

**KAZO DISTRICT LOCAL GOVERNMENT
EDUCACTION AND SPORTS DEPARTMENT
P.4 SCIENCE LESSON NOTES TERM II 2023**

LESSON ONE

TOPIC: THE HUMAN BODY ORGANS

SUB TOPIC: THE MAJOR ORGANS OF THE HUMAN BODY

Read and write these words

- Eyes
- Ears
- Heart
- Kidney
- Lungs

Major external body parts

- Eyes
- Ears

Major internal body parts

- Lungs
- Brain
- Stomach
- Kidneys
- Liver
- Heart
- Urinary bladder

The structure of the major organs of the human body (St. Benard integrated science pupil's BK4 Pg 87)

ACTIVITY

1. Name one example of external body organs
2. Outline four examples of internal body organs
3. Why are lungs referred to as internal body organs?
4. On which part of the body do we find the eye?
5. Draw and label the structure of the sense organ used for seeing.

LESSON TWO

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: THE EYE

Read and write these words

- Sight
- Seeing
- Eye
- Organ

THE EYE

The eye is used for seeing

Structure of the eye

(St. Benard integrated science pupil's BK4 Pg 88)

The eye is on the front part of the head called face. Human beings have two eyes

ACTIVITY

1. What is the main function of the eye?
2. How many eyes does your mother have?
3. Match the following body organs with their senses;
 - Organ Sense
 - Eye Tasting
 - Nose Seeing
 - Tongue Smelling

LESSON THREE

TOPIC: THE HUMAN BODY

S.TOPIC: THE EYE

Read and write these words

- Light
- Trachoma
- Image
- Night blindness

HOW THE EYE WORKS

- Light rays enter through an opening called pupil. The iris controls the amount of light entering the eye.
- When light reaches the lens, it bends light rays to make an image on the retina.
- The retina is sensitive to light

Qn; Mention two fluids found in the eye

- Aqueous humor
- Vitreous humor

Diseases of the eye

- Trachoma
- Night blindness
- Conjunctivitis

ACTIVITY

1. Name the vector that spreads trachoma
2. Name the deficiency disease that attacks the eyes
3. How does light enter the eye?
4. Where is the image found in the eye?
5. What is the sensitive part of the eye?

LESSON 4

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: THE EYE

Read and write the following words

- | | |
|-------------|----------|
| • Towels | • Bright |
| • Regularly | • Dusty |

Ways of caring for the eye

- | | |
|--|--|
| • Clean your eyes regularly with clean water | • Do not read in dim light |
| • Avoid sharing face towels with friends | • Do not pierce the eye with sharp objects |
| • Do not look into direct sunlight | • Avoid staying in dusty environment |
| • Do not read in bright sunlight | |
| • | |

ACTIVITY

1. Mention two ways how a P4 pupil can care for his/ her own eyes
2. Give a reason why it is dangerous for Sarah to share a face towel with her friend
3. Why is it dangerous to look into direct sunshine?
4. State the importance of cleaning our eyes regularly.

LESSON FIVE

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: THE BRAIN

Read and write these words

- Brain
- Memory
- Information
- Receives
- Tobacco

THE BRAIN

Uses of the brain

- It receives information
- It stores information
- It is used for thinking
- It helps us to make decisions

Things that damage the brain

- Drinking alcohol
- Over smoking marijuana
- Severe accidents
- Diseases e.g. fever

ACTIVITY

1. State two functions of the brain
2. Which part of the body protects the brain?
3. How is too much consumption of alcohol dangerous to one's life?
4. Apart from over smoking, mention two causes of brain damage.

LESSON 6

TOPIC: THE HUMAN BODY

S.TOPIC: THE BRAIN

Read and write these words

- Fever
- Malaria
- Alcohol
- Tobacco
- Marijuana

DISEASES OF THE BRAIN

- Cerebral malaria
- Meningitis
- Memory loss

HOW TO CARE FOR THE BRAIN

- Avoid taking too much alcohol
- Have enough rest after a heavy work
- Feed on a balanced diet
- Doing regular physical exercises

- Avoid smoking marijuana

ACTIVITY

1. State two ways of keeping the brain in good working conditions
2. What do you understand by the term balanced diet?
3. Identify two importance of performing regular physical exercises

LESSON 7

TOPIC: THE HUMAN BODY

Read and write these words

- | | |
|-----------|---------|
| • Ear | • Sound |
| • Hearing | • Pinna |

THE EAR

- A human being has two ears
- Ears collect sound waves from all directions
- The ears are used for hearing.

THE STRUCTURE OF THE EAR

(St. Benard int. sci pupil's BK4 Pg 88)

ACTIVITY

1. Where do we find the ear on the human body?
2. Draw and name the sense organ for hearing
3. Name the sense organ that uses sound energy
4. Match the following animals with their sound

Animals	Sound
• Cow	bellow
• Cat	quark
• Bull	mew
• Duck	moo
• Snake	hisses

LESSON 8

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: THE EAR

Read and write these words

- Wax
- Ear buds

- Noise
- Needles

HOW THE EAR CAN BE DAMAGED

- Too much wax in the ear
- Pushing solid materials in the ear
- Using sharp objects to clean the ear

WAYS OF CARING FOR THE EAR

- Clean the ear with clean water and soap
- Avoid being in noisy place
- Do not use sharp objects to clean the ear
- Use cotton buds to clean the ears
- Never push anything into the ears e.g. beads, seeds, stones etc

ACTIVITY

1. State two ways of caring for the ear
2. Identify the danger of too much wax in the ear
3. What is the danger of being in noisy places to the ear?
4. Give two habits that damage the ear

LESSON 9

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: THE URINARY BLADDER

Read and write these words

- Muscular
- Urine
- Bladder
- Kidneys

THE URINARY BLADDER

- The urinary bladder is a muscular organ
- It stores urine for a short time
- Urine from the bladder passes out through the urethra

THE STRUCTURE OF THE URINARY BLADDDER

(St. Benard int. sci pupil's BK 4 Pg 92)

ACTIVITY

1. State the function of the urinary bladder
2. Indicate the position of the bladder on the diagram shown below. (use an arrow with letter A)

3. What is the importance of the urethra?

LESSON 10

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: THE KIDNEYS

Read and write these words

- Kidneys
- Filter
- Urine
- Abdomen

THE KIDNEY

- The human body has two kidneys that is the right and left kidneys
- Kidneys are found behind the abdomen

THE STRUCTURE OF THE KIDNEY

(St.Benard int. science pupil's BK4 Pg 92)

USE OF THE KIDNEYS

- Kidneys filter blood

LESSON 11

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: THE KIDNEYS

Read and write these words

- Stones
- Failure
- Bilharzias
- Diseases
- Fresh water snail

DISEASES OF THE KIDNEY

- Kidney stones
- Kidney failure
- Bilharziasis

PREVENTION OF KIDNEY DISEASES

- Feed on a balanced diet
- Drinking a lot of water
- Empty your bladder as soon as it gets filled
- Go for regular medical checkups

ACTIVITY

1. Name two diseases that affect the kidney
2. Outline two ways of preventing kidney diseases
3. Which vector spreads bilharzias?

LESSON 12

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: THE STOMACH

Read and write these words

- Stomach
- Diarrhea
- Mouth
- Organs

THE STOMACH

Importance of the stomach

The stomach stores food for a short time

STRUCTURE OF THE STOMACH

(St. Benard int. sci pupil's BK4 pg 89)

Diseases of the stomach

- Peptic ulcers
- Diarrhea
- Dysentery
- Typhoid

DISORDERS OF THE STOMACH

- Vomiting
- Constipation
- Indigestion

ACTIVITY

1. State the function of the stomach
2. State two diseases of the stomach
3. Outline one disorder of the stomach
4. Draw the diagram of the stomach in the space below
5. What is the difference between diarrhea and dysentery?
6. Mention two ways of preventing diarrhea

LESSON 13

TOPIC: THE HUMAN BODY PRGANS

S.TOPIC: THE LUNGS

Read and write these words

- Breathe
- Breathing
- Breath
- Oxygen
- Carbon dioxide

THE LUNGS

- There are two lungs in the human body
- The lungs are found in the chest cavity

Importance of the lungs

The lungs are used for breathing

THE STRUCTURE OF THE LUNGS

(St.Benard int. sci pupil's BK4 Pg 91)

ACTIVITY

1. What is the main function of the lungs?
2. Name the part of the air that we;
 - a) Breathe in
 - b) Breathe out
3. Why is the trachea made up of rings of cartilage?
4. Identify the part that protects the lungs

LESSON 14

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: THE HEART

Read and write these words

- Heart
- Blood
- Chest cavity
- Carbon dioxide

THE HEART

The heart is found in the chest cavity

Importance of the heart

It pumps blood to all body parts

THE STRUCTURE OF THE HEART

(St. Benard int. sci pupil's BK4 Pg 90)

WAYS OF CARING FOR THE HEART

- Doing regular physical exercises
- Feeding on a balanced diet
- Do not feed on too much fatty foods
- Drinking a lot of water

ACTIVITY

1. How is the heart Important in the body?
2. Name the part that protects the heart
3. Where in the body do we find the heart?
4. Outline two ways of keeping the heart in a good working condition

LESSON 15

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: THE LIVER

Read and write these words

- Liver
- River
- Juice

THE LIVER

The liver is the largest body organ in the body

It is dark red in colour

Uses of the liver

- It produces bile
- It stores bile
- It changes poisonous substances to non-poisonous e.g. alcohol

THE STRUCTURE OF THE LIVER

(Functional integrated science pupil's BK4 Pg 73)

ACTIVITY

1. Name the largest body organ in the body
2. Name the juice produced in the liver
3. Draw the liver in the space below
4. State two functions of the liver

LESSON 16

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: HOW THE HUMAN BODY WORKS

Read and write these words

- Useful
- Absorb
- Faeces
- Anus

HOW THE HUMAN BODY WORKS

- The body receives food and water through the mouth
- The body also receives air through the nose
- Food is anything we eat and is useful to the body
- Food passes through the mouth to the stomach

- Food is broken down into smaller and simpler particles during digestion.
- Food is then absorbed into the blood stream and transported to all body parts for use
- The food that is not digested goes to the large intestines and then rectum to be pushed out through the anus as faeces

HOW THE BODY USES FOOD AND OXYGEN TO GET ENERGY

Food is absorbed in the body to give us energy

Energy is the ability to do work

Uses of food in the body

- For building our bodies
- For giving our body energy
- For protecting our bodies against diseases

ACTIVITY

1. Name the part of the body that takes in food
2. What is the importance of the nose to the body
3. What name is given to the process by which food is broken down into small and simpler particles?
4. Where does absorption of food take place in the body?
5. State two functions of food in the body
6. Define the term energy

LESSON 17

TOPIC: THE HUMAN BODY ORGANS

S.TOPIC: HOW FOOD AND OXYGEN ARE CARRIED TO DIFFERENT PARTS OF THE BODY

Read and write these words

- Oxygen
- Carbon dioxide
- Waste
- Sweat
- Sweating

HOW FOOD AND OXYGEN ARE CARRIED TO DIFFERENT BODY PARTS

- The heart receives blood from all body parts and pumps it to the lungs to pick oxygen
- Blood with oxygen goes back to the heart to be pumped to all body parts

HOW THE HUMAN BODY REMOVES WASTE PRODUCTS

Waste products are substances that are produced in the body and are not needed by it

Examples of wastes in the body

- Excess water(sweat)
- Carbon dioxide
- Undigested food particles(faeces)
- Excess salts
- Urine

The removal of waste products from the body is called excretion

ACTIVITY

1. Why does blood go to the lungs before it is pumped to the other body parts?
2. Outline only three waste products from the body
3. Match the following body organs with the wastes they excrete from the body

Organs	wastes
Skin	faeces
Kidney	carbon dioxide
Lungs	urine
Anus	sweat

LESSON 18

TOPIC: THE TEETH

S.TOPIC: SETS OF TEETH

Read and write these words

- Teeth
- Milk
- Permanent
- Break

THE TEETH

The teeth break food into small particles

SETS OF TEETH

There are two sets of teeth namely;

- I. Milk teeth
- II. Permanent teeth

I. MILK TEETH

These are the first set of teeth that develops in babies

They are 20 milk teeth in a baby

STRUCTURE OF THE MILK TEETH

(St. Benard int.sci BK 4 Pg 97 diagram A)

II. PERMANENT TEETH

This is a set of teeth that replaces the milk teeth

These start to develop from the age about five years

There are 32 permanent teeth in an adult

STRUCTURE OF THE PERMANENT TEETH

(St. Benard int. sci. BK4 Pg 97 diagram B)

ACTIVITY

1. State the main function of teeth to animals
2. Name two sets of teeth
3. What set of teeth is found in;
Babies
Adults
4. How many teeth does an adult have?
5. Name the type of teeth missing in the milk set of teeth

LESSON 19

TOPIC: THE TEETH

S.TOPIC: TYPES OF TEETH

Read and write these words

- Incisors
- Canines
- Premolars
- Molars

TYPES OF TEETH

There are four types of teeth

- I. Incisors
- II. Canines
- III. Premolars
- IV. Molars

I. MOLARS

- These are four front teeth at the top and bottom of the mouth
- They are used for biting/ cutting food

STRUCTURE OF AN INCISOR TOOTH

(Functional int. sci pupil's BK4 Pg 79)

Adaptation of incisor tooth to its function

- It is flat on top
- It has sharp edges
- It is chisel shaped

ACTIVITY

1. State the importance of incisor teeth
2. Draw and name the type of tooth used for biting food
3. How are incisors able to cut food?

LESSON 20

TOPIC: THE TEETH

S.TOPIC: CANINES

Read and write these words

- Canines
- Edge
- Tearing
- Sharp

II. CANINES

Canines are two on top and two at the bottom

The canine teeth are used for tearing food

Examples of animals with developed canine teeth

- Dogs
- Cats
- Lions

STRUCTURE OF A CANINE TOOTH

(Functional int. sci pupil's BK4 Pg 79)

Adaptations of canine teeth to their function

- They are sharp
- They are pointed

ACTIVITY

1. What is the main function of the canine teeth?
2. The diagram below is of a type of tooth

- a) Name the type of tooth shown in the diagram
- b) How is the above tooth adapted to its function?
- c) List down two animals with well developed canine teeth

LESSON 21

TOPIC: THE TEETH

S.TOPIC: PREMOLARS

Read and write these words

- Premolars
- Broad
- Cusps
- Chewing
- Grinding

PREMOLARS

There are four premolars in each jaw of a person

Function of premolars

- For chewing food
- For grinding food

STRUCTURE OF A PREMOLAR TOOTH

(Functional int. sci BK4 Pg 79)

ADAPTATION OF PREMOLARS TO THEIR FUNCTION

- They are broad
- They have cusps

ACTIVITY

1. How many premolars does an adult have?
2. State one function of premolars to man
3. Name the type of tooth shown in the diagram

4. How is the above tooth adapted to its function?

LESSON 22

TOPIC: THE TEETH

S.TOPIC: MOLARS

Read and write these words

- Ridges
- Broad
- Blunt
- Molars

THE MOLARS

Molars are six in each jaw

They are found at the back of each jaw

Uses of the molars

- For grinding food
- For chewing food

STRUCTURE OF A MOLAR TOOTH

(Functional int. sci pupil's BK4 Pg 79)

ADAPTATIONS OF MOLAR TEETH TO THEIR FUNCTION

- They have cusps/ ridges
- They are broad/ wide

ACTIVITY

1. State one function of a molar tooth
2. Draw a molar tooth in the space below
3. How are molars adapted to their function?
4. State one difference between premolars and molars
5. Identify the functional similarity between molars and premolars

LESSON 23

TOPIC: THE TEETH

S.TOPIC: REGIONS OF A TOOTH

Read and write these words

- Crown
- Enamel
- Regions
- Incisors

REGIONS OF A TOOTH

They include;

- I. The crown
- II. The neck
- III. The root

A DIAGRAM SHOWING REGIONS OF A TOOTH

(St Benard int. sci. pupil's BK4 Pg 103)

Functions of regions of a tooth

- I. The crown: it protects the inner parts of a tooth
- II. The neck: it separates the crown from a root
- III. The root: it fixes the tooth into the jaw bone

ACTIVITY

1. Name any two regions of a tooth
2. Draw an incisor tooth and on it label the crown and neck using arrows
3. Name the region of a tooth where the enamel is found

LESSON 24

TOPIC: THE TEETH

S.TOPIC: STRUCTURE OF A HUMAN TOOTH

Read and write these words

- Enamel
- Dentine
- Pulp cavity
- Nerves

PARTS OF A HUMAN TOOTH

(Functional integrated science pupil's BK4 Pg 80)

Functions of the parts of a human tooth

1. Enamel: it protects the inner parts of a tooth
Mineral salts that make up the enamel
 - I. Calcium
 - II. Phosphorous
2. Dentine: it absorbs shock in a tooth
3. Pulp cavity: it is the most sensitive part of a tooth
It senses heat, coldness and pain
4. Blood vessels: they absorb food and oxygen for the tooth

ACTIVITY

1. Name two parts of a tooth
2. The diagram below is of a tooth. Using an arrow with letter A, show the enamel

3. How is calcium important in a baby's diet?

LESSON 25

TOPIC: THE TEETH

S.TOPIC: CARING FOR THE TEETH

Read and write these words

- Tooth paste
- Dental flossing
- Rinsing
- Particles

THINGS WE USE TO CARE FOR OUR TEETH

- Tooth paste
- Tooth brush
- Stick used as a brush
- Clean water
- Dental floss

Uses of the things we use to care for our teeth

1. Tooth brush: it removes food particles in between the teeth
2. Tooth paste: it kills germs in the teeth
3. Dental floss: it removes food particles remaining in between teeth

ACTIVITY

1. Outline three materials we use to care for our teeth
2. State the importance of brushing our teeth using tooth paste
3. Name the mineral salt present in tooth paste that is responsible for whitening teeth
4. Draw a diagram of a tooth brush in the space below

LESSON 26

TOPIC: THE TEETH

S.TOPIC: WAYS OF CARING FOR THE TEETH

Read and write these words

- Dental flossing
- Tooth paste
- Twice
- Healthy

WAYS OF CARING FOR OUR TEETH

- a) Brushing teeth after every meal
- b) Do not share tooth brushes with others
- c) Never brush hard
- d) Rinsing mouth after meals
- e) Dental flossing
- f) Going for regular dental check up
- g) Avoid eating too much sweet foods
- h) Do not open soda bottles with teeth
- i) Feeding on food rich in minerals and vitamins

ACTIVITY

1. State the importance of brushing teeth with tooth paste
2. Why are children not advised to take too many sweets?
3. Give a reason why it is not advisable to open soda using our teeth
4. Mention two minerals responsible for the formation of strong teeth
5. Name one part which we should brush carefully
6. Why is it dangerous to brush hard?

LESSON 27

TOPIC: THE TEETH

S.TOPIC: TEETH DISEASES

Read and write these words

- Dental
- Cavity
- Plaques
- Decay

TEETH DISEASES

- a) Dental cavity/ Tooth decay
A cavity is a hole in the tooth
It is caused when bacteria enter the teeth

Signs of dental cavity

- The tooth becomes painful
 - The tooth develops a hole in it
- b) Dental plaques
Dental plaques are coatings on the teeth caused when the left over food sticks on the teeth to form a brown coating
They are caused by bacteria
It may cause tooth decay if not removed

ACTIVITY

1. What do you understand by cavity?
2. State one sign of dental cavity
3. Identify one sign of dental plaques

LESSON 28

TOPIC: THE TEETH

S.TOPIC: GINGIVITIS (GUM DISEASES)

Read and write these words

- Bacteria
- Gingivitis
- Improper
- Sugary

GINGIVITIS (GUM DISEASES)

It is caused by bacteria formed by food particles that keep piling between the teeth

Causes of gingivitis

Improper cleaning

Signs and symptoms of gingivitis

- The gum becomes swollen
- The gum becomes big red
- Bleeding gum when brushing
- Bad smell from the mouth

Prevention and control of gingivitis

- Avoid eating sugary foods
- Brushing teeth after every meal
- Seek medical attention in case of pain

ACTIVITY

1. State the germ that causes gingivitis
2. Name the food value responsible for the formation of healthy gums
3. Identify two signs of gingivitis

LESSON 29

TOPIC: THE TEETH

S.TOPIC: DISORDERS OF THE TEETH

Read and write these words

- Improper
- Cracks
- Growth
- Broken

DISORDERS OF THE TEETH

- Tooth cracks
- Broken teeth
- Improper growth of teeth

Signs of improper growth of teeth

- Developing of gaps between the teeth
- Some teeth extend out of the mouth
- Some teeth grow on top of others
- Some teeth grow past the line of others

Causes of improper growth of teeth

- Thumb pr finger sucking
- Finger nails biting
- Late removal of milk teeth

ACTIVITY

1. List down two disorders of the teeth
2. Why is it not good to open bottle tops using teeth?
3. Give two signs of improper growth of teeth
4. Mention one cause of improper growth of teeth

LESSON 30

TOPIC: PERSONAL HYGIENE

S.TOPIC: PERSONAL HYGIENE

Read and write these words

- Hygiene
- Cleanliness
- Personal
- Hygiene

PERSONAL HYGIENE

Hygiene means keeping clean

Personal hygiene is the general cleanliness of the body and things we use

OR

It is the keeping of our body clean

Parts of the body that need to be kept clean

- Head
- Hair
- Teeth
- Hands
- Legs
- Eyes
- Ears
- Nose
- Body
- Clothes

- Shoes

ACTIVITY

1. Differentiate between hygiene and personal hygiene
2. State two parts of the body that need to be kept clean

LESSON 31

TOPIC: PERSONAL HYGIENE

S.TOPIC: IMPORTANCE OF KEEPING OUR BODIES CLEAN

Read and write these words

- Dirt
- Germs
- Scabies
- Cleanliness
- Odor

IMPORTANCE OF KEEPING OUR BODIES CLEAN

- To remove dirt
- To avoid ad smell or odor
- To be healthy
- It prevents sickness

HOW TO KEEP OUR BODIES CLEAN

- By bathing regularly
- Cutting finger nails short
- Brushing teeth after every meal
- Washing hands with soap after visiting a latrine
- Washing hands with soap before eating
- Washing our clothes
- Cleaning places we live in
- Cleaning our teeth

ACTIVITY

1. State two importance of proper personal hygiene
2. Name two diseases that result from poor personal hygiene

LESSON 32

TOPIC: PERSONAL HYGIENE

S.TOPIC: WASHING HANDS

Read and write these words

- Germs
- Dirt
- Dirty
- Serving

a) WASHING HANDS

Reasons why we wash hands

- To remove germs
- To remove dirt
- To prevent sickness

When do we wash our hands?

- Before preparing food
- Before serving food
- Before eating food
- After eating food
- After visiting a latrine/ toilet

Materials used in washing hands

- Soap
- Cleaning water

ACTIVITY

1. Identify two reasons why we wash our hands
2. State two things used to wash our hands
3. State the use of the following in washing our hands
 - I. Soap
 - II. Water

LESSON 33

TOPIC: PERSONAL HYGIENE

S.TOPIC: CLEANING OUR TEETH

Read and write these words

- Rotten
- Decay
- Particles
- Rinse

CLEANING OUR TEETH

Effects of food that remains in our teeth

- It causes bad smell in the mouth
- It destroys the gum
- It makes the teeth decay

Materials used to clean our teeth

- Tooth paste
- Tooth brush
- Brush stick
- Dental floss

STEPS TAKEN IN BRUSHING TEETH

- Brush gently with a tooth brush moving it upwards and downwards
- Brush the inside of the mouth and the tongue
- Rinse with clean water

ACTIVITY

1. Outline two materials used to clean our teeth
2. Give two effects of having food remains in between the teeth for a long time
3. Give a reason why it is not advisable to move the tooth brush sideways while brushing
4. When should a P4 pupil brush his/her teeth?
5. Mention two ways of promoting oral health

LESSON 34

TOPIC: PERSONAL HYGIENE

S.TOPIC: CLEANING OUR CLOTHES

Read and write these words

- Bedbugs
- Vectors
- Ironing
- Laundry

CLEANING OUR CLOTHES

Ways of cleaning our clothes

- By washing them
- Ironing our clothes

REASONS FOR IRONING OUR CLOTHES

- To kill germs
- To kill vectors
- To look smart

ACTIVITY

1. State two ways of cleaning our clothes
2. Draw and name two items used in washing clothes
3. State two reasons why we iron clothes
4. Mention two examples of vectors found in dirty clothes
5. What is the difference between a germ and as vector?

LESSON 35

TOPIC: PERSONAL HYGIENE

S.TOPIC: THINGS USED FOR KEEPING OUR BODIES CLEAN

Read and write these words

- Towel
- Razorblade
- Sponge
- Scrubbing

THINGS USED FOR KEEPING OUR BODIES CLEAN

1. Water: it removes dirt
It removes germs
2. Soap: it kills germs
3. Towel: for drying our skin after bathing
4. Tooth paste: it kills germs in the teeth
5. Razorblade: for cutting finger nails short
For trimming hair
6. Sponge: for scrubbing the body
7. Tooth brush
8. Pair of scissors

ACTIVITY

1. Mention two things used in promoting personal hygiene
2. State the use of the following materials in promoting personal hygiene
 - I. Towel
 - II. Sponge
3. Draw and name two items used in cleaning our bodies

LESSON 36

TOPIC: PERSONAL HYGIENE

S.TOPIC: KEEPING BEDDINGS AND CLOTHING CLEAN

Read and write these words

- Beddings
- Clothing
- Mattresses
- Pillows

KEEPING BEDDINGS AND CLOTHING CLEAN

Beddings: e.g. bed sheets, blankets, bed covers, mattresses and pillows

Clothing: refers to what is worn on the body e.g. petticoats, brassieres, shirts, dresses, under wares, stockings

Ways of keeping beddings clean

- Putting beddings under the sun
- Washing beddings regularly
- Ironing beddings

Reasons why we clean beddings

- To be healthy
- To avoid bad smell
- To be comfortable during sleep

ACTIVITY

1. Identify two examples of;
 - I. Beddings
 - II. Clothing
2. Give two ways of keeping beddings clean
3. Why is it important to keep beddings clean?
4. State reasons for carrying out the following practices;
 - I. Putting beddings in the sun
 - II. Ironing clothes

LESSON 37

TOPIC: OUR FOOD

S.TOPIC: FOOD

Read and write these words

- Energy
- Repair
- Tissues
- Building

FOOD

Food is something good to eat or drink and has a value in our body

Sources of food

- Gardens
- Markets
- Shops
- Animals

Importance of food

- Food gives us energy
- Food builds our bodies
- Food repairs worn out body tissues
- Food protects our body against diseases

ACTIVITY

1. What is food?
2. State the main source of food in rural areas
3. Identify three uses of food in our bodies
4. Match the items in list A with those in list B correctly

List A	List B
Sheep	goat-meat
Cattle	mutton
Pigs	beef
Goat	pork

LESSON 38

TOPIC: OUR FOOD

S.TOPIC: FEEDING ANMD NUTRITION

Read and write these words

- Nutrition
- Nutrients
- Functioning
- Supplied

FEEDING AND NUTRITION

Feeding is the taking in of food

Nutrition is the process by which the body is supplied with food nutrients for proper functioning

REASONS WHY WE EAT FOOD

- To stop hunger
- It is a habit
- It brings happiness
- It is a sign of hospitality
- For good body health

ACTIVITY

1. Differentiate between feeding and nutrition
2. State two reasons why we eat food
3. Write 5H's in full

LESSON THIRTY NINE

TOPIC: OUR FOOD

S.TOPIC: A BALANCED DIET

Read and write these words

- Diet
- Meal
- Correct
- Right

A BALANCED DIET

- It is a meal that contains all food values in their correct amounts
- A diet is a meal that we usually eat
- A meal is the time when we eat food

Components of a balanced diet

- Carbohydrates
- Proteins
- Fats and oils
- Vitamins
- Mineral salts
- Water

- Roughages

ACTIVITY

1. What do you understand by a balanced diet?
2. State the difference between a diet and a meal
3. Outline three components of a balanced diet

LESSON 40

TOPIC: OUR FOOD

S.TOPIC: CARBOHYDRATES

Read and write these words

- Carbohydrates
- Energy
- Starch

CARBOHYDRATES (ENERGY GIVING FOOD)

They provide energy to the body

Sources of carbohydrates

- Posho
- Bread
- Sweet potatoes
- Cassava
- Millet
- Yams
- Honey
- Maize
- Sorghum
- Rice
- Cooking oil

PROTEINS

- They build our bodies
- They repair worn out body tissues

Sources of proteins

- Beans
- Eggs
- Ground nuts

- Chicken
- Fish
- Beef
- Milk

ACTIVITY

1. State one use of carbohydrates
2. Draw and name two food stuffs rich in;
 - I. Proteins
 - II. Carbohydrates
3. What is the importance of proteins to;
 - I. Babies
 - II. The elderly
4. Give a reason why sports men need more foods rich in carbohydrates

LESSON 41

TOPIC: OUR FOOD

S.TOPIC: VITAMINS

Read and write these words

- Healthy
- Health
- Protective
- Against

VITAMINS (HEALTH GIVING FOODS)

They protect the body against diseases

They keep the body healthy

Examples of vitamins

- Vitamin A
- Vitamin B
- Vitamin C
- Vitamin D
- Vitamin E
- Vitamin K

VITAMIN A

Vitamin A keeps our eye sight good

For proper vision

Sources of vitamin A

- Carrots
- Oranges
- Green vegetables
- Mangoes
- Egg yolk
- Liver

ACTIVITY

1. Identify one importance of vitamins
2. Name the vitamin that is responsible for proper eye sight
3. Use the list of food stuffs and answer the questions
Oranges, dodo, mangoes, egg yolk
4. Name the food stuff that is not rich in vitamin A

LESSON 32

TOPIC: OUR FOOD

S.TOPIC: VITAMINS

Read and write these words

- Nerves
- Health
- Unpolished
- Egg yolk

VITAMIN B

Vitamin B helps nerves in good health

Sources of vitamin B

- Unpolished rice
- Beans
- Lean meat
- Egg yolk

VITAMIN C

- It helps in the formation of healthy gums
- It helps in the formation of healthy skin
- It helps in the formation of blood vessels

Sources

Mangoes, avocado, oranges, pawpaw

ACTIVITY

1. Identify the use of the following vitamins;
 - I. Vitamin B
 - II. Vitamin C
2. Sarah's gums bleed while she's brushing her teeth. which food value would she be lacking?

LESSON 43

TOPIC: OUR FOOD

S.TOPIC: VITAMINS

Read and write these words

- Strengthen
- Strong
- Sunbathing
- Utter

VITAMIN D

It helps in the formation of strong bones

It helps in the formation of strong teeth

Sources of vitamin D

- Butter
- Yellow bananas
- Sunbathing
- Fish
- Milk
- Eggs

VITAMIN E

Sources of vitamin E

- Green vegetables
- Eggs
- Liver

ACTIVITY

1. Name the vitamin responsible for the formation of strong teeth and bones
2. Apart from sunbathing, state two sources of vitamin D
3. At what time should Bella take her baby for sunbathing?

LESSON 44

TOPIC: OUR FOOD

S.TOPIC: MINERAL SALTS

Read and write these words

- Calcium
- Phosphorous
- Iron
- Iodine
- Fluoride

MINERAL SALTS (HEALTH GIVING FOODS)

Mineral salts protect the body against diseases

Examples of mineral salts

- Calcium
- Phosphorous
- Iron
- Iodine
- Fluoride
- Potassium
- Sodium chloride

CALCIUM

It helps in the formation of strong teeth and bones

ACTIVITY

1. Why should a baby be fed on food rich on mineral salts?
2. Outline two examples of mineral salts
3. Name the mineral salt that makes up the enamel

LESSON 45

TOPIC: OUR FOOD

S.TOPIC: MINERAL SALTS

Read and write these words

- Phosphorous
- Strengthen
- Bones
- Born

PHOSPHOROUS

It helps in the formation of strong bones and teeth

Sources of phosphorous

- Dairy foods(milk, cheese, ghee, butter)
- Meat
- Fish
- Eggs
- Green leafy vegetables

Iron

It helps in the formation of blood

Sources of iron

- Meat
- Liver
- Egg yolk
- Coca
- Greer leafy vegetables

ACTIVITY

1. State one mineral salt responsible for strengthening teeth
2. Mention two sources of;
 - I. Phosphorus
 - II. Iron
3. State the functional similarity between calcium and phosphorus

LESSON 46

TOPIC: OUR FOOD

S.TOPIC: MINERAL SALTS

Read and write these words

- Iodine
- Iodized
- Fluoride
- Growth

IODINE

It helps in the proper function of the thyroid gland

It helps in growth and metabolism

Sources of iodine

- Sea water
- Sea foods
- Sea weeds
- Cocoa
- Algae
- Iodized salt

FLOURIDE

It helps in the formation of white teeth

Sources of iodine

- Fluoride tooth paste
- Fish bones

ACTIVITY

1. Name the mineral salt responsible for;
 - a) Growth
 - b) Whitening teeth
2. Identify two sources of the following food values
 - I. Iodine
 - II. Fluoride

LESSON 47

TOPIC: OUR FOOD

S.TOPIC: MINERAL SALTS

Read and write these words

- Potassium

- Maintain
- Fluids
- Transmit
- Signals

POTASSIUM

It helps to maintain balance of fluids in the body

Sources of potassium

- Meat
- Milk
- Grain
- Cereals

SODIUM CHLORIDE

It helps to transmit nerve signals in the body

It helps in the normal functioning of muscles

Sources of sodium chloride

- Table salt
- Sea foods
- Smoked fish

ACTIVITY

1. Name two sources of potassium
2. Below is a diagram of a food stuff

Name the food value got from the above food stuff

LESSON 48

TOPIC: OUR FOOD

S.TOPIC: FATS AND OILS

Read and write these words

- Butter
- Cheese
- Ghee
- Ground nuts
- Thirst
- Thirsty

FATS AND OILS (ENERGY GIVING FOODS)

Fats and oils give energy to the body

Sources of fats

- Milk

- Butter
- Cheese
- Ground nuts

WATER

Sources of water

- Tea
- Coffee
- Milk
- Fruit juice

Uses of water

- It transports materials in the body
- It eases digestion
- It cools the body
- It quenches thirst

ROUGHAGES

Roughages help to prevent constipation

Sources of roughages

- Fruits
- Rice
- Green leafy vegetables
- Bread
- Peas
- Oranges

ACTIVITY

1. State two sources of;
 - I. Fats and oils
 - II. Roughages
2. How are the following food stuffs useful in the body?
 - I. Water
 - II. Roughages
 - III. Fats and oils
3. Give two materials transported by water in the body
4. How does water cool the body?
5. Sweating is to man as-----is to plants.

LESSON 49

TOPIC: OUR FOOD

S.TOPIC: CLASSES OF FOOD

Read and write these words

- Glow
- Grow
- Healthy

CLASSES OF FOOD

These are known as the 3Gs. These include;

- Go
 - Glow
 - Grow
- a) GO FOODS
These foods we eat to get energy
 - b) GROW FOODS:
These are foods we eat to grow
 - c) GLOW FOODS
These are foods we eat to be healthy

ACTIVITY

1. Write 3Gs in full

2. Complete the table below

Class of food	Food value
Go foods	
	Carbohydrates
Grow foods	
Glow foods	

LESSON 50

TOPIC: OUR FOOD

S.TOPIC: DEFICIENCY DISEASES

Read and write these words

- Deficiency
- Diseases
- Kwashiorkor
- Marasmus
- Rickets

DEFICIENCY DISEASES

These are diseases we get when the body does not have enough food values

Examples of deficiency diseases

- Marasmus
- Kwashiorkor
- Night blindness
- Beriberi
- Pellagra
- Scurvy
- Rickets
- Infertility/sterility
- Poor blood clotting
- Anemia
- Goiter

a) Marasmus

It is caused by lack of food rich in carbohydrates In the body

Signs of Marasmus

- Eyes are very bright
- Bony face(face looks like that of an old person)
- Swelling of the lower abdomen
- The baby is always hungry

Prevention of marasmus

- Feed the child on foods rich in carbohydrates
- Mothers should breast feed their children for at least two years

ACTIVITY

1. What are deficiency diseases?
2. List down two deficiency diseases.
3. The diagram shows a child with a deficiency disease(Functional int. sci pupil's BK4 Pg 56)

Which deficiency disease is the child suffering from?

4. What advice do you give to the above child's mother?
5. Suggest two food stuffs that the above child should be fed on

LESSON 51

TOPIC: OUR FOOD

S.TOPIC: KWASHIORKOR

Read and write these words

- Kwashiorkor
- Swollen
- Pot belly

KWASHIORKOR

It is caused by lack of food rich in proteins

Signs and symptoms of kwashiorkor

- Swollen face
- Pot belly
- Little brown hair which falls off head
- Swollen hands and legs

Prevention of kwashiorkor

Feed the child on food rich in proteins

NIGHT BLINDNESS

It is caused by lack of food rich in vitamin A

Signs and symptoms

- Poor eye sight
- Unhealthy skin
- Reduced night vision
- Sore eyes

Prevention of night blindness

Feeding on food rich in vitamin A

ACTIVITY

1. Name the deficiency disease caused by lack of the following food values
 - a) Proteins
 - b) Vitamin A
2. Write down two signs of night blindness
3. Jolly's baby has the following signs;
Pot belly, swollen face, little brown hair
4. What advice can you give to the above parent?
5. Draw and name two food stuffs Jolly van give her baby

LESSON 52

TOPIC: OUR FOOD

S.TOPIC: BERIBERI

Read and write these words

- Beriberi
- Tiredness
- Appetite
- Muscles

BERIBERI

It is caused by lack of foods rich in vitamin B

Signs of beriberi

- The skin peels off
- Skin rash
- Loss of appetite
- Retarded growth
- Pain in muscles

Prevention of beriberi

Feeding on food rich in vitamin B

PELLAGRA

It is caused by lack of food rich in vitamin B2

Signs and symptoms

- General body weakness
- Skin disorders
- Digestive disorders
- Dark marks on the skin of the legs

Prevention of pellagra

Feed the child on foods rich in vitamin B2

ACTIVITY

1. State the cause of the following diseases
 - I. Beriberi
 - II. Pellagra
2. Draw and name two food stuffs rich in;
 - I. Vitamin B

LESSON 53

TOPIC: OUR FOOD

S.TOPIC: SCURVY

Read and write these words

- Scurvy
- Bleeding
- Wounds
- Heal

SCURVY

It is a skin deficiency disease

It is caused by lack of foods rich in vitamin C

Signs and symptoms of scurvy

- Skin itches
- Skin rashes
- Wounds take long to heal
- Painful swelling of bones
- Anemia

Prevention of scurvy

Feeding on food rich in vitamin C

RICKETS

It is caused by lack of food rich in vitamin D, calcium and phosphorous

Signs and symptoms

- Poor bone formation
- Poor teeth formation
- Bones are soft or swollen
- Bones may be weak
- Bow legs

Prevention of rickets

Eating foods rich in calcium, phosphorous

Sunbathing in the morning sunlight

ACTIVITY

1. Name the deficiency disease that affects the skin
2. The diagram below shows a child with a deficiency disease
(Functional integrated science BK4 Pg 58)
Name the deficiency disease the above child is suffering from
3. Name two food stuffs that the above child should be fed on
4. What advice do you give to the above parent?

LESSON 54

TOPIC: OUR FOOD

S.TOPIC: INFERTILITY/ STERILITY

Read and write these words

- Fertility
- Sterility
- Fertile
- Sterile
- Clotting

INFERTILITY AND STERILITY

It is caused by lack of foods rich in vitamin E

Signs and symptoms

- Woman becomes sterile
- Men may fail to reproduce

POOR BLOOD CLOTTING

It is caused by lack of food rich in vitamin K

Signs and symptoms

- Blood comes out of the wound for a long time
- Wounds take long to heal

Prevention

Feeding on food rich in vitamin K

ACTIVITY

1. Name the vitamins responsible for the following
 - a) Formation of reproductive cells
 - b) Blood clotting
2. Joan's wounds take long to heal, what vitamin could she be lacking?
3. Mention any two examples of vitamin deficiency diseases

LESSON 55

TOPIC: OUR FOOD

S.TOPIC: ANEMIA

Read and write these words

- Anemia
- Goitre/goiter
- Occur
- Palm

ANAEMIA

It is caused by lack of food rich in iron

Signs and symptoms

- Person feels weak
- Tiredness/fatigue
- Children and pregnant women eat soil
- The palms and feet become white
- Pale gums
- Inside eyelid turns pale

Prevention of anaemia

Feeding on foods rich in iron

GOITRE

It is caused by lack of foods rich in iodine

Signs and symptoms

Swelling of the throat

Prevention of goiter

Feeding on foods rich in iodine

ACTIVITY

1. What causes goiter?
2. Name two sources of iodine
3. Study the diagram below
(St. Benard int. sci BK4 Pg 79)
Name the deficiency disease shown in the diagram
4. Write down two food stuffs the above child should be fed on
5. Complete the table below

Group of people	Food stuff	Food value
Pregnant mothers		Proteins
Athlete	Posho	
Young children	Milk	

Elderly		Proteins
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LESSON 56

TOPIC: OUR FOOD

S.TOPIC: FOOD CONTAMINATION AND POISONING

Read and write these words

- Diarrhoea
- Contaminate
- Poisonous
- Harmful

FOOD CONTAMINATION AND POISONING

Food contamination is the making of food go bad

Ways how food gets contaminated

- Leaving left overs uncovered
- Handling food with dirty hands
- Serving food with dirt containers
- Serving food in dirty places
- Storing food in dusty and dirty places
- Eating half cooked food
- Sneezing while serving food

Effects of food contamination

It causes food poisoning

NB: Food poisoning is the adding of harmful substances into food

Ways of preventing food contamination

- Eating well cooked food
- Do not sneeze or cough without covering your nose
- Cover the left overs
- Serve food with clean containers
- Wash hands after visiting a latrine
- Wash hands before handling food
- Prepare and serve food in a clean environment

ACTIVITY

1. Differentiate between food contamination and food poisoning
2. Draw and name two items used in preparing food
3. Outline two causes of food contamination
4. Identify two ways of preventing food contamination

LESSON 57

TOPIC: OUR FOOD

S.TOPIC: FOOD PRESERVATION

Read and write these words

- Preserve
- Smoking
- Tinning
- Refrigeration

FOOD PRESERVATION

It is the way of keeping food safe and free from germs for a long time

Methods of food preservation

Traditional methods

1. Sun drying: It dehydrates the food
It removes moisture from the food

Examples of foods preserved by sun drying

Millet, maize, beans, cassava, sorghum, fish

2. Salting: it removes the moisture content on food
It dehydrates the food
3. Smoking: it dehydrates food

Examples of food preserved by salting

- Fish
- Meat

ACTIVITY

1. What do you understand by the term food preservation?
2. Mention two examples of foods preserved by the following methods;
 - I. Sun drying
 - II. Salting
3. How do the following methods preserve food?
 - I. Sun drying
 - II. Salting

LESSON 58

TOPIC: OUR FOOD

S.TOPIC: MODERN METHODS OF PRESERVING FOOD

Read and write these words

- Freezing
- Refrigeration
- Tinning
- Cereals

- Carbon dioxide

Modern methods of preserving food

- I. Freezing/ refrigeration: it prevents multiplication of germs
- II. Canning/ tinning: it prevents multiplication of germs

Examples of foods preserved by refrigeration

- Fresh fruits
- Green leafy vegetables
- Tomatoes
- Meat
- Fish
- Soft drinks
- Chicken

Examples of foods preserved by tinning/ canning

- Fish
- Soft drinks
- Powdered milk
- Beans
- Fish
- Chicken

ACTIVITY

1. Name the gas used to preserve soft drinks
2. The diagram below is of a refrigerator
(functional int. sci BK4 Pg 61)
Name the condition present in a refrigerator that helps to preserve food
3. Outline two examples of foods kept in a refrigerator
4. How does the above method preserve food?

LESSON 59&60

TOPIC: OUR FOOD

S.TOPIC: METHODS OF FOOD PRESERVATION

Read and write these words

- Steaming
- Boiling
- Roasting
- Baking
- Frying
- Deep frying

Methods of preparing food

- a) Steaming: it is the method of preparing food using moist heat

Examples of foods prepared by steaming

- Meat
 - Matooke
 - Fish
 - Ground nuts
- b) Boiling

Examples of foods prepared by boiling

- Water
 - Rice
 - Porridge
 - Irish
- c) Baking

Examples of food prepared by baking

- Cakes
 - Buns
 - Bread
 - Pancakes
 - Doughnuts
- d) Roasting: it is the method where food is put on low supply of fire

Examples of food prepared by roasting

- Meat
 - Cassava
 - Fish
 - Maize
 - Sweet potatoes
- e) Cooking

Examples of food prepared by cooking

- Matooke mixed with beans
 - Cassava mixed with beans
 - Sweet potatoes mixed with beans
- f) Frying
- g) Deep frying

ACTIVITY

1. Outline three methods of preparing food
2. The diagram below shows a method of preparing food
(st. Benard int. sci BK4 Pg 83)
Name the method shown in the diagram
3. Give two examples of food prepared using the above method
4. Name any two examples of food prepared by;
 - I. Frying
 - II. Deep frying

LESSON 61

TOPIC: SANITATION

S.TOPIC: SANITATION

Read and write these words

- Sanitation
- Cleanliness
- Environment
- Kitchens
- Urinals

SANITATION

Sanitation is the general cleanliness of the environment

Environment is man and his surroundings

Places that need to be kept clean

- Latrines/ toilets
- Compound
- Kitchen
- Classrooms
- Houses
- Water sources

ACTIVITY

1. What do you understand by the term sanitation?
2. Identify two components of the environment
3. Mention two places which need to be kept clean

LESSON 62

TOPIC: SANITATION

S.TOPIC: WAYS OF KEEPING OUR ENVIRONMENT CLEAN

Read and write these words

- Disposal
- Faeces
- Rubbish
- Wastes

WAYS OF KEEPING OUR ENVIRONMENT CLEAN

- Proper disposal of faeces in latrines/ toilets
- Proper disposal of rubbish
- Clearing all bushes around our homes
- Remove broken bottles and pots in the compounds
- Do not share houses with animals
- Clean water sources
- Sweeping the house
- Smoking latrines

ACTIVITY

1. Name two examples of human wastes
2. Where do we dispose faeces?
3. Draw and name the equipment used to dispose off rubbish
4. Why should we pick broken bottles and pots in the compound?
5. State one way of keeping water sources clean
6. Why are we advised to smoke latrines?

LESSON 63

TOPIC: SANITATION

S.TOPIC: IMPORTANCE OF PROPER SANITATION

Read and write these words

- Surround
- Healthy
- Germs
- Vectors

IMPORTANCE OF PROPER SANITATION

- It keeps away germs
- It keeps us healthy
- It keeps away vectors e.g. houseflies, mosquitoes
- A clean environment looks smart and beautiful

Equipment used in promoting sanitation

- Broom
- Mop
- Water
- Squeezers
- Scrubbing brush
- Slasher

ACTIVITY

1. name two signs of a dirty environment
2. outline two importance of proper sanitation
3. draw and name two equipment used to clean our environment
4. why are we advised to slash all the tall grass around our homes

LESSON 64

TOPIC: SANITATION

S.TOPIC: GERMS AND DISEASES

Read and write these words

- germs
- microscope
- microscopic

- naked

GERMS AND DISEASES

Germ s are small living organisms that cause diseases

Germ s are called microscopic organisms because they cannot be seen using our naked eyes

Places where germ s live

- latrine/ toilet
- contaminated air
- soil
- decomposing matter

ACTIVITY

1. What are germ s?
2. Name the equipment used to see germ s
3. Why are bacteria referred to as microscopic organisms?

LESSON 65

TOPIC: SANITATION

S.TOPIC: TYPES OF GERMS

Read and write these words

- Bacteria
- Fungi
- Virus
- Protozoa

Types of germ s

- Bacteria
 - Fungi
 - Protozoa
 - Virus
- a) Bacteria

Diseases caused by bacteria

- Tetanus
 - Dysentery
 - Pneumonia
 - Whooping cough
 - Tuberculosis
 - Diarrhoea
- b) Fungi

Diseases caused by fungi

- Ringworm
- Athlete's foot

- Candidiasis
 - Thrush
 - Jack itch
- c) Virus

Diseases caused by virus

- AIDS
 - Yellow fever
 - Influenza
 - Polio
- d) Protozoa

Diseases caused by protozoa

- Malaria
- Sleeping sickness
- Nagana

ACTIVITY

1. Name two groups of germs
2. Complete the table below

Germ	Disease
Bacteria	
	Ringworm
Protozoa	

3. Name the skin disease caused by;
 - I. Bacteria
 - II. Fungi

LESSON 66

TOPIC: SANITATION

S.TOPIC: HOW GERMS ARE SPREAD

Read and write these words

- Touching
- Infected
- Hugs
- Shoulder

How germs are spread

- Through body contact
- Sharing clothes with an infected person
- Sharing clothes
- Through air

- Drinking contaminated water
- Through insect bites
- Through the 4Fs germ path

How to keep water safe

- Boiling drinking water safe
- Fencing water sources
- Chlorinating water

ACTIVITY

1. Outline two ways how germs spread from one person to another
2. Give one danger of grazing animals in a water source
3. Complete the table below

vector	Disease
Female anopheles	
Mosquito	
Culex mosquito	
	Yellow fever
Housefly	

4. What do you understand by a vector?
5. Match the following vectors in A with what they use to spread diseases in B

A Housefly Female anopheles mosquito Cockroach	B proboscis hairy body hairy body
---	--

LESSON 67

TOPIC: SANITATION

S.TOPIC: THE 4Fs GERM PATH

Read and write these words

- Faeces
- Flies
- Fingers
- Food

THE 4Fs GERM PATH

4Fs stand for Faeces → Flies → Fingers → Food

THE 4Fs GERM PATH

(St. Benard int. sci BK4 Pg119)

ACTIVITY

1. Name the source of germs in the 4Fs germ path
2. Identify the vector in the 4Fs germ path
3. What does the above vector use to spread germs
4. Write 4Fs in full

LESSON 68

TOPIC: SANITATION

S.TOPIC: DISEASES APREAD IN THE 4Fs GERM PATH

Read and write these words

- Diarrhoea
- Dysentery
- Typhoid
- Cholera

Diseases spread through the 4Fs germ path

- Diarrhoea
- Dysentery
- Typhoid
- Cholera

a) Diarrhoea/diarrhea

Diarrhoea is the passing out of watery stool many times a day

It is caused by bacteria

Prevention of diarrhoea

- Drinking clean boiled water
- Chlorinate water
- Wash hands with soap after visiting a latrine
- Warm left overs
- Wash hands before handling food
- Vaccination
- Wash fresh fruits and vegetables before eating them

ACTIVITY

1. What is diarrhoea?
2. Name one cause of diarrhoea
3. State two vectors that spread diarrhoea
4. Mention three ways of preventing diarrhoea

LESSON 69

TOPIC: SANITATION

S.TOPIC: DYSENTERY

Read and write these words

- Dysentery
- Amoeba
- Amoebic

DYSENTERY

It is the frequent passing out of watery stool with blood stains

Signs and symptoms of dysentery

- Blood stained diarrhoea
- General body weakness
- Fever

- Vomiting
- Abdominal pains

Prevention of dysentery

- Proper disposal of faeces
- Wash hands with clean water and soap after using a latrine/ toilet
- Destroy all breeding places for houseflies
- Drink clean boiled water

ACTIVITY

1. What is dysentery?
2. State two signs of dysentery
3. Outline two symptoms of dysentery
4. How are the following practices useful in the prevention of dysentery?
 - I. Boiling drinking water
 - II. Washing hands

LESSON 70

TOPIC: SANITATION

S.TOPIC: CHOLERA

Read and write these words

- Cholera
- Cholera
- Vibrio

CHOLERA

It is caused by bacteria called vibrio cholera

How cholera is spread

- Eating contaminated food
- Drinking contaminated water

Signs and symptoms of cholera

- Stool contaminating bacteria
- Vomiting
- Diarrhoea

Prevention and control of cholera

- Wash hands before eating food
- Wash hands after visiting a latrine
- Use clean utensils to serve food
- Proper disposal of faeces
- Give a patient ORS
- Isolate the sick person

ACTIVITY

1. Name the germ that causes cholera
2. State two ways how cholera is spread
3. Outline the signs and symptoms of cholera
4. Give two ways of preventing cholera

LESSON 71

TOPIC: SANITATION

S.TOPIC: TYPHOID

Read and write these words

- Typhoid
- Fever
- Tenderness
- Temperature

Typhoid

It is caused by bacteria called salmonella

Signs and symptoms of typhoid

- Abdominal pain
- Tenderness
- Persistent fever
- Headache
- Diarrhoea

Prevention of typhoid

- Proper disposal of faeces
- Practice good personal hygiene
- Wash hands with soap after visiting a latrine
- Cover left overs
- Seek medical attention
- Proper disposal of rubbish

ACTIVITY

1. Name the bacteria that causes typhoid
2. Outline two signs and symptoms of typhoid
3. State three ways of preventing typhoid

LESSON 72

TOPIC: SANITATION

S.TOPIC: HOW GERMS CAUSE ROTTING

Read and write these words

- Rotting

- Refrigerator
- Drying
- Smelly

How germs cause rotting

- When plants and animals die, germs feed on them
- When food is not stored well, germs feed on it
- As germs feed on food or dead plants and animals, they multiply and break down the food
- This process is caused rotting
- As things rot, a smelly gas is given off and these things become bad and not good to eat
- If it is a plant, or animal it rots and forms soil

ACTIVITY

1. What is rotting?
2. Which component of soil is formed when plants and animals rot?
3. What are germs?
4. Name the type of germ commonly found on rotting food

LESSON 73

TOPIC: SANITATION

S.TOPIC: WAYS OF PREVENTING OURSELVES AGAINST GERMS AND DISEASES

Read and write these words

- Environment
 - Left overs
 - Contamination
 - Against
- I. In the environment
 - Spray the surroundings
 - Keep water wells and public bore holes clean
 - Do not throw garbage in water sources
 - Do not urinate in wells and springs

Equipment used to promote sanitation in the environment

- Dustbin
- Slasher
- Barbed wire
- Sprayer

ACTIVITY

1. State the function of the following in promoting sanitation
 - I. Slasher
 - II. Dustbin
 - III. Sprayer
 - IV. Barbed wire

LESSON 74

TOPIC: SANITATION

S.TOPIC: WAYS OF PREVENTING OURSELVES AGAINST GERMS IN THE HOME

Read and write these words

- Burn
- Garbage
- Ventilated
- Faeces
- b) In the home
 - Burn all garbage in the dustbin
 - Proper disposal of wastes
 - Smoking latrines
 - Proper ventilation of the houses
 - Covering latrines with latrine covers
 - Washing hands after visiting a latrine
 - Washing hands before eating food
 - Clearing all bushes around the home

ACTIVITY

1. State the reason why it is important to smoke latrines
2. State the function of the following on a toilet
 - I. Door
 - II. Window
3. What is the function of a dustbin in a home

LESSON 75

TOPIC: SANITATION

S.TOPIC: OUR SCHOOL

Read and write these words

- Mosquitoes
- Cleaning
- Cholera
- Typhoid
- c) Our school
 - Slashing tall bushes
 - Smoking latrines
 - Spraying around the compound
 - Sweeping the compound

Other ways of protecting ourselves against germs

- Do not allow flies to land on your food
- Do not share houses with animals
- Do not spit on the floor when coughing or sneezing
- Remove all broken tins and pots in the compound

ACTIVITY

1. State two reasons why we should keep the school environment clean
2. Where do mosquitoes breed?
3. State two ways how we can prevent germs at school
4. State two ways of keeping latrines clean

LESSON 76

TOPIC: OUR FOOD

S.TOPIC: REVISION QUESTIONS

Read and write these words

- Healthy
- Health
- Hospitality
- Growth

REVISION WORK

1. What is the difference between feeding and nutrition?
2. Write down two uses of food to man
3. Draw and name two sources of body building foods
4. List down two ways how food gets contaminated
5. List down three sources of food in your community
6. Why do sportsmen and women need more foods rich in carbohydrates?
7. Match the food values in A with the deficiency diseases in B

A	B
Vitamin B1	Goitre
Proteins	Beriberi
Carbohydrates	Marasmus
Iodine	Rickets
Calcium	Kwashiorkor

8. The diagram below shows a soft drink in a bottle

- a) Name the gas labeled Y
- b) Give a reason why the above liquid is used to preserve soft foods

LESSON 77

TOPIC: PERSONAL HYGIENE AND SANITATION

S.TOPIC: REVISION QUESTIONS

Read and write these words

- Hygiene
- Cleanliness
- Finger
- Faeces

REVISION QUESTIONS

1. What is the difference between sanitation and personal hygiene?
2. Name two parts of the body that need to be kept clean
3. Outline two signs of a dirty environment
4. State the importance of the following items in promoting sanitation
 - a) Dustbin
 - b) Water
 - c) Soap
5. How are the following practices important in the promotion of personal hygiene?
 - I. Grooming finger nails
 - II. Washing our clothes
 - III. Brushing teeth regularly
6. The diagram shows a vector
(Diagram of a housefly St. Benard int. sci BK 4 Pg 141)
 - a) Name the vector in the diagram
 - b) Outline two diseases spread by the above vector
 - c) What structures does the above vector use to spread diseases?

LESSON 78

TOPIC: THE TEETH

S.TOPIC: REVISION QUESTIONS

Read and write these words

- Dentition
- Dentine
- Crown
- Plaques
- Cavity

REVISION QUESTIONS

1. Name the two sets of teeth
2. How many teeth make up;
 - I. Milk teeth
 - II. Permanent teeth
3. Name the four types of teeth
4. Complete the table below

Types of teeth	Functions	Adaptations
Incisors		They are chisel shaped
Canines	Tearing food	
Premolars		
	Chewing food	They are broad

5. Complete the table below

	incisors	canines	premolars	Molars
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Upper jaw			4	6
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6. How are the following practices important in promoting oral health?
- I. Tooth paste
 - II. Dental floss