

South Sudan

GRADE
1

COMMUNITY GIRLS' SCHOOL SCIENCE

GRADE 1

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FOREWORD

I am delighted to write the foreword for this book. The Ministry of General Education and Instruction (MoGE&I) has developed the Community Girls School (CGS) textbooks based on the National Curriculum of South Sudan.

The textbook was written to help learners develop the background knowledge and understanding in the subject. It is intended largely to serve as a source of knowledge and understanding of the subject concerned, but not to be considered as a summary of what learners ought to study.

The National Curriculum is a competency based and learner-centered that aims to meet the educational needs and aspirations of the people of South Sudan. Its aims are manifold: (a) Good citizenship (b) successful lifelong learners, (c) creative, active and productive individuals; and (d) Environmentally responsible members of our society.

This textbook was designed by subject panelists to promote the learners' attainment of the following competencies; critical and creative thinking, communication, cooperation, culture and identity.

No one can write a book of this kind without support from colleagues, friends and family. Therefore, I am pleased to register my thanks to Dr Kuyok Abol Kuyok, the Undersecretary of the Ministry, who emphasized the importance of Alternative Education System (AES) and approved the development of its textbooks.

I also want to record my thanks to Ustaz Omot Okony Olok, the Director General for Curriculum Development Centre (CDC) and Ustaz Shadrack Chol Stephen, the Director General for Alternative Education Systems (AES) who worked tirelessly with the subject panelists to develop the textbooks.

Lastly, but not least, my greatest thanks and appreciation must go to the Global Partnership for Education (GPE) and UNICEF-South Sudan for without their support and partnership this textbook would not have seen light.



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1.1: Thing found in School environment



Activity 1:

Walk around your school, observe living things found in the school



Activity 2:

In small groups, discuss what you saw while walking around the school.



Activity 3:

In pairs, mention living things that you observed around your school.

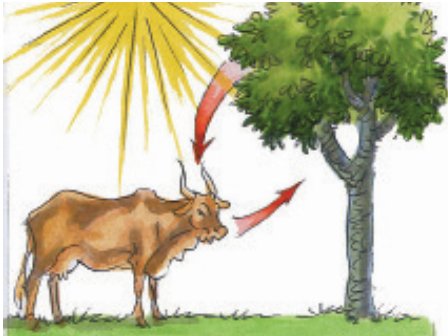


1.2: Domestic animals found at home/village environment



Activity 1:

In pairs, tell the names of domestic animals found in your home or village.





Activity 2:

In small groups, role-play domestic animals found in home or village environment.



Activity 3:

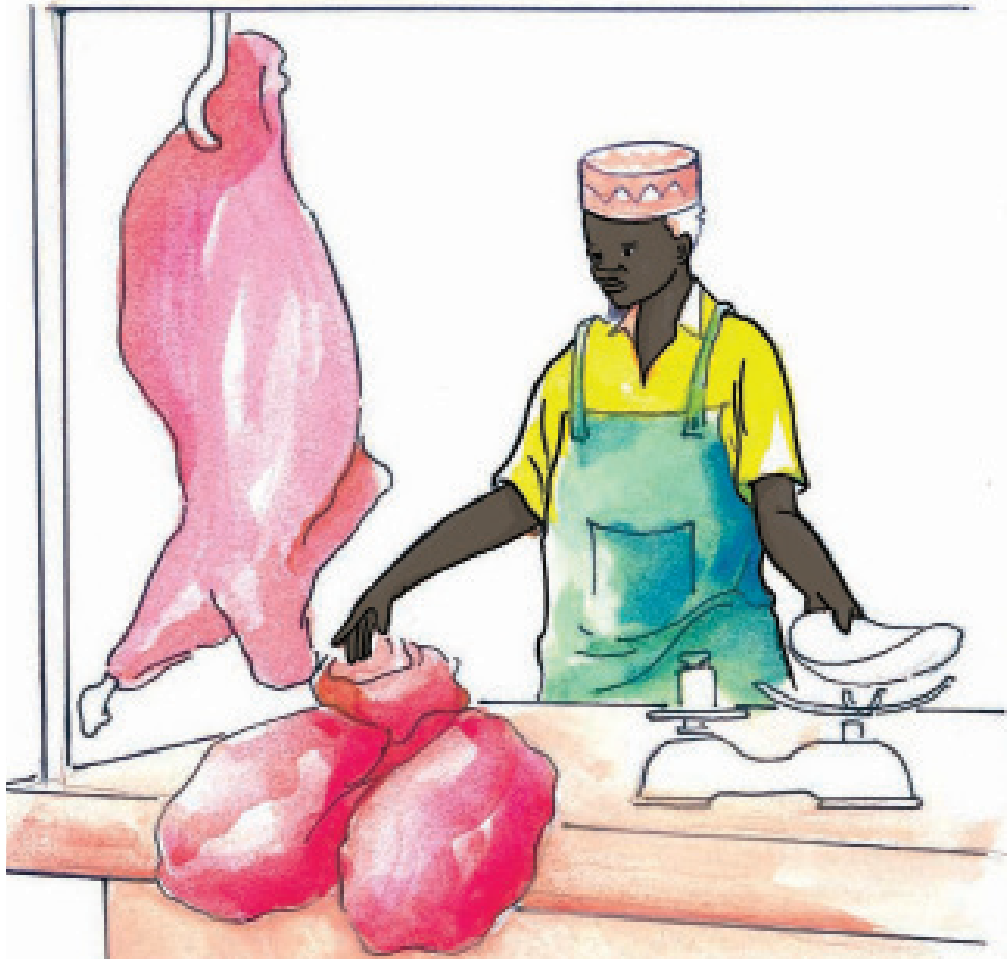
In pairs, discuss how do you take care of your domestic animals





Activity 4:

In groups, write a poem on the importance of the domestic animals, and then, recite it to the class.

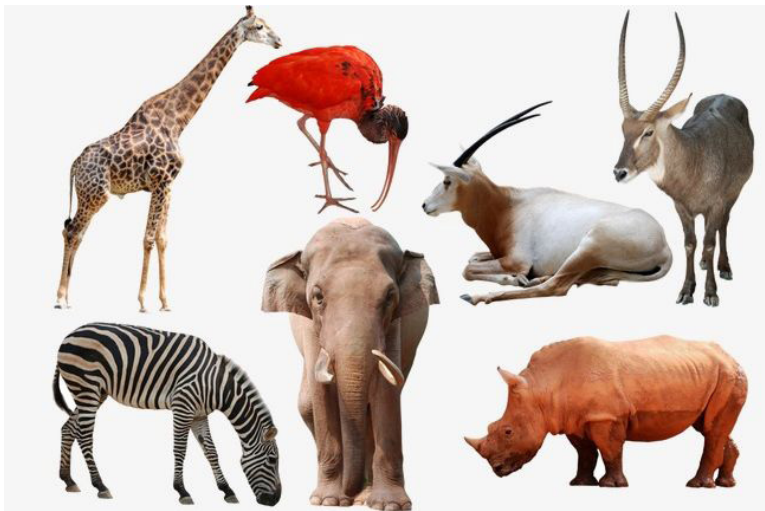


1.3: Wild animals found in the village environment



Activity 1:

In small groups, tell the names of wild animals found in the village environment.



Activity 2:

Individually, tell any story that you have heard about wild animals in your villages

1.4: Plants/trees found in the local environment



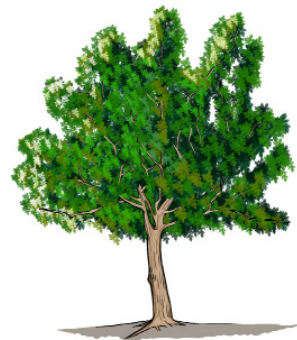
Activity 1:

Individually, tell the names of plants found in your local environment



Activity 2:

In pair, recite poem/song about plants found in your local environment



1.5: Importance of planting trees and Flowers in our environment



Activity 1:

In small groups, mention the important of planting trees and flowers in our environment.



Activity 2:

In pairs, tell the importance of taking care of young tree and flowers



Activity 3:

Individually, name some trees found in your areas



Activity 4:

In groups, name some fruit trees found in your areas.



A



B



C



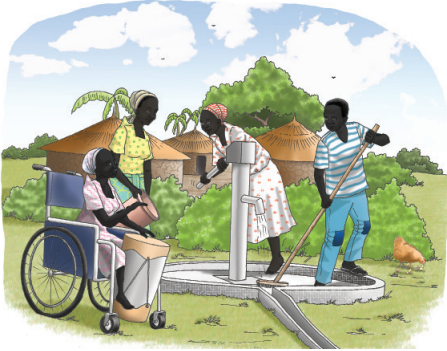
D

1.6 Water



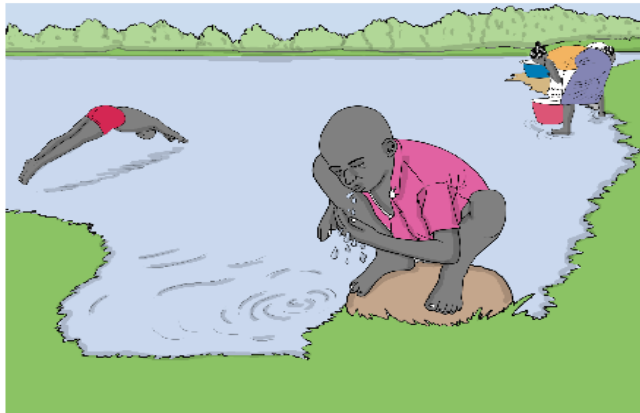
Activity 1:

In small groups, mention the different sources of water



Activity 2:

In pairs, discuss the importance of water.





Activity 1:

Parts of the body

eyes



ears



nose

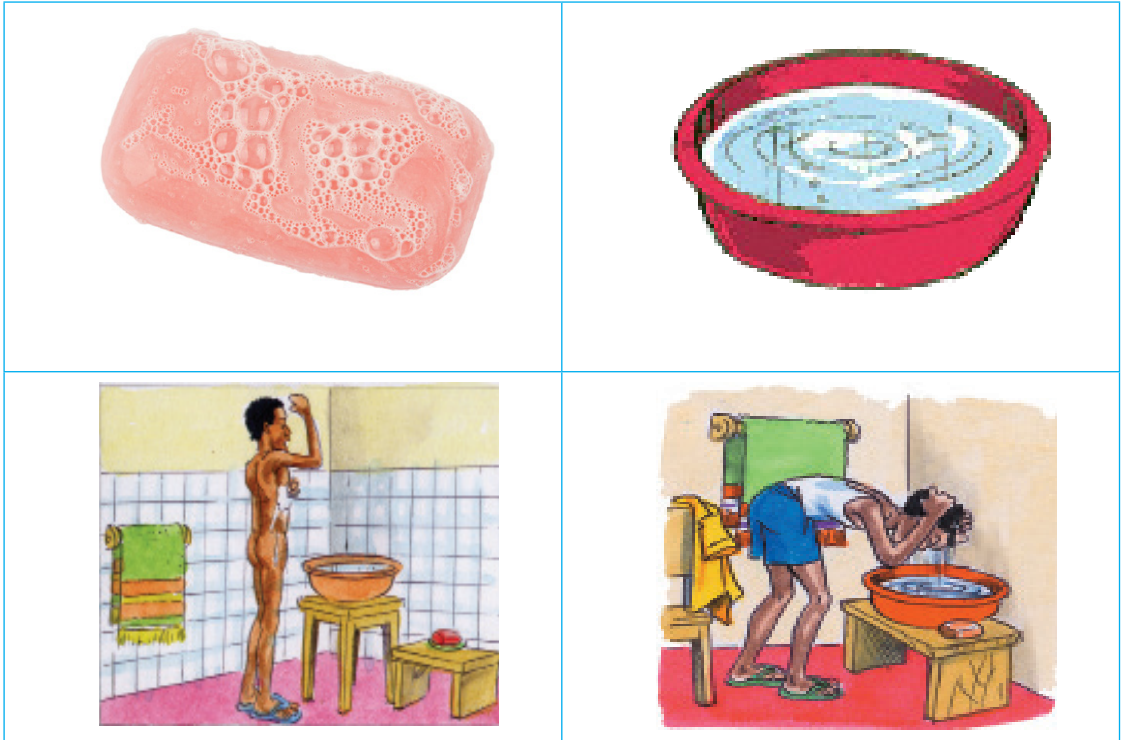


mouth



Care of the body

In pairs, talk about the pictures shown below and then answers the questions.



1) How do you use soap and water to keep your body clean?

2) Why do you need to keep your body clean?

Learning point

- We keep our body clean by using soap and water.



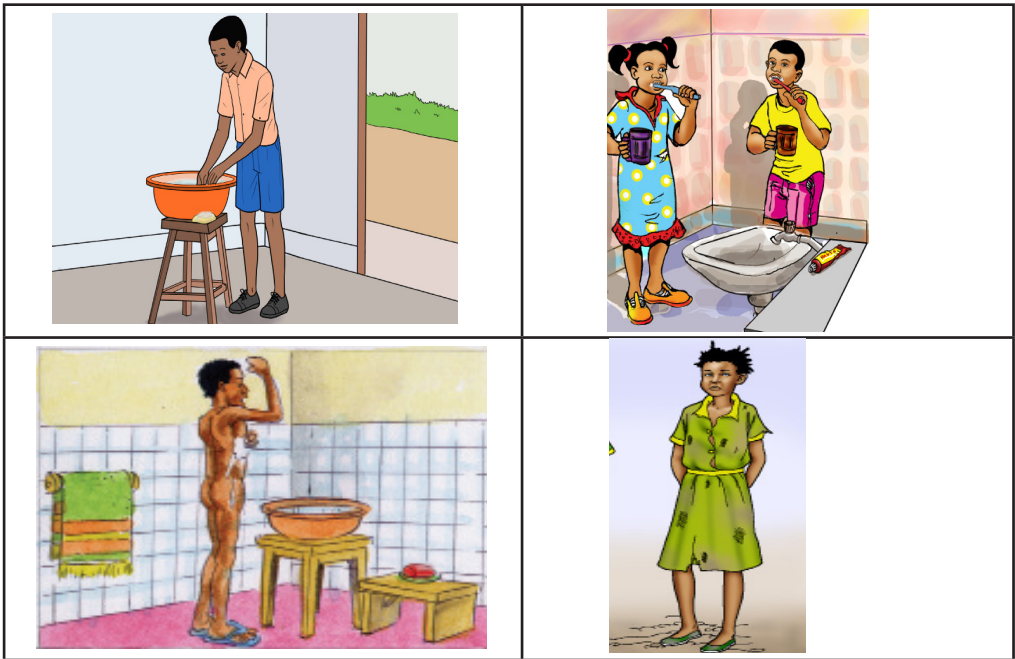
2.1 Care of the body



Activity 1

In pairs:

1. Talk to your friend about what you can see in the pictures above? How do the pictures relate to good health?



2. Recite the following poem:

When I wake up in the morning,
I brush my teeth,
I wash my face,
I wash my hair,
I wash my feet,
I bathe with warm water,
I dress up for school,
I go to school,
I remain fresh all day.

3. What can you learn from the poem?

Learning point

Keeping our body clean is known as personal hygiene.
We clean different parts of the body differently.

(a) Cleaning your teeth



Activity 2

In groups



1. You are provided with the following materials.



A



B



C



D

2. Talk to the group members about:

- How you will use the materials to clean your teeth.
- Suggest Other ways of cleaning your teeth.

Learning point

Brushing your teeth keeps your mouth fresh and protects the gums from diseases.



Fun corner

Practise singing the following song.

Brush your teeth always,
After taking breakfast, brush your teeth,
After eating snacks, brush your teeth,
After taking supper, brush your teeth,
After having lunch, brush your teeth,
Brush your teeth always.

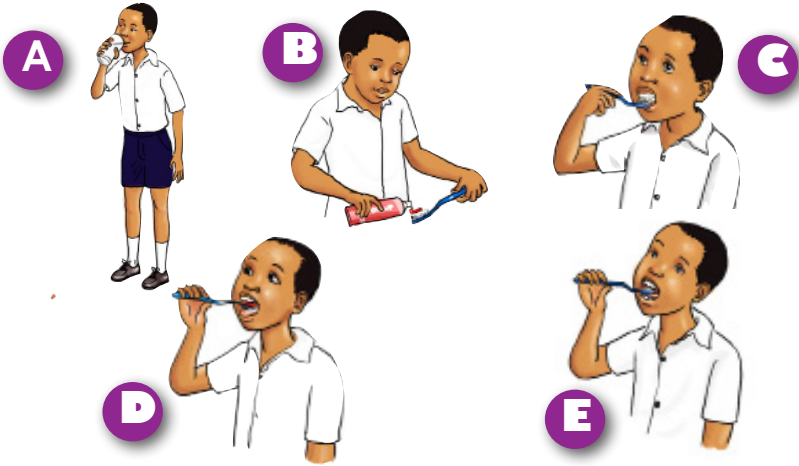
Remember!

Toothbrushes are personal items. They should not be shared.



Check your progress 2.1(a)

Arrange the following tooth brushing steps correctly.



(b) Cleaning your face

When do you wash your face?



Activity 3

In groups



Tell your friends:

1. What you do when you wake up.
2. How do you clean your face.
3. Why is it important to wash your face.

Learning point

We should wash our face when we wake up, after playing and before going to bed.

Remember!

When washing your face, do not forget to wash the neck and behind the ears.



Check your progress 2.2(b)

1. Which body parts are found on the face?
 - a) _____
 - b) _____
 - c) _____
 - d) _____
2. What makes your face dirty?
 - a) _____
 - b) _____

(c) Cleaning your hair



Activity 4

Individually



Look at these pictures.



A



B

1. Which of the two boy's hair looks neat?
2. Why do you think boy A looks sad?
3. How do you make your hair to look neat?



Activity 5

In groups



What are the children in the pictures below doing?



A



B

You have been provided with the following items.



A



B



C



D

1. Tell your friends how you will use the items above (A,B,C and D) to clean your hair.
2. Why should you wash your hair?
3. Why do you comb your hair?

Learning point

Cleaning and combing our hair keeps us healthy.



Check your progress 2.3(c)

1. Draw three items used for cleaning hair.

- a) _____
- b) _____
- c) _____

(D) Cleaning your nose



Activity 6



Role play the conversation below.

Hey Wani! Is your nose bleeding?



Akello



Wani

I did not notice. I just blew my nose.

What did you use to blow your nose?



Akello

I used my handkerchief.



Wani

Akello: Look at it! It should have some blood on it. You must have used a lot of force to blow your nose.



Akello



Wani

I need to see the teacher for first aid. Look you have mucus in your nose.



Akello

I have a handkerchief to clean my nose too.

Learning point

You should clean your nose using a clean piece of cloth or a clean handkerchief.

Remember!

A handkerchief is a personal item.
Do not share it.



Check your progress 2.4(d)

1. What is the importance of cleaning our nose?
2. Which things do we clean from our noses? _____

(E) Cleaning your ears

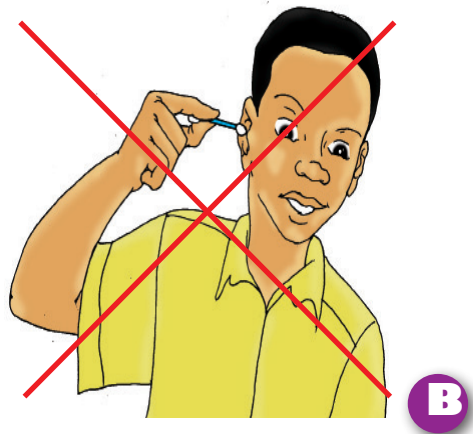


Activity 7

As a class



1. How do you clean your ears?
2. Observe the charts provided by your teacher on how to clean the ear.
3. Why is it not advisable to insert anything into your ear as shown below?



Learning point

Our ears get dirty. They should be cleaned.

Remember

We should clean our ears regularly to improve our hearing.



Check your progress 2.5(e)

1. What kind of dirt collects in your ears?

2. How often should you clean your ears?

(F) Cleaning your hands

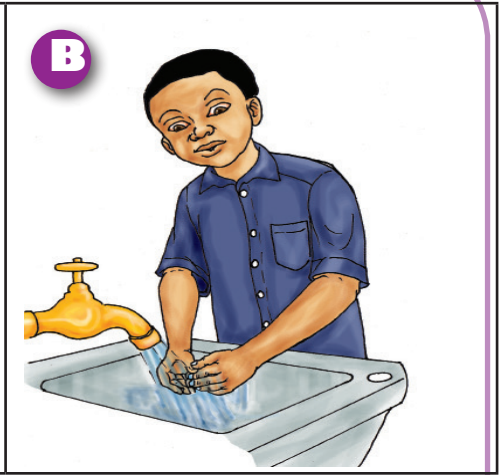


Activity 8

In pairs



1. Talk to your friend about the pictures in the next page.



2. What is the difference between picture A and B.

- Whose hands will be clean?

3. How do the activities below help to prevent the spread of diseases?



Learning point

Washing hands prevents the spread of diseases such as cholera, diarrhoea and flu. These diseases are dangerous to us.

Remember!

We should not wipe our hands with the clothes that we are wearing.



Fun corner

Practise the song below.

Children, children, children,

Wash your hands,

Before eating any food,

After eating any food,

After using the toilet,

After cleaning the house,

After collecting litter,

After touching animals,

After blowing your nose,

After coughing,

Washing your hands prevents spread of diseases.



A



B



Activity 9

In groups, use the below items to answer questions that follows.

Soap, oil, clean water, towel or a clean piece of cloth, face towel, two basins



1. Demonstrate how you would wash your hands when dirty with oil?



2. Use the materials listed above to clean your hands.



3. Compare cleaning your hands with soap and without soap.

- Which hands are still oily?
 - Which hands are clean?
- 4.** Fill two basins with water. Wash one handkerchief with soap and the other without soap.



- 5** Compare the two handkerchiefs after drying up. Which one is clean?

Learning point

Soap helps in removing dirt from our bodies and our clothes.



Check your progress 1(f)

1. Why do we wash our hands?
2. Cutting your nails can help to prevent the spread of diseases. Why do you think this happens?

- Which hands are still oily?
 - Which hands are clean?
4. Fill two basins with water. Wash one handkerchief with soap and the other without soap.



- 5 Compare the two handkerchiefs after drying up. Which one is clean?

Learning point

Soap helps in removing dirt from our bodies and our clothes.



Check your progress 2.6(f)

1. Why do we wash our hands?
2. Cutting your nails can help to prevent the spread of diseases. Why do you think this happens?

(G) Cleaning your legs



Activity 10

In groups



A



B

1. Compare pictures A and B.
2. What can the boy in picture A do to have clean legs?
3. Talk to your group on how you clean your legs.

Learning point

We should wash our legs to prevent germs from infecting them.
Germs make them produce bad smell.

Remember

Dirty legs keep jiggers.



Check your progress 2.7(g)

1. Draw the items you need for cleaning your legs.

(H) Cleaning the whole body



Activity 11

Individually



1. What is the difference between pictures A and B?



A



B

2. What would you do if you were the girl in picture B?
3. Talk to your friends about the following questions:
 - How do you keep your body clean after sweating?
 - What is the importance of cleaning your body?

Learning point

Bathing everyday protects the body from getting skin diseases .



Remember

We should bathe everyday using soap and clean water.





Activity 12

In groups



Talk to your group members about the materials you can use to clean your body when you do not have soap.

Learning point

Baking soda can be used instead of soap. It clears bad odour from the body too.



Check your progress 2.8(h)

1. Which activities make the body to produce sweat?
 - a) _____
 - b) _____
2. Name and draw two items needed in cleaning the body.
 - a) _____
 - b) _____
3. Say if it is true or false.
 - a. When we clean our ears we hear better.
 - b. We wear shoes on our feet to keep them warm.
 - c. We should brush our teeth only once.
 - d. Dirty feet are attacked by jiggers.

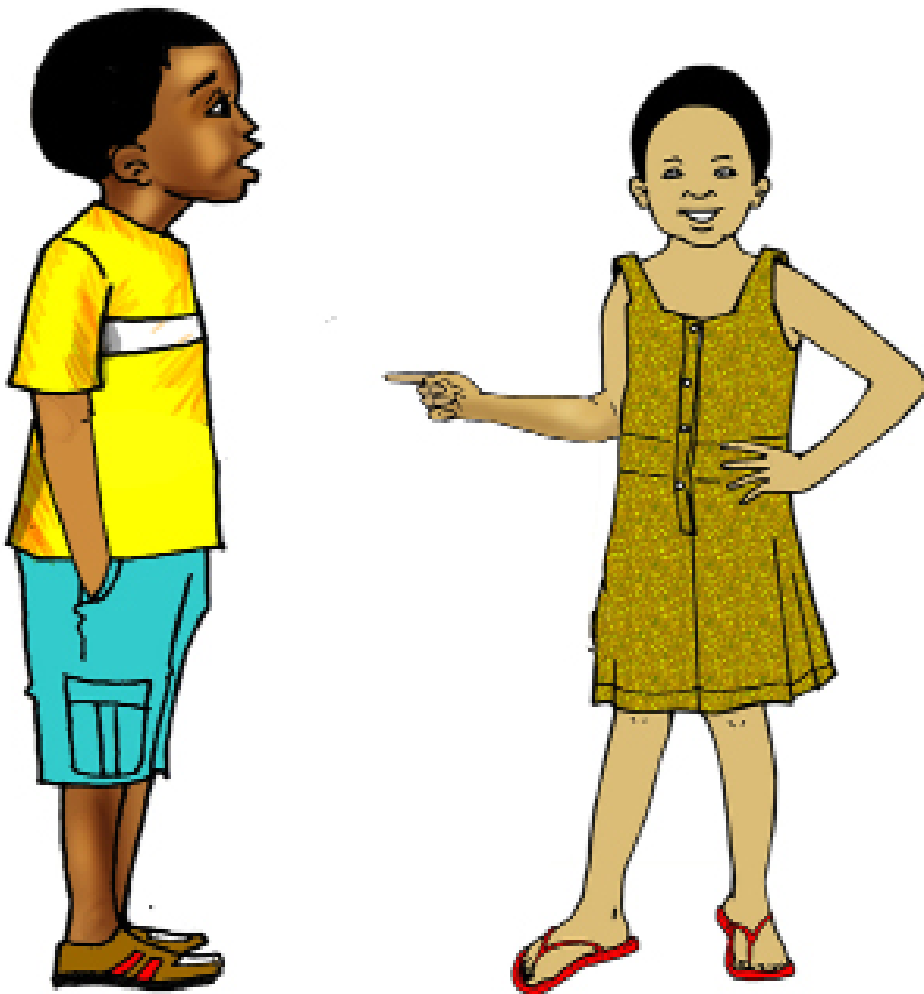
Sub Unit: Uses of bones, joints and muscles in human body



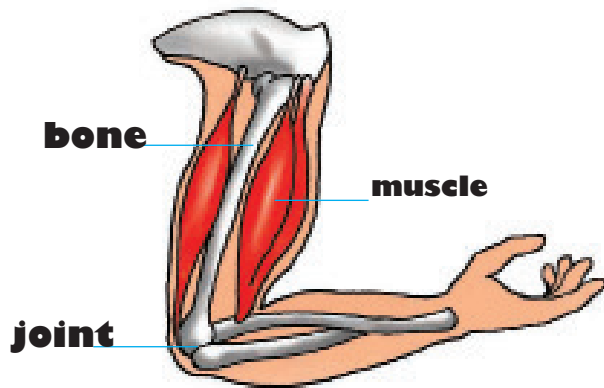
Activity 1.2

In pairs

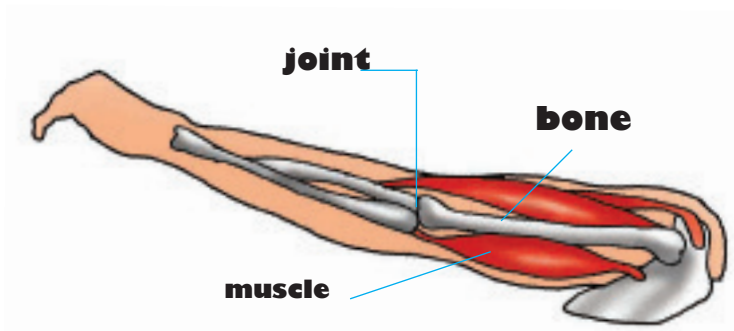
- 1) Use a string to measure the length of the arms and legs of your partner when stretched and when bent.



- What makes your arm and legs to stretch or bend?
- How are you able to run, jump, skip or walk?



a) A bent arm



a) A stretched arm

2) Trace your longest finger when stretched on a drawing paper.

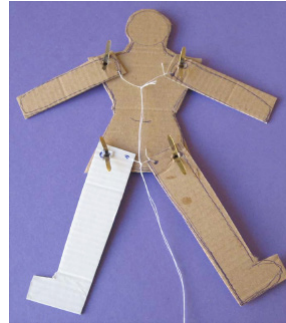
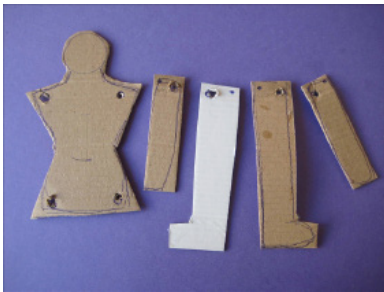


Learning point

- Bones and joints work together with muscles to help in movement.

FUN CORNER

- 1) Get cartons with human pictures.
- 2) Cut out the parts of the human body using scissors.
- 3) Join the body parts using a string.
 - Are the body parts moving?



Importance of healthy exercises



Activity 1.3

In groups



A



B



C



D



E



F

- 1) What activities are the children doing in the pictures?
- 2) Why are the activities important?

Learning point

- Exercise is good for our health.

Sub Unit: How Germs Spread



Activity 13

In pairs



A



B



C



D

1. Talk to a friend about what the people in the pictures above are doing?
2. How can they get diseases through their action?

Learning point

Germes are small organisms that cause diseases.

Germes can also be spread from infected person to healthy person through contact. The diseases caused by germes include influenza, cholera, cough and typhoid.

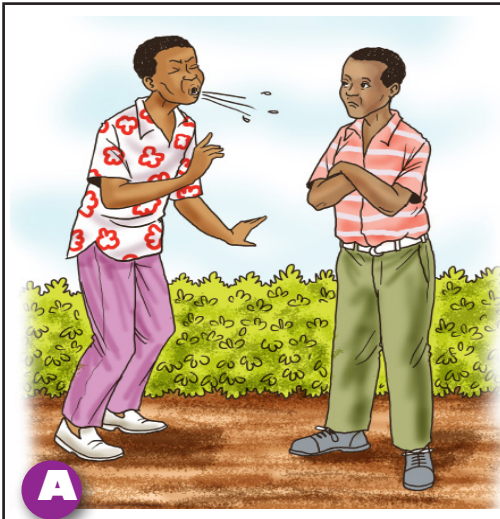


Activity 14

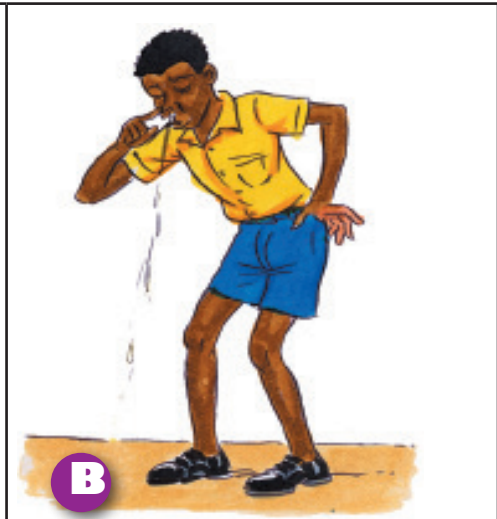
In pairs



1. Talk to your friend about what is happening in the pictures below.
 - How do we get diseases through such actions?



A



B

2. How do we get diseases through mishandling food?

Learning point

Germs are spread through sneezing, coughing, blowing our nose without using a handkerchief or rubbing eyes with dirty hands.

Germs can be spread from dirty hands to food too.

Remember !

It is always good to wash your hands before cooking, after using the toilet and before eating.



Check your progress 2.9(i)

1. Which foods need to be washed before cutting or cooking?
 - a. _____
 - b. _____
 - c. _____
 - d. _____
2. The best method of preventing spread of germs is by _____.

1.3 Designing posters



Activity 15

As a class



Visit the nearest health centre and observe the posters on the walls.

- What do they contain?
- How is information written in the posters?

Learning point

An example of a poster in a health centre is shown below.

Healthy Child Care

When to Wash Hands

- 1** Before children arrive for the day.
- 2** After cleaning.
- 3** Upon arrival and after outdoor play.
- 4** Before and after preparing and eating food.
- 5** After diapering or toileting.
- 6** After contact with body fluids.
- 7** After touching animals or their equipment.



Fun corner

On a manila paper, write and colour the information below

CLEAN HANDS ARE HAPPY HANDS.

REMEMBER TO WASH YOUR HANDS.



Check your progress 3.0(j)

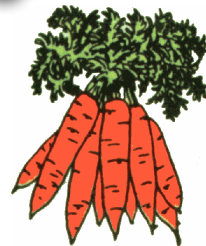
1. What information is found in a poster on uses of soap?
2. What information would be contained in a poster about the danger of germs.

3.1 Plants

Activity 1

In groups

- 1) Which plants are found near your home or school environment?



- 1) Which of the plants in the pictures do you know?
- 2) Play a game of naming the plants and where they are found.
- 3) Create a garden within the school compound with different types of plants found in different areas.

Learning point

- There are many types of plants.
- a) The plants shown in the picture below grow in dry areas.



Acacia

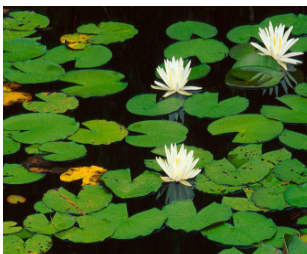


Cactus



Euphorbia

- b) These plants grow in cool places with a lot of water.



Water lily



Water hyacinth



Amazon lily

- c) Some plants grow in our gardens and we use them as a source of food. They include:



Banana



Maize



Bean

- d) Some plants give us food. They include:



Pawpaw

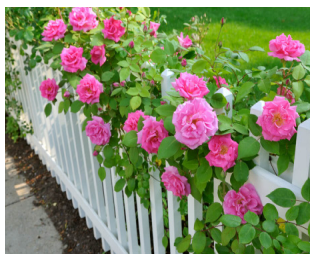


Tomato



Mango

- e) Some plants produce flowers that make our homes look good and beautiful, they are called ornamental plants. They include:



Roses



Hibiscus



Lantana

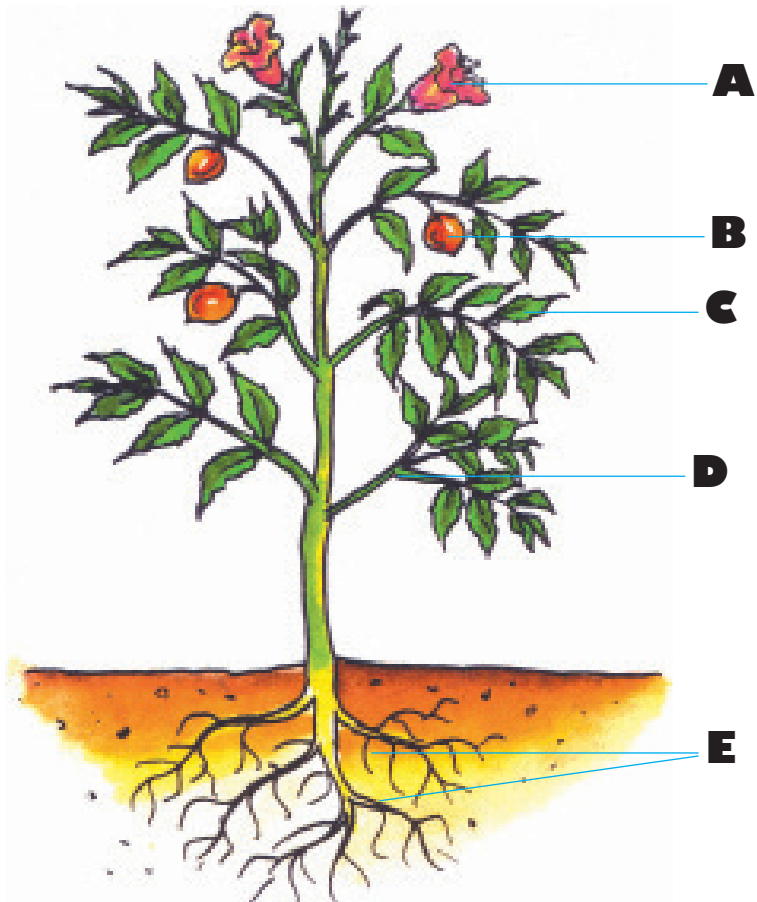
Parts of a Plant



Activity 2

In pairs

1) Name the parts of the plant shown below.



Remember

Not all plants have the same structure.



Check your progress 3(a)

1. Match the following

	Part of the plant	Description
1	Leaves	They are very beautiful.
2	Stem	Are picked when they are ready.
3	Fruits	They are green.
4	Roots	The middle part of the tree.
5	Flowers	They are found in the soil.



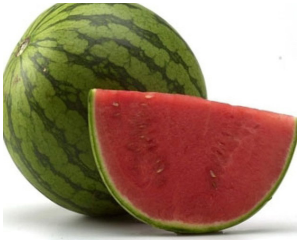





Plants that we eat



Activity 3

In pairs

1) On which part of the plant do we get these foods?

 A	 B	 C
 D	 E	 F
 G	 H	 I



J



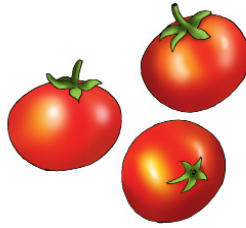
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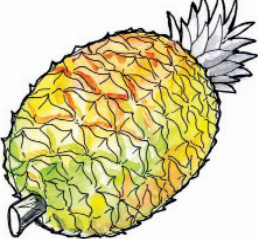


N



O

- 1) Play a game of naming the parts of the plants. Let your friend point at a picture as you name.
- 3) Which parts of the plants are eaten raw or cooked?
- 4) Match the following plants with their edible parts.

Plant	Edible part
	fruit
	roots






Plants we cook before eating and those eaten raw



Activity 4

In groups

- 1) Pick plants that you eat raw and those eaten when cooked.

		
Pumpkin	Beans	Potatoes
		
Mangoes	Pawpaws	
		
Sugar cane	Yam	Orange

2) Write down the plants cooked before eating and those eaten raw.

Eaten only when cooked	Eaten when raw
a. _____	a. _____
b. _____	b. _____
c. _____	c. _____
d. _____	d. _____

Learning point

- Plants that we cook before eating are beans, maize, pumpkins, potatoes and arrow roots.
- Plants we eat without cooking(raw) include; bananas, pawpaws, coconuts, carrots, pineapples, mangoes, oranges and watermelons. Most fruits are always eaten raw.



Remember

Some plants are not eaten. They are harmful to our health.

FUN CORNER

Draw and colour three types of plants we eat without cooking.



Check your progress 3b

1) Complete the table below. Choose your answer from the words given below.

Plants which we eat	Plants we do not eat
a. _____	a. _____
b. _____	b. _____
c. _____	c. _____
d. _____	d. _____
e. _____	e. _____
f. _____	f. _____
g. _____	g. _____

Papyrus reeds, peas, bananas, cactus, flower, maize, nappier grass, sisal, beans, hibiscus, arrow roots, acacia, carrots

2.3 Reasons why animals feed on some plants and not others



Activity 5

In pairs



A



B

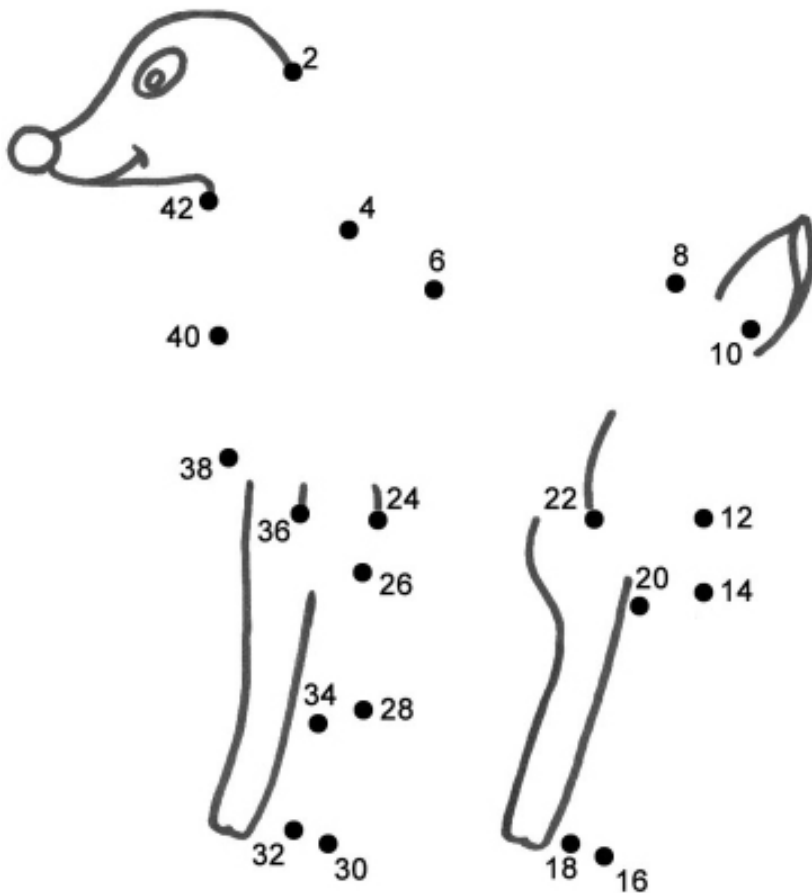
- 1) Talk about what you see in the pictures above.
- 2) What do the animals in the above picture feed on?

Learning point

- Animals do not eat some plants because they are poisonous, smelly and taste bad.
- Animals have different feeding habits.

FUN CORNER

Trace and join the dots to form an animal then colour it.



2.4 Plants or parts of plants children like and dislike



Activity 6

In pairs



A



B



C



D



E



F

- 1) Talk about the pictures above with a friend.
- 2) Which plants do you like or dislike? Why?

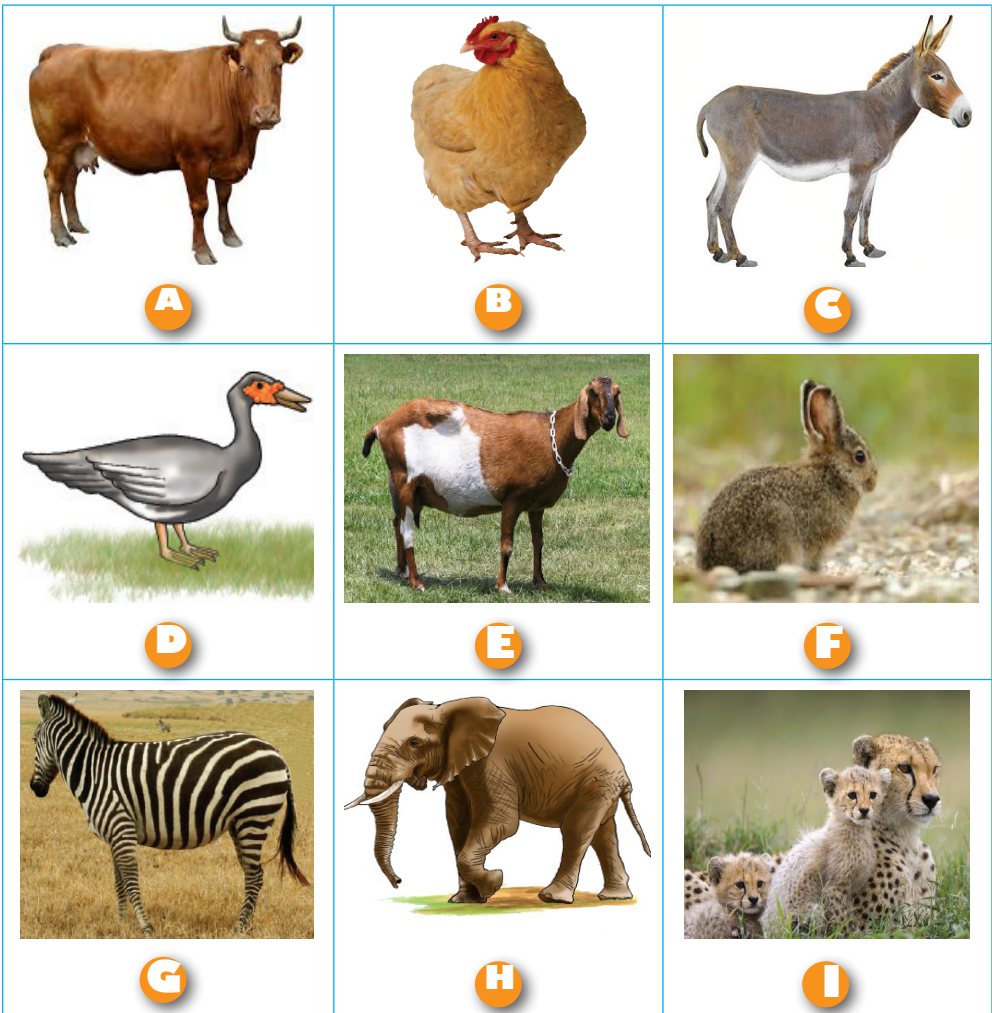
3.2 Animals

How animals around our community differ from other communities



Activity 1

In pairs



1) Name the animals shown in the previous page.

- Which animals are found at your home?
- Which animals are found in the forest?

Learning point

- Animals found at home are called domestic animals.
- Animals found in the forest are called wild animals.

Importance of plants and animals

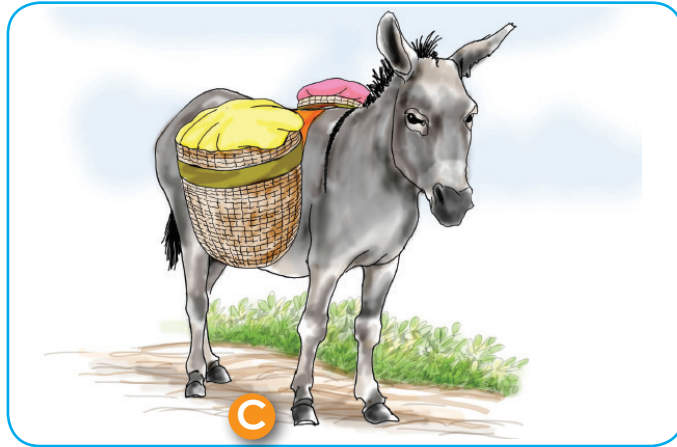


Activity 2

In pairs, name the importance of plants and animals shown in the following pictures.



A



2. Why do you think the plants grow along the river?

a) _____

b) _____



Activity 3

In pairs



Talk to your friend about the pictures below.



a) Where do the animals in the pictures above live?

b) Why do they live there?

Learning point

Animals live on land or in water.

Land animals

Animals that live on land include :

- Animals that live underground.
- Wild animals.
- Domestic animals.

(a) Animals that live underground



Activity 4

In pairs



1. Answer the following questions:

(a) What are these animals? Where do they live?



A



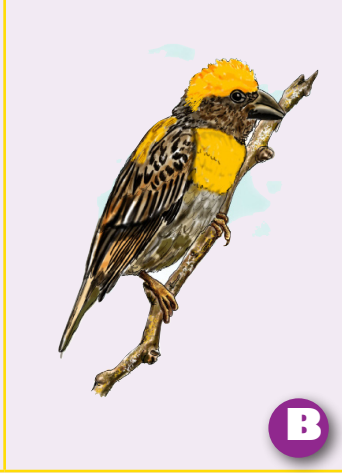
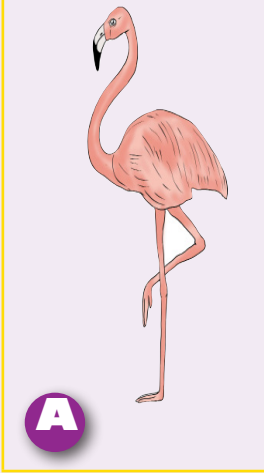
B





- (b)** Where are the animals found?
- (c)** Name the animals that you have seen.
- (d)** Suggest the kind of food that the animals eat.

2. Name the birds shown below.



3. Where do you think wild birds live?

Learning point

Animals that live in the forest are known as wild animals. These animals include gazelles, zebras, lions, antelopes among others. Birds make part of wild animals too.



Fun corner

Draw and colour a bird you like.

Remember!

Wild animals are not friendly.

Characteristic of animal and their habitats



Activity 5

In pairs



1. Observe photographs, pictures and charts provided to you by your teacher or the picture below.



Antelopes

2. Talk to your friend about the animals you have seen.

(a) How do they protect themselves from other animals?

(b) Which animals are dull coloured?

(c) Which ones are brightly coloured?

3. Copy and fill the table below in your notebooks.

	Animals with dull coloured fur	Animals with brightly coloured fur
1		
2		
3		
4		
5		

Learning point

Animals with brown or grey fur cannot be seen from far. They look like their surroundings. Their predators are not able to spot them. Predators are animals that eat other animals.

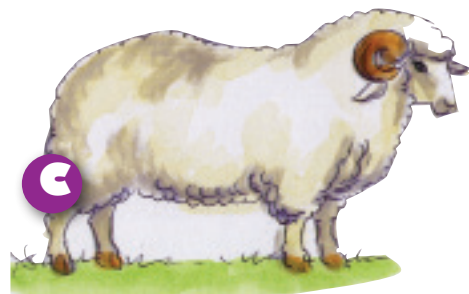
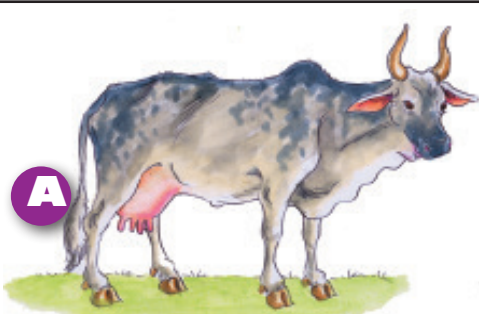
Animals with brightly coloured fur such as zebra can be spotted from far. They are easily seen by their predators.

Sub Unit: Domestic animals



Activity 1

Individually



1. Name the animals shown in the pictures above.
2. Where are the animals found?
3. How do the animals help us?

Learning point

Domestic animals are animals kept at home. We also have birds kept at home.



Check your progress 2(i)

1. What are the uses of the domestic animals shown in the below?



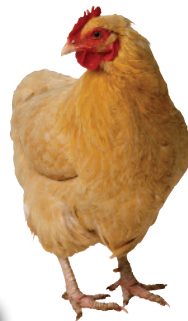
A



B



C



D



Fun corner

Compose a song about domestic animals and their uses.

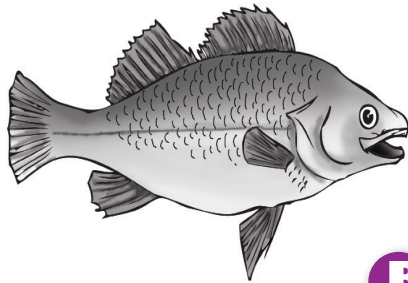
Sub Unit: Animals that live in water

Animals that live in water



Activity 1

Individually



1. Name the animals shown in the pictures above.
2. Where are they found?
3. What kind of food do you think they eat?

4.1 Sources of light



Activity 1

In groups

1) Name the sources of light shown below.



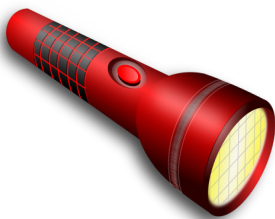
A



B



C



D



E



F

- 2) Name other sources of light used in your home.
- 3) Where do you think light comes from?

Learning point

- Sources of light include the sun, lantern, fire, candles, lamps, torches.



Remember!

The sun is the main source of light. Do not look directly at the sun. It can destroy your eyes.

FUN CORNER

Draw and colour the source of light you use at home.

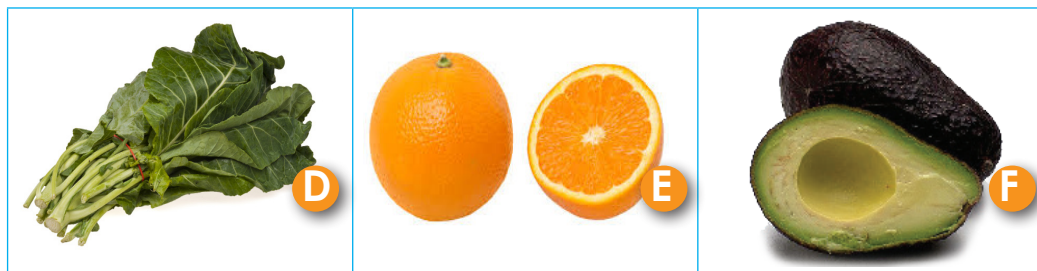
4.2 Sense of seeing



Activity 2

In pairs

- 1) Tick the one that is different in each row in the pictures below.



- 2) Why do you think they are different from the rest?

Learning point

- We cannot see without our eyes. Eyes helps us to see.

Did you know?

Hawks have strong eyes which help them see things from far up in the sky. That is why they see small chicks from far and come to catch them.



FUN CORNER

Draw and colour the sun, moon and stars.



Check your progress 4a

1) Match the source of light with its name.

Picture	Name
	Candle
	Sun
	Lamp
	Fire

2) When there is no light, my _____ cannot see.

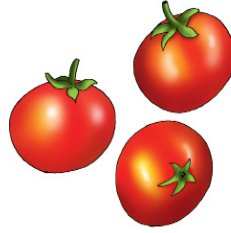
3) Write the correct colour for the following foods.



(a) _____



(b) _____



(c) _____

4.3 Sources of sound



Activity 3

In groups

- 1) Name the following sources of sound.
- 2) Which ones are found at school?
- 3) Which ones are found at home?



A



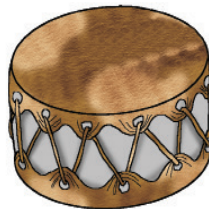
B



C



D



E



F

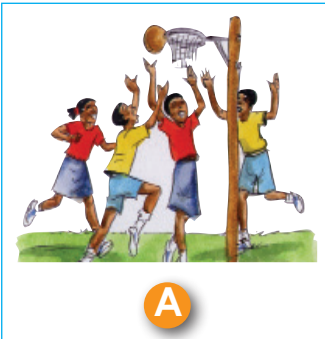


4) Name other sources of sound.

Learning point

- Things that produce sound are called sources of sound.

Look at the pictures below. What are the children doing?

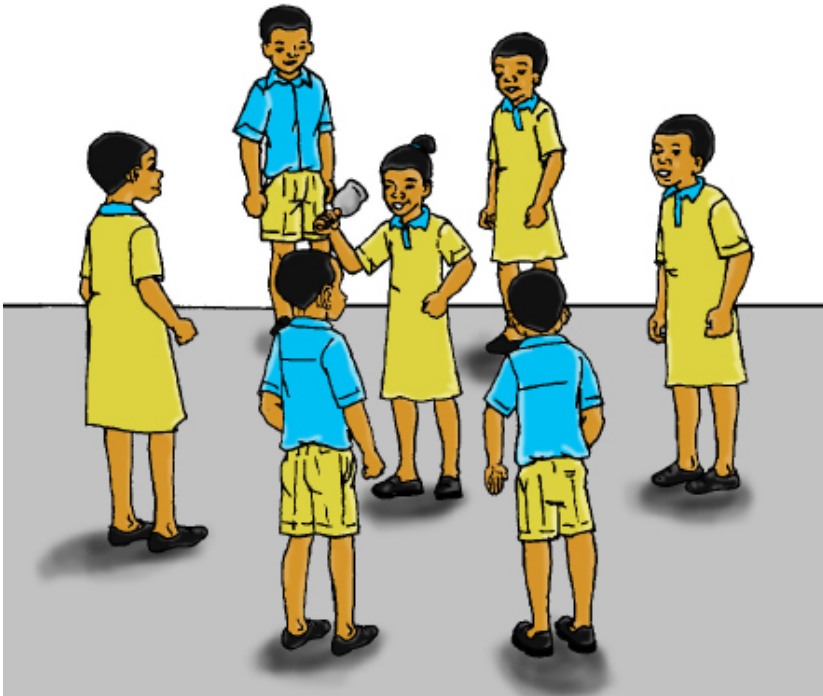


- When children play, they produce sound.
- When children sing, they produce sound.
- When playing a guitar, sound is produced.

FUN CORNER

- 1) Draw and colour the sources of sound in school.
- 2) Recite this poem

Sound oh! Sounds at school
When children play, sound
When children sing, sound
When the bell rings, sound



Sound at home



Activity 4

In groups

- 1) What kind of sounds do the items below produce? Do they produce the same sound as these sounds found at school?



- 2) When at home, listen to the sounds around the compound.
- 3) Can you name some sources of sound you have heard?
- 4) Which animals produce sound at home?

Learning point

- There are different sources of sounds around the school and at home.

FUN CORNER

Draw and colour a dog barking.



Remember!

Sharp or loud sounds can cause damage to the ears!



Check your progress 4b

- 1) What type of sound is produced by each of the animals shown in the pictures below?



A



B



C



D



E



F

4.5 Sense of hearing

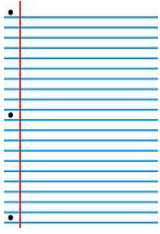


Activity 5

In pairs

- 1) Drop the following things on the floor. Tick the correct box with the kind of sound produced.

Picture	Loud	Soft
		
		
		
		



2) What did you use to differentiate the sounds?

Learning point

- Things that produce sound are called sources of sound.
- The ear is the organ for hearing.

FUN CORNER

Close one ear and role play listening to different



Remember!

We should protect our ears.

Did you know?

Horses have strong ability to hear sound from far.

Elephants have large ears that can get faintest sound.

4.6 Sense of taste



Activity 6

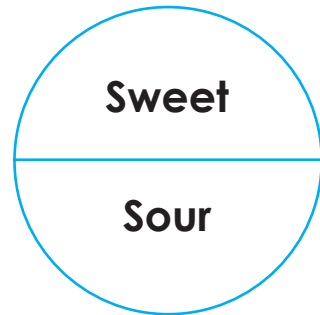
In groups

- 1) Play a game of tasting things.
- 2) Blindfold one member of the group and let him or her pick an item from a box and taste.



3) Let your friend tell you if you are right.

4) Draw a line to match each picture with the correct part of the circle.



5) How do the following taste?

	Sweet	Salty
	Bitter	Sour
	Sweet	Salty
	Bitter	Sour



Sweet

Salty

Bitter

Sour



Sweet

Salty

Bitter

Sour

Learning point

- The tongue is the organ for tasting.
- Some things taste sweet, bitter, salty or sour.
- Some things taste salty. Salt tastes salty.



Remember

Do not taste everything that you come across. Some things may be harmful to your health.

4.7 Sense of smell



Activity 7

In pairs

1) Smell these things.



- Which one has a smell?
- Do all things smell the same?

2) In pairs, play a game of smelling items.



3) Can you identify the items?

Learning point

- We use the nose to smell things.
- Our nose is the sense organ for smelling.

FUN CORNER

Role play a smelling game with a friend.






Remember

Dogs have a strong sense of smell. It can smell things that are very far.



Check your progress 4d

- 1) Match the sense with the sense organ in the table below.

Sense organ	Sense
	Sight
	Tasting
	Smelling





Hearing

4.7 The sense of touch



Activity 8

In pairs

- 1) Play a game of feeling things provided by the teacher.



- 2) Let your friend blindfold you and use your hands to touch things.
- 3) Touch and feel whatever is brought to you, one by one and say how it feels.
 - Is it cold or warm?

Learning point

- We use the skin to feel things around us.

FUN CORNER

Play a game of feeling things with a friend.



Remember!

Do not touch everything you come across, some things can be dangerous to you.



Check your progress 4c

1) How do the following things taste?



A



B



C



D

2) How do the following things feel?



A



B



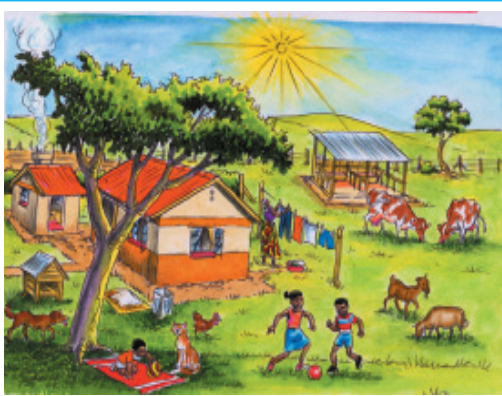
C

5.1 Weather changes

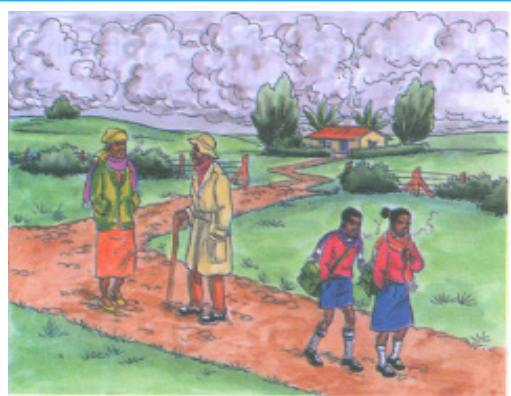


Activity 1

In pairs



A



B



C



D

1) What type of weather is shown by each picture?

Learning point

- Weather can change within a short time.
- Weather can be windy, cloudy, rainy, sunny or calm.

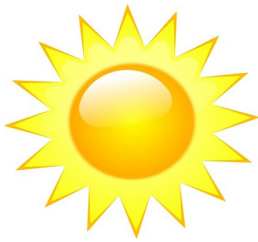
Weather symbols



Activity 2

In pairs

Weather symbol



A _____



B _____



C _____



D _____

1) What do you think the symbols above represent?

Learning point

We use weather symbols to record weather conditions of a particular day.

FUN CORNER

Draw the symbol of the weather today.

5.2 Recording of weather changes



Activity 3

In groups

- 1) The table below shows of the daily weather conditions. Use the table to answer question on the next page.

Daily weather condition		
Day	Morning	Afternoon
Monday	Sunny	Rainy
Tuesday	Calm	Windy
Wednesday	Cloudy	
Thursday	Sunny	
Friday	Sunny	
Saturday	Sunny	
Sunday	Cloudy	

5.3

Weather symbols and instruments



Activity 1

In pairs



1. Talk about the pictures below with your friend.

A



B



C



D



E



2. What does each picture show?

3. What type of weather is shown in each picture?

Learning point

The weather pictures above are called weather symbols.



Fun corner

1. Draw and colour weather symbols.
2. Stick them on a Manila paper
3. Hung the Manila paper on the notice board at the science corner.



Activity 2

Individually in a weather journal, copy and fill in weather changes throughout the given week. Use weather symbols to fill in the journal.

Day	Monday	Tuesday	Wednesday	Thurs- day	Friday	Satur- day	Sun- day
Morning							
Afternoon							

Learning point

Weather symbols are used to show the weather condition of each day.

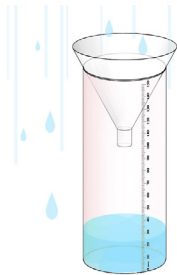


Activity 3

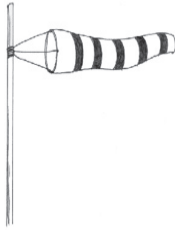
In groups



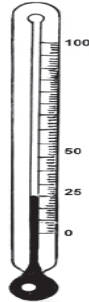
1. Talk about the instruments shown below.



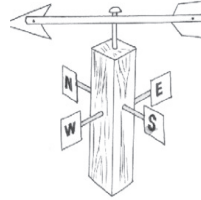
A



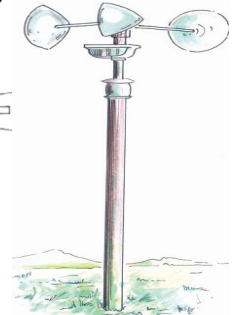
B



C



D



E

a) What are they used for?

b) Where are they found?

2. Draw and colour the weather instruments in your notebook.

Learning point

The instruments used for recording weather are kept in weather stations.





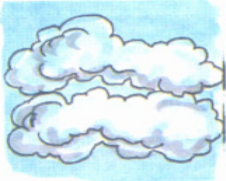


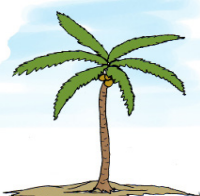






Fun corner

Visit a weather station near your school and identify the weather instruments.



Check your progress 5(a)

1. This is Nyibol's weather chart. Look at it carefully.

Day	Morning	Afternoon
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		



FUN CORNER

Draw the symbol of the weather today.

FUN CORNER

Use papers and sticks to make a fan. Use it to fan yourself when you feel hot.



Activity 5

In groups



A



B



C



D



- 1) Talk about what you see in the pictures with a friend.
- 2) What do you think has been put in the balloon, car tube and ball to make them big in size?

Learning point

- Air fills the ball, car tube and balloon to make them appear big in size



Remember!

The air we breathe is around us.

5.4 Effects of moving air

Learning point

- Moving air is called wind. Wind makes things to move.

FUN CORNER

Make a kite and fly it on a windy day.



Remember!

Wind can cause destruction of things.

5.5 Uses of moving air

Learning point

- Wind helps us to dry clothes, generate electricity and winnow grains.



Check your progress 5a

- 1) We cannot _____ air.
- 2) I make trees and flags move. Who am I? _____
- 3) Moving _____ makes a kite to fly.

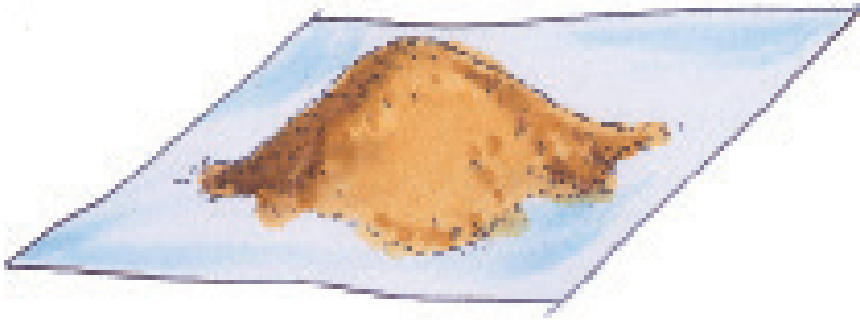
6.1 Collecting soils from different places



Activity 1: Feeling soil

In groups

- 1) Collect some soil and place it on a sheet of paper.



Soil on a sheet of paper

- What is the colour of the soil?
 - What things can you see in the soil?
- 2) Soil may have these things:
soil particles, dead plants and animals like dead insects, earthworms and millipedes.
 - 3) Now touch and feel the soil between your fingers.



Feeling soil between fingers

- Are there big and small particles?
- Are the particles smooth or rough?

Learning point

- Some soils are smooth like powder. Other soils are rough like sand.



Activity 2: Feeling different types of soil

In groups

- 1) With the help of your teacher collect soil from the garden, roadside, river and river bank.
- 2) Look at each type of soil.
- 3) Touch and feel each soil collected.



Feeling soils from different places

- Which soil has the largest particles?
 - Which soil has small particles?
 - Which one feels soft when touched?
 - Which one sticks to the fingers when wet?
- 4) Your teacher will help you to group the soils collected into clay, sand and loam.

Learning point

Soils with large particles like sand feel rough.

Soils with small particles like clay feel smooth.



Activity 3: Drawing on soil

In groups

- 1) Collect some dry soil.
- 2) Pour it on a level ground or floor.
- 3) Make the soil levelled with a stick or ruler.
- 4) Use your finger to write numbers, letters patterns or shapes on the soil.



Drawing on soil

- 5) Now draw a picture of a bird and house on the soil.
- 6) Step on the soil to make a foot print.
- 7) Now make a palm print like the one shown on the soil using your hand.



Hand



Palm print



Check your progress 6a

- 1) Different soils have different textures. _____
(True or False)
- 2) Collect soils from these places: home garden, on the roadside, an anthill. Feel the soils.
 - a) The soil from the home garden feels _____.
 - b) The soil from the way to school (road) feels _____.
 - c) The soil from an anthill feels _____.

6.2 Mixing soils with water





Activity 4

In groups

- 1) Put soil in the three containers and add water.



- 2) Tick the one that allows water to pass through fastest.

Picture	Name
	<input type="checkbox"/>
	<input type="checkbox"/>

3) How does the three types of soil feel after mixing with water?

- Which soil mixes easily with water?

Learning point

- Clay soil

Clay soil is smooth and sticky when wet.

- Sand

Sand is less sticky when wet and less smooth.

- Gravel

When wet, it is not sticky and has a rough feel.



Check your progress 6b

- 1) I am a type of soil used to build roads. Who am I? _____
- 2) I am a type of soil found mostly in rivers beds. Who am I? _____
- 3) I am a type of soil used to model dolls and pots. Who am I? _____

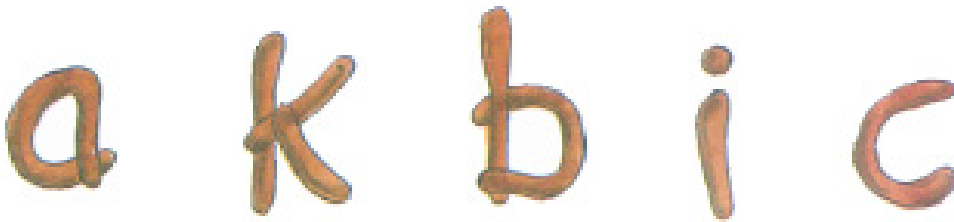
6.3 Modelling with soil



Activity 5

In pairs

1) Model the following.



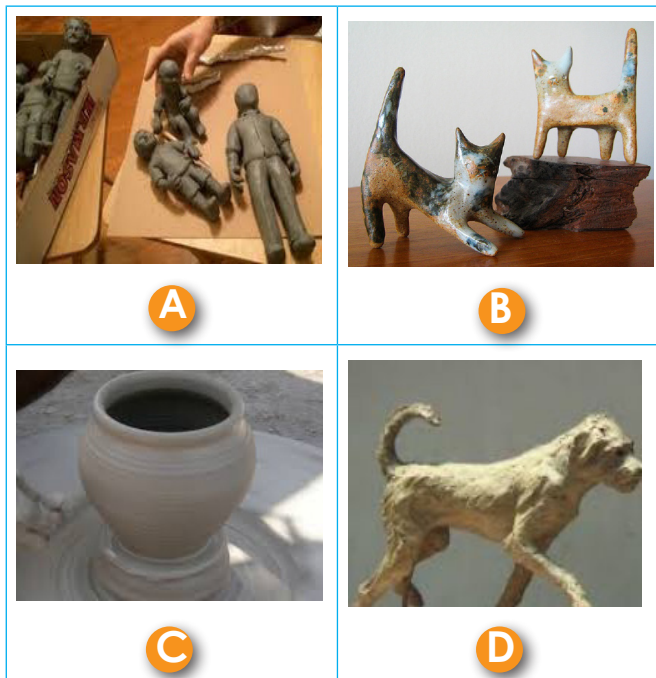
2) Model the following objects using clay.



- 3) Leave the models to dry for three days.
- 4) How does the letters, numbers and objects look like?

Learning point

- Different things are modelled using clay soil. For example:



- Clay soil is the best soil for modelling.
- Ribbons from other soils such as sand and gravel crack after some time when they dry.

FUN CORNER

Model a doll, cup, house and a car using clay soil.



Remember!

Clay is the best soil for modelling.



Check your progress 6c

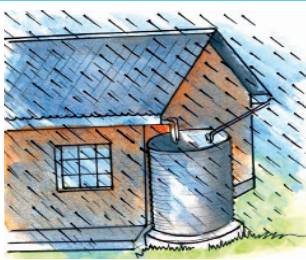
- 1) The soil that makes the poorest models is _____ soil. (clay, gravel)
- 2) Soil which feels smooth when touched is _____ soil (Clay, gravel, sand)
- 3) A doll is made from which type of soil? _____

7.1 Sources of water



Activity 1

In pairs



A



B



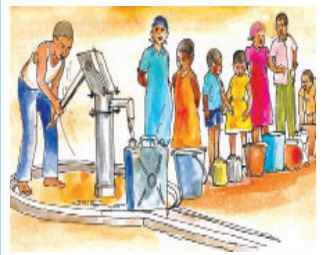
C



D



E



F

- 1) Talk about what is in the pictures above.
- 2) Where do you get water for use at home and school from?
- 3) Which source of water is found near your home?

Learning point

- We get water from rivers, rain, wells, dams, oceans, lakes, seas and boreholes.
- These are called sources of water.



Remember!

Dirty water causes diseases.

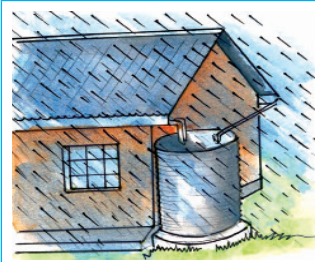
FUN CORNER

Draw, colour and name two sources of water.



Check your progress 7a

1) Name this sources of water.



This is



This is a



This is a

2) Rearrange the following letters to form the correct source of water.

a) ohrleboe _____

b) inar _____

c) rrvei _____

d) ealk _____

7.2 Uses of water



Activity 2

In groups tell:



- 1) What is happening in the pictures above?
- 2) How do you use water at home?

Learning point

- We use water every day both at home and at school.

FUN CORNER

Recite the following poem

Oh! water, precious water!

When thirsty, water

Oh! water, precious water!

Washing clothes, water

Oh! water, precious water!

For bathing water

Oh! water, precious water!

Crops growing, water

Oh! water, precious water!

When cooking, water



Remember!

We should always drink clean boiled water.

7.3 Using water well



Activity 4

In pairs



A



B

- 1) What is happening in each picture?
- 2) What do you think will happen if the tap is left to run for a long time?
- 3) Talk in groups how we re-use water at home.

Learning point

- We should use water sparingly.

- We should not waste water.

FUN CORNER

Practise watering plants or flowers at home and in school.




Remember!

We should always close taps after use to avoid wasting water.



Check your progress 7b

- 1) How do you use water well at home?
- 2) Match the activity in the picture with its meaning.

Activity	Words
	<p>Watering plants</p>



Cooking food



A girl drinking water



Children swimming

7.4 Measuring water



Activity 5

In groups

What you need

- Water
- Measuring cylinder
- Small containers of different shapes and sizes
- Four containers of the same size and shape (cups)
- Plastic bottles of various sizes

What to do

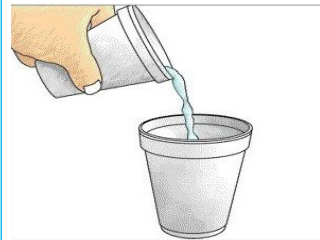
- 1) Fill all the containers with water.
- 2) Which containers hold more or less water?



A



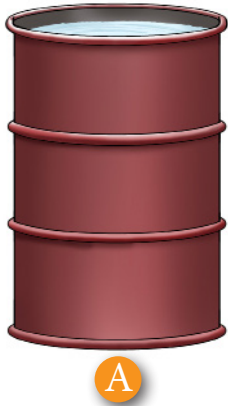
B



C

- 3) Pour the water in the small containers to fill the big containers

- 4) Measure the amount of water that fills containers using the measuring cylinder.
- Do all the containers hold the same amount of water?
 - Which one holds more or less?



Learning point

- Big containers hold more water than small containers

FUN CORNER

Practise filling a big container with water using a small container. How many small containers of water do you use to fill a big container?



Remember!

We use small and big containers at home to store water.

7.5 Floating and sinking



Activity 6

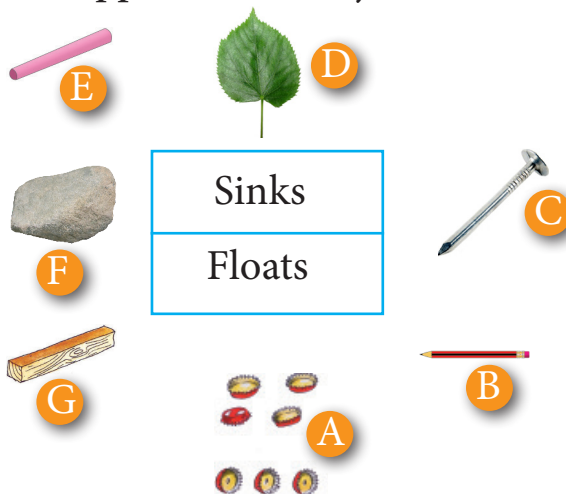
In pairs

What you need

Stones, bottle tops, pencil, rubber, ruler, basin of water, piece of paper, nails, wooden blocks, coins and keys in classroom.

What to do

- 1) Put each of these objects in a basin of water.
- 2) Match what happens to the objects in the diagram below.



Learning point

- When an object remains on top of water, we say it is floating.
- When an object goes down into the water, we say it is sinking.



Remember!

When you swim you float on water.



Activity 7.7

In pairs

What you need

Big and small stones, large and small piece of paper.

What to do

- 1) Place the small stone on water. What happens?
- 2) Place the bigger stone on water. What happens?
- 3) Place small and big piece of paper on water. What happens?

Learning point

- Floating and sinking is not affected by size of the object.

FUN CORNER

Make a paper boat and sail it on water.



Activity 7.8

In groups

What you need

A basin of water, a bottle top and a hammer.

What to do

- 1) Place a bottle top facing upwards on a basin of water.
 - What happens? Does it sink or float?
- 2) Using a hammer or stone,
- 3) hit bottle top into a ball.
- 4) Place it back in water.
 - Does the bottle top sink or float?

Learning point

- Change in shape of an object can make it sink or float.



Activity 7.9

In groups

What you need

Water in a basin, two plastic lids of equal sizes and some stones.

What to do

- 1) Place the two lids on water.
- 2) Place two or three stones on the lid and label it A.
- 3) Place six to nine stones in another lid and label it B.
 - What happens?

Learning point

- Weight affects floating and sinking of objects.

FUN CORNER

Role play floating and sinking of objects in water.





Check your progress 7c

Fill the table below with the following objects.

Papers, stone, keys, coins, wooden block, rulers

Objects which float	Objects which sink
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____