperature is the measure of how hot or cold a substance is	Samples of hot and cold objects, pictures of the Sun, a fire, a burning candle, etc.	Reading: p 34 CW: Activity 1 HW: Activity 2

Key words: hot, cold, temperature

Method: Show the students pictures of hot and cold objects. Ask them to distinguish between them on the basis of temperature. Explain that when something is hot, it gives out heat. We can find out whether something is hot or not by touching it.

We can use a thermometer to show exactly how hot it is. Show the students a thermometer and explain its use. **Ask**: Have you ever had your temperature checked by a doctor or nurse? How do they know that somebody has a fever? Explain that when we are sick, the temperature of our body rises and causes fever. A doctor or nurse can measure our temperature with a thermometer. We can also find out how hot the air round us is by using a thermometer. Show the students a laboratory thermometer. Draw a diagram of a thermometer on the board and explain how it works.

Activity: Make a model of a thermometer

Materials: Cardboard cut-outs of a thermometer, red marker

Method: Use a red marker to draw a line from the top to the bottom of the cut-out thermometer. Use a pencil to mark the freezing point of water at the lower end as 0 degrees Celsius, and the boiling point of water at the upper end as 100 degrees Celsius. Also mark the normal body temperature at 32 degrees Celsius.

Name: _____ Date: _____

Draw red circles around the things that are hot and blue circles around the things that are cold.










Name: _____ Date: _____

Draw three things that are cold.

Draw three things that are hot.

Lesson plan

Date: Time: 40 mins

Unit 12 **Topic: Light and heavy**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Sinking and floating	• to explain the meanings of the terms *sink* and *float* • to explain why some things float and others sink	• explain that heavy things sink and light things float • distinguish between light and heavy objects in relation to their masses	Samples of light and heavy objects such as small stones, plastic boat, apple, nails, egg, rubber ball, pencil, etc., a tub of water, a wooden block and a stone of similar size	Reading: p 37 CW: Activity1 HW: Activity 2

Key words: light, heavy, sink, float

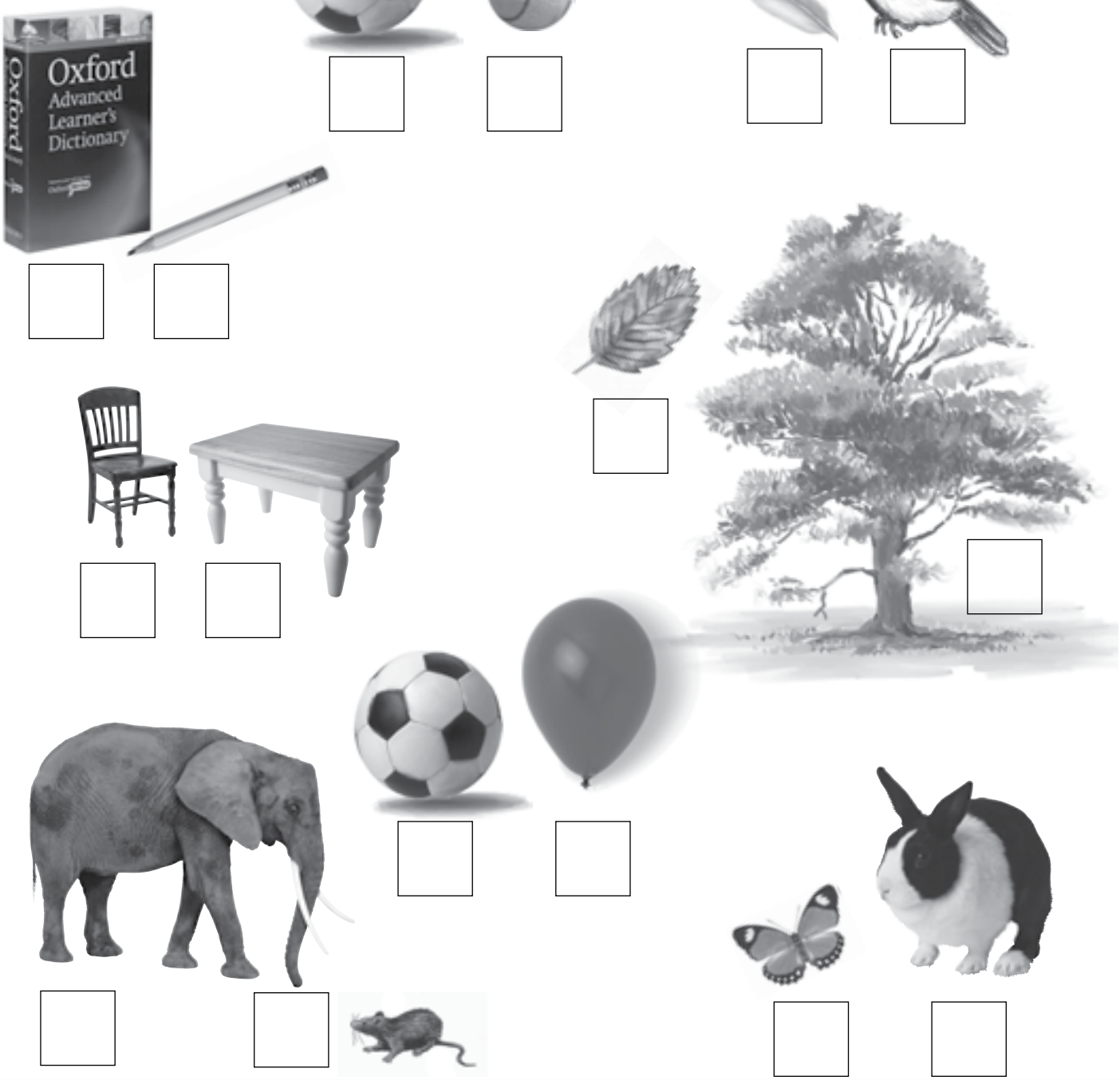
Method: Show the students samples of heavy and light objects. **Ask**: What would happen to this stone if I put it in water? What would happen to the matchstick? Explain that heavy things sink if they are placed in water, and light things float.

Show the students a wooden block and a stone of almost the same size and ask: What will happen if I place both of these in the water?

Explain that if an object is heavy for its size, it will sink. Although it is small, the stone is heavy, so it will sink. The wooden block, which is of almost the same size as the stone, will float, because it is lighter.

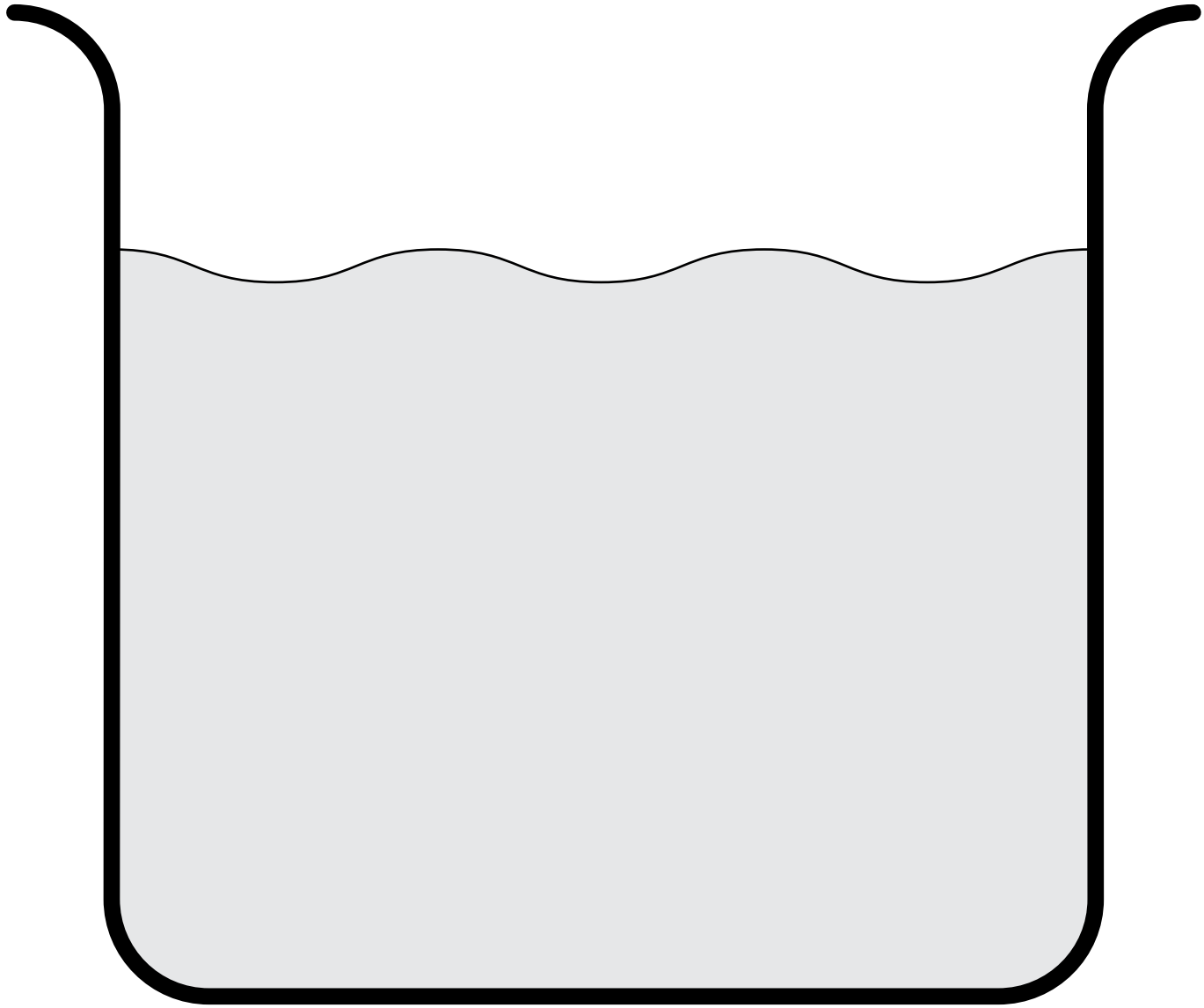
Name: _____ Date: _____

Put a tick beside the item that is the heavier of each pair.



Name: _____ Date: _____

Draw two things that will sink, and two things that will float on the water in the tub.



Lesson plan

Date: Time: 40 mins

Unit 13 **Topic: Sounds**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Loud and soft sounds	• to explain how sound is produced • to identify different sounds produced in our environment	• explain how sound is produced • distinguish between different sounds in our environment	Pictures of musical instruments, an alarm clock, a bell, a telephone, a CD player, a toy guitar, a toy drum, etc.	Reading: p 39 CW: Activity p 40
Key words: sound, music, noise, loud, soft **Method: Ask**: What is sound? How is sound produced? Which sounds do we like to hear? Which sounds do we dislike? Explain that sound is produced when any object swings to and fro. These to and fro movements are called vibrations. When a body vibrates (moves backwards and forwards very fast), sound is produced.				
Activity: To listen to sounds and recognize them **Method**: Divide the class into two groups. Ask one group to make sounds of animals and things, and the other group should guess the animal or thing which makes the sound.				

Name: _____ Date: _____

Draw a circle around the pictures that represent the sounds that you like:

Name: _____ Date: _____

Match the animals to the sounds they make:

Sounds

barks

croaks

hisses

brays

meows

quacks

chirps

moos

roars

hoots

caws

Lesson plan

Date: Time: 40 mins

Unit 14 Topic: Our Earth	Teaching objectives	Learning outcomes Students should be able to:	Resources/Materials	Activities/CW/HW
Our Earth	• to demonstrate the shape of the Earth • to explain that the Earth is covered with land and water	• describe the shape of the Earth • explain that the Earth is covered with land and water	A globe, a torch, pictures of a mountain, a forest, grassland, a river, a sea, a lake, a desert	Reading: p 42 CW: Activity 1 HW: Activity 2

Key words: Earth, land, air, water

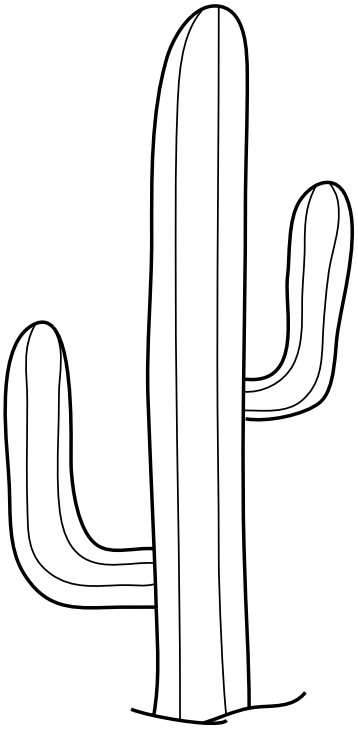
Method: Show the students a globe. Explain that the globe is a model of the Earth. Point out the areas of land and water. Explain that the large areas of land are called continents. The large areas of water are called oceans and seas. Talk about the different animals and plants that live on land and in water.

Show the students pictures of the different kinds of landforms found on Earth and discuss the different animals and plants that live in them.

Spin the globe and explain that the Earth is constantly spinning on its axis. Shine a torch from one side of the globe while it spins slowly on its axis. Explain the occurrence of day and night. It takes twenty-four hours for the Earth to spin once on its axis.

Name: _____ Date: _____

A cuctus is a desert plant. A pine tree grows in the mountains. Colour the cactus and the pine tree.



Draw a water animal and a land animal.

Lesson plan

Date: Time: 40 mins

Unit 15 Topic: Water	Teaching objectives	Learning outcomes Students should be able to:	Resources/Materials	Activities/CW/HW
Water	• to describe the sources of water • to discuss the uses of water	• list the sources of water • list some uses of water	Pictures of sources of water and the uses of water	Reading: p 45 Activity: p 4
Key words: water, sailing, washing, drinking, watering **Method**: **Ask**: Where does the water we use in our homes come from? What is rain? What is a river? Where does rainwater go? Discuss the sources of water. **Ask**: How do we use water? Discuss the various uses of water in our daily lives. Explain the importance of water for all living things. Discuss the ways in which water becomes polluted, and the harmful effects of polluted water for human beings, plants, and animals. Discuss the ways in which we can conserve water.				
Activity Draw three ways in which we use water.				

Name: _____ Date: _____

Draw two ways to show how we get water:

Arrange the following from the smallest to the biggest.

Name: _____ Date: _____

Colour the picture.

Lesson plan

Date: Time: 40 mins

Unit 16 **Topic: Weather**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Weather	• to describe different kinds of weather • to explain the changes in weather	• identify and describe different kinds of weather • explain what causes changes in the weather	Pictures of different kinds of weather Pictures of the seasons	Reading: p 48 CW: Activity 1 HW: Activity 2, 3

Key words: weather, cold, rainy, cloudy, sunny

Method: **Ask**: What is the meaning of the term 'weather'? Explain that the day to day changes in the conditions of the air around us are called weather. When the sun is shining brightly and the air is warm, the weather is hot; at other times it is cold. When there are lots of clouds, the weather is cloudy. Sometimes it rains or snows.

Ask: What is the weather like today? Which weather do you like? Why? With the help of pictures and diagrams on the board, discuss the different weather conditions. **Ask**: What is the best type of weather for a picnic at the seaside? for plants? for animals?

Discuss the weather conditions during the four seasons: summer, winter, spring, and autumn. **Ask**: Which season do you like best? Why?

Activity: Making clouds

Materials: Cotton wool, blue sheets of cardpaper, glue

Method: Stick clouds of cotton wool on the sheet.

Name: _____ Date: _____

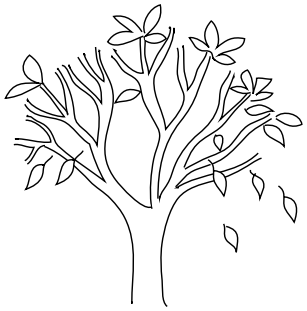
Match the picture to the kind of weather.

snowy windy sunny rainy

Name: _____ Date: _____

Write the name of the season:

_____



_____

_____

_____

Lesson plan

Date: Time: 40 mins

Unit 17 **Topic: Travel**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Travel	• to explain the meaning of the term *transport* • to discuss different means of transport	• explain what the term transport means • describe different means of transport	Pictures of different forms of transport	Reading: p 52 Activities 1, 2, 3

Key words: transport, aeroplane, bus, tonga, bicycle, ship, car, motorcycle, train

Method: **Ask**: How can we travel from one place to another? How do you come to school? Which is the fastest means of transport in the world? Which is the slowest?

How can people travel to the Moon? Where does an aeroplane fly? What does a train move on? Where does a ship move? What does a car or a motorcycle move on? Discuss the various means of transport and how they move from one place to another.

Ask: What does a car need to move? Discuss the need for fuel to provide the energy for movement. How do people move? What is the fuel for the human body? Explain that fuel is burned to release energy which helps the human body and other things to move.

Activity: Paper aeroplanes

Materials: A piece of paper, some markers or crayons

Method: Follow the folding instructions to make a paper aeroplane. Use the markers or crayons to make patterns.

Name: _____ Date: _____

Which means of transport would you use to go to these places?

school

the market

another city

a far-off country

Name: _____ Date: _____

Write how many wheels each of the following means of transport has.

Means of transport	Number of wheels
	_____
	_____
	_____
	_____
	_____
	_____
	_____
	_____

Lesson plan

Date: Time: 40 mins

Unit 18 **Topic: Keeping in touch**	**Teaching objectives**	**Learning outcomes** Students should be able to:	**Resources/Materials**	**Activities/CW/HW**
Keeping in touch	• to explain the meaning of the term *keeping in touch* • to discuss different methods of keeping in touch	• explain what is meant by communication • list different means of communication	Pictures of different means of communication, a newspaper, a letter, etc.	Reading: p 55 Activity: p 55

Key words: email, newspaper, television, radio, letter

Method: Show the students pictures of different means of communication. Discuss the ways in which we hear news and information from distant places and people. **Ask**: What means of communication do you like the best? Why? Discuss the activity on page 55. **Ask**: How are the people in the picture keeping in touch?

Ask: How does a computer help us to keep in touch? What information do we get from the newspaper or the television? How does a radio help us to keep in touch with the world? How do we keep in touch with our friends and relatives? Discuss the various means of communication and their importance in our lives.

Activity

Draw the method of communication you would use for the following:

listening to the news

watching the news

sending a letter

Name: _____ Date: _____

Match the picture with the means of keeping in touch.

Means of keeping in touch	Picture
computer	
newspaper	
television	
radio	
letter	
telephone	
mobile phone	

Notes