

## **PRIMARY FOUR SCIENCE**

### **TERM I**

#### **TOPIC: FOOD AND NUTRITION**

#### **Sub topic: Food path**

#### **Lesson 1**

Learners will be guided on how to;

- Define food path.
- Mention the types of food path.
- Describe village food path.
- List stages involved in food production.

#### **Evaluation activity**

1. Explain food path.
2. Outline the types of food path.
3. What is village food path?
4. Identify the stages involved in village food path.

#### **Lesson 2**

#### **Sub topic: Stages in village food path**

#### **Land preparation**

- Ways of preparing land.
- Garden tools used in land preparation.
- Diagrams of the tools.

#### **Evaluation activity**

1. Explain land preparation.
2. State different ways of preparing land.
3. Identify garden tools used in land preparation.
4. Draw and give the functions of each garden tool identified.
5. What is the suitable time for land preparation?

#### **Lesson 3**

#### **Selecting seeds for planting**

- Reasons for seed selection.
- Qualities of good planting materials.
- Seed viability.

### **Evaluation activity**

1. Why do we carry out seed selection?
2. What is seed viability?
3. Mention any four qualities of a good planting material.
4. Why is it not good to plant spoilt seeds?

## **Lesson 4**

### **Planting**

**Note:** Some seeds are first planted in a nursery bed while others are planted directly in the main garden.

### **Nursery bed/seed bed**

- Definition of a nursery bed.
- Examples of seeds which are first planted in a nursery bed.
- Site for a good nursery bed.
- Importance of a nursery bed.

### **Evaluation activity**

1. Define a nursery bed.
2. State any five examples of seeds that are first planted in a nursery bed.
3. Mention any four good sites of a nursery bed.
4. How useful is a nursery bed to crop farmers?

## **Lesson 5**

### **Preparation of a nursery bed**

- Tools used in preparing a nursery bed.
- Definition of terms: seedling, transplanting
- Suitable time for transplanting and reason why.
- Garden tool used for transplanting (trowel).

### **Evaluation activity**

1. State the different ways of preparing a nursery bed.
2. Identify any four tools used in preparing a nursery bed.
3. Define the following terms;
  - a) Seedling
  - b) Transplanting
4. What is the suitable time for transplanting?
5. Give a reason for your answer in (4) above.
6. Draw and name the garden tool used for transplanting.

## Lesson 6

### Methods of transplanting

- i) Row planting
- ii) Broadcasting
- Description of each method of planting.
- Seeds planted using each method.
- Advantages of row planting over broadcasting method.

### Evaluation activity

1. State the two methods of planting.
2. Define the following:
  - a) Row planting
  - b) Broadcasting method
3. Identify any three seeds planted using the following methods.
  - a) Row planting
  - b) Broadcasting
4. Mention any two advantages of each of the following methods.
  - a) Row planting
  - b) Broadcasting

## Lesson 7

### Caring for plants in the garden

#### Ways of caring for plants

##### (a) Weeding

- Definition of weeding and weeds.
- Examples of common weeds.
- Dangers of weeds to crops and advantages of weeding.
- Uses of weeds.
- Ways of controlling weeds.

### Evaluation activity

1. Define the following terms:
  - i) Weeds
  - ii) Weeding
2. Mention any five examples of weeds you know.
3. State any two uses of weeds.
4. How dangerous are weeds to crops?
5. Suggest any four ways of controlling weeds in the garden.

## Lesson 8

### **(b) Manuring**

- Definition
- Importance of adding manure.
- Types of manure and their description.

### **Evaluation activity**

1. Explain manuring?
2. State the importance of adding manure to the soil.
3. List the three types of manure.
4. Explain how the following types of manure are got.
  - a) Farm yard manure
  - b) Composite manure
  - c) Green manure

## **Lesson 9**

### **(c) Watering and pruning mulching**

- When is watering done (dry season).
- Suitable time for watering (evening and early morning).
- Garden tool used.

### **Pruning**

- Definition
- Importance of pruning.
- Garden tool used.

### **Evaluation activity**

1. Define pruning.
2. What is the suitable time for watering crops?
3. How useful is a watering can to a crop farmer?
4. State any three importance of pruning.
5. Draw and name any two garden tools used for pruning.

## **Lesson 10**

### **(d) Mulching**

- Definition
- Materials used.
- Advantages of mulching.
- The major reason for mulching (to preserve moisture).

### **Evaluation exercise**

1. Define mulching.
2. State any three materials used for mulching.

3. Give the main reason as to why farmers carry out mulching.
4. List any four advantages of mulching.
5. Outline any three disadvantages of mulching.

## **Lesson 11**

### **(e) Pest control**

- Ways of controlling pests.
- Definition of terms e.g. crop rotation and pesticides.
- Advantages of crop rotation.
- Ways in which crop rotation controls pests.

### **Evaluation activity**

1. State any five ways of controlling pests.
2. Define:
  - a) Crop rotation
  - b) Pesticides
3. How does crop rotation control pests?
4. State any four advantages of crop rotation.

## **Lesson 12**

### **(f) Thinning**

- Staking
- Harvesting.
- Definition of the above terms.
- Ways of harvesting crops.
- Suitable season for harvesting.
- Tools used for harvesting.
- Reason why harvesting is done in the dry season.

### **Evaluation activity**

1. Define the following terms;
  - a) Thinning
  - b) Staking
  - c) Harvesting
2. Write down any four ways or methods of harvesting crops.
3. State the best season for harvesting crops.
4. Give reasons why harvesting is done in the dry season.
5. Draw and name any three garden tools used for harvesting.

## **Lesson 13**

### **A. Food preservation**

- Definition of food preservation.
- Methods of preserving food.
- Advantages of food preservation.

## **B. Storage of food**

- Definition.
- Conditions of a good store.
- Importance of storing food.
- Types of stores.

### **Evaluation activity**

1. Define the following terms;
  - a) Food preservation.
  - b) Storing
2. Write down any five methods of preserving food.
3. State any three advantages of food preservation.
4. Write down any four conditions of a good store.
5. Mention any three importance of food storage.
6. Draw and name the two types of food stores.
7. How useful are rat guards on a granary?

## **Lesson 14**

### **Types of food path**

#### **Town food path**

- Description.
- Stages in town food path.

#### **Earning food path**

- Description
- Stages in earning food path.

### **Evaluation activity**

1. Describe the following types of food production.
  - a) Town food path
  - b) Earning food path
2. State all the stages involved in:
  - a) Town food path
  - b) Earning food path

## **Lesson 15**

## **Blocks in food path**

- Describe blocks in food path.
- State the blocks in food path.

### **Evaluation activity**

1. Describe blocks in food path.
2. Outline the different blocks in food path.
3. Identify the blocks in the following food path.
  - a) Town food path
  - b) Village food path

## **Lesson 16**

### **Food preparation**

- Ways of preparing food.
- Ways of proper food handling.
- How food gets dirty.
- Importance of proper food handling.
- Uses of food in the body.

### **Evaluation activity**

1. Outline any four ways of preparing food.
2. List any five ways food can be properly handled.
3. State any three ways in which food can get dirty/contaminated.
4. Give three importance of proper food handling.
5. Identify the three uses of food in the body.

## **Lesson 17**

### **SAMPLE TOPICAL QUESTIONS**

1. What do you understand by the term food path?
2. Outline the three types of food path.
3. Identify any three garden tools used in the preparation of land.
4. What should be the suitable time for land preparation?
5. Define the term seed viability.
6. Outline at least three qualities of good planting material.
7. What is a nursery bed?
8. Mention any four crops whose seeds are first planted in a nursery bed.
9. Give at least two uses of a nursery bed.
10. Write the meaning of the following.
  - a) Transplanting
  - b) Seedling
11. Describe the suitable time for transplanting seedlings.

12. Which garden tool does a farmer use to transplant seedlings?

13. Outline the two methods of planting seeds.

14. Identify any three advantages of:

- a) Row planting
- b) Broadcasting methods

15. Write the meaning of these terms.

- a) Weeds
- b) Weeding

16. State any four examples of common weeds.

17. Write down any four ways of controlling weeds.

18. List down the three types of manure.

19. What is pruning?

20. Which garden tools are used for:

- a) Pruning
- b) Watering crops

21. (a) What is mulching?

b) State the main reason to why farmers carry out mulching.

c) Identify any three materials that can be used for mulching.

d) Write down three advantages of mulching.

e) Mention any two disadvantages of mulching.

22. (a) What is a pest?

b) Give any three examples of crop pests.

c) Define crop rotation.

d) How does crop rotation control pests?

e) Outline any three advantages of crop rotation.

23. (a) Define the following terms

- i) Staking
- ii) Harvesting

b) Identify any three crops that can be staked.

c) Why is harvesting done in dry season?

24. (a) Mention any five methods of preserving food.

b) Write down any four conditions of a good store.

c) State any three importance of food storage.

d) How useful are rat guards on a granary.

25. (a) List down any three ways food can be handled properly.



b) What is food contamination?

c) Mention any three ways in which food gets contaminated.

d) Give two ways in which we can prevent food contamination.

e) State any three uses of food in the body.

## **TOPIC: PLANT LIFE**

### **Lesson 18**

#### **Flowering plants**

- Definition.
- Structure of a flowering plant.
- Systems of flowering plant.

#### **Evaluation activity**

1. Define a flowering plant.
2. Mention any five examples of flowering plants.
3. Identify the two systems of a flowering plant.
4. Draw and name parts of a flowering plant.
5. List any five parts which make up a shoot system.

### **Lesson 19**

#### **Parts of a flowering plant**

##### **Leaves**

- The structure of a leaf.
- Uses of leaves to both plants and man.
- Types of leaves.

#### **Evaluation activity**

1. Draw and name the parts of a leaf.
2. Mention any four uses of leaves to a plant.
3. State any four uses of leaves to man.
4. Outline the two types of leaves.
5. Draw and name the different types of leaves.  
e.g simple leaf, compound pinnate, compound bipinnate, trifoliate, digitate

### **Lesson 20**

## Leaves

### Leaf venation

- Definition.
- Types of leaf venation.
- Illustrations of the different types of venation.

### Evaluation activity

1. Define leaf venation.
2. State the two types of leaf venation.
3. List any three examples of plants from each type.
4. Draw diagrams to illustrate each type of venation.

## Lesson 21

### Processes in leaves

- i) Photosynthesis
- ii) Transpiration

### Photosynthesis

- Definition
- Conditions for photosynthesis.
- Importance of each condition.
- Raw materials; carbondioxide and water.
- End products; water and starch (product).

### Evaluation exercise

1. Define photosynthesis.
2. State the meanings of the following.
  - a) Photo\_\_\_\_\_
  - b) Synthesis \_\_\_\_\_
3. Mention the conditions a plant needs to make its own food.
4. How useful are the following during photosynthesis
  - a) Chlorophyll
  - b) Sunlight
  - c) Carbondioxide and water
5. State the end products of photosynthesis.
6. Why can't photosynthesis take place at night?

## Lesson 22

### Processes in leaves

### Photosynthesis

### **Testing for starch**

- Requirements.
- Reason of the following.
  - Boiling the leaf in water
  - Boiling the leaf in methylated spirit
  - Washing the leaf in water
- Results after boiling.
- Conclusion

### **Evaluation activity**

1. Outline the requirements needed to test for starch.
2. Let each child try the experiment.

## **Lesson 23**

### **Transpiration**

- Definition.
- Experiment to show that plants carry out transpiration.
- Factors affecting the rate of transpiration.

### **Evaluation activity**

1. Define transpiration.
2. List any six factors that affect the rate of transpiration.
3. Carry out an experiment to show that plants transpire.
4. Draw diagrams illustrating the experiment at its results.

## **Lesson 24**

### **Transpiration**

- Importance of transpiration.
- How do plants reduce the rate of transpiration?
- Effects of transpiration.
- Uses of leaves to animals.

### **Evaluation activity**

1. Mention any three importance of transpiration to plants.
2. State any four ways plants reduce the rate at which they are losing water.
3. Why do some plants shed off their leaves?
4. Outline any two effects of transpiration.
5. List down five uses of leaves to man.
6. Identify one plant that reduces the rate of transpiration by covering its stomata with wax.

## Lesson 25

### Flowers

- Definition.
- The structure of a flower both internal and external parts.

### Evaluation activity

1. Define a flower.
2. Mention the main function of a flower to the plant.
3. Draw and name the parts of a flower.

## Lesson 26

### Flower

- Functions of each part of a flower.
- The general name given to;  
Sepals  
Petals

### Evaluation activity

1. Mention the uses of all the parts of a flower.
2. What general name is given to;  
a) Sepals  
b) Petals

## Lesson 27

### The reproductive/essential parts of a flower

- Pistil
- Stamen
- Diagrams showing the essential parts of a flower.
- The parts of a flower that make each i.e. male and female.
- Define pollination.
- Types of pollination.

### Evaluation activity

1. The male part of a flower is called \_\_\_\_\_
2. Name the female part of a flower.
3. Draw the male and female part of a flower and name their parts.
4. Explain pollination.
5. State the two types of pollination.

## **Lesson 28**

### **Pollination**

- Describe each type of pollination.
- Draw diagrams illustrating each type of pollination.
- Agents of pollination.

### **Evaluation activity**

1. Describe the following;
  - a) Cross pollination
  - b) Self pollination
2. Draw diagrams illustrating the following types of pollination.
  - a) Cross pollination
  - b) Self pollination
3. Define agents of pollination.
4. State the two common agents of pollination.
5. Apart from the two common agents named above identify any other three agents you know.

## **Lesson 29**

### **Agents of pollination**

#### **Insects**

- Examples of insects that carry out pollination.
- Characteristics of insect pollinated flowers.
- Reason why insects visit flowers.
- Insects that pollinate flowers at night and why?

### **Evaluation activity**

1. List examples of insect pollinators.
2. State any six characteristics of insect pollinated flowers.
3. Why do insects visit flowers?
4. Where is nectar stored in flowers?
5. Name the insect that pollinate flowers at night.

## **Lesson 30**

### **Wind**

- Examples of plants pollinated by wind i.e. maize, wheat and most grasses.
- Characteristics of wind pollinated flowers.
- Example of a bird that pollinates flowers.

### **Evaluation activity**

1. State any two plants that are pollinated by wind.
2. State any five characteristics of wind pollinated flowers.
3. Name the bird that pollinates flowers.
4. How are bats able to pollinate flowers at night (some are fruit eaters).

## **Lesson 31**

### **Fertilization**

- Definition
- Where fertilization takes place in a flower.
- Name the male and female cells of a plant.
- What happens to an ovary and ovules after fertilization?
- Uses of flowers to man.

### **Evaluation activity**

1. Define fertilization.
2. Where does fertilization take place in a flower?
3. What name is given to the male and female cell/gametes of a plant?
  - a) Male \_\_\_\_\_
  - b) Female \_\_\_\_\_
4. State what happened to the following after fertilization.
  - a) Ovary \_\_\_\_\_
  - b) Ovules \_\_\_\_\_
5. Mention any five uses of flowers to man.

## **Lesson 32**

### **Stems**

- Functions of stems to a plant

### **Types of stems**

- Upright stems
  - a) Description.
  - b) Examples of plants with erect stem.

### **Evaluation activity**

1. State any four functions of a stem to a plant.
2. To which system of a plant does the stem belong?
3. Mention the three types of stems.
4. Describe upright stems.
5. Give any three examples of plants with upright stems.

## Lesson 33

### Stems

#### Underground stems/storage stems

- Name the four types of underground stems.
- Characteristics of underground stems.

#### Stem tubers

- Description of stem tubers.
- Examples of stem tubers.
- Diagram of an irish potato.

#### Evaluation activity

1. Explain underground stems.
2. State the four types of underground stems.
3. Write down any three characteristics of underground stems.
4. What are stem tubers?
5. List down any two examples of stem tubers.
6. Where does an irish potato store its food?
7. Draw and name the parts of an irish potato.

## Lesson 34

### Stems

#### Bulbs

- Description of a bulb.
- Examples of bulbs.
- Draw and name the parts of an onion.
- State the functions of each part named.

#### Evaluation activity

1. Describe a bulb.
2. Mention any two examples of a bulb.
3. Draw an onion, mark and name the following parts;
  - a) Foliage leaves
  - b) Storage leaves
  - c) Scale leaves
  - d) Auxiliary buds
  - e) Stem
4. State the functions of the above named parts.
5. Which part of an onion do we eat?

6. Where does an onion store its food?

## Lesson 35

### Rhizomes

- Examples of rhizomes.
- Characteristics of rhizomes.
- Diagram showing parts of rhizomes.

### Corms

- Description.
- With the help of a real object, learners will identify the characteristics of corms.

### Evaluation activity

1. Explain the following;
  - a) Corms
  - b) Rhizomes
2. State any two characteristics of each of the following underground stems.
  - a) Corms
  - b) Rhizomes
3. Draw the diagram of a rhizome and name its parts.
4. List down any one example of a corm.

## Lesson 36

### Climbing stems

- Learners will be helped to define climbing stems with the help of real objects.
- Learners will use their knowledge acquired in P3 to:
  - a) List examples of climbing stems.
  - b) Give reasons why plant climb others.
  - c) Mention ways in which plants climb others.
- Using the textbooks learners will draw diagrams to illustrate ways plants use to climb others.

### Evaluation activity

1. Explain climbing plants.
2. List any three examples of climbing plants.
3. State any two reasons why plants climb others.
4. List the three different ways plants climb others.
5. Draw diagrams to illustrate the different ways plants use to climb others.

## Lesson 37



## **Roots**

Learners will be helped by the teacher to;

- Define roots and root system.
- Read the text about functions of roots to a plant.
- State the examples of root system.
- List types of roots.

### **Evaluation exercise**

1. Define the following;
  - a) A root
  - b) A root system
2. State the two examples of root systems.
3. Roots that develop from other parts of plants are called\_\_\_\_\_.
4. Outline any four functions of roots to plants.
5. Write down any three examples of adventitious roots.
6. Draw and name the different types of roots.

## **Lesson 38**

### **Prop roots/ storage roots**

With the help of a real object, teachers will help learners to;

- Identify prop roots and storage roots.
- Describe prop roots and storage roots.
- State the use of prop roots to a maize plant.
- Give examples of storage roots.

### **Evaluation activity**

1. How useful are prop roots to a maize crop?
2. List any two examples of plants that develop prop roots.
3. At what stage of a growing plant do prop roots develop?
4. What are root tubers?
5. Mention any two examples of root tubers.
6. With the help of a textbook draw the taproot of a carrot.
7. Where does the cassava plant store its food?

## **Lesson 39**

### **Types of flowering plants**

Learners will be helped by the teacher to;

- Identify the types of flowering plants.
- Differentiate the two types of flowering plants.

- Give examples of each type of flowering plants.
- Define monocot and dicot plants.

### **Evaluation activity**

1. Define flowering plants.
2. State the two types of flowering plants.
3. Explain the following terms;
  - a) Monocotyledonous plants
  - b) Dicotyledonous plants
4. List down any two examples for each of the above plants.
5. Mention any three differences between monocotyledonous and dicotyledonous plants.

## **Lesson 40**

### **Seeds**

- Learners will be helped by the teacher t:
  - a) Define seeds
  - b) Mention the two types of seeds.
- Learners should use the previous knowledge in P3 to:
  - a) Define monocots and dicots.
  - b) Give examples of monocots.
  - c) Draw and name parts of monocot seeds (maize).
- Using real objects and well prepared charts, help learners to name the parts of a monocot seed.
- Functions of the parts named above.

### **Evaluation exercise**

1. What is a seed?
2. Mention the two types of seeds.
3. List down any two uses of seeds to man.
4. Define monocotyledonous seeds.
5. Give any three examples of monocots.
6. Draw a maize grain and name its parts.
7. Why is a maize grain called a fruit?
8. What general name is given to the plumule and radical?

## **Lesson 41**

### **Dicotyledonous seeds**

Learners will be helped by the teacher to:

- Define dicotyledonous seeds.
- Structure of a dicot seed (bean).

- Give examples of dicotyledonous seeds.
- Functions of each part named on the diagram.
- Using well prepared charts and textbooks learners will draw the types of seeds.

### **Evaluation activity**

1. Define dicotyledonous seeds?
2. Mention any three examples of dicot seeds.
3. Draw and name the parts of a dicot seed (bean).
4. Mention the function of each part of the seed named.

## **Lesson 42**

### **Germination**

- Learners will use their previous knowledge about germination in P3 to:
  - a) Define seed germination.
  - b) State the types of germination.
  - c) State the conditions necessary for germination.
- Using textbooks, learners will explain and draw the types of germination.

### **Evaluation activity**

1. What is seed germination?
2. State the two types of seed germination.
3. Give any two examples of seeds that undergo:
  - a) Epigeal germination
  - b) Hypogeal germination
4. Explain and draw diagrams showing the types of germination.

## **Lesson 43**

### **Conditions for seed germination**

- Learners will be helped by the teacher to carry out an experiment to identify the different conditions for seed germination.
- Uses of water during germination.
  - a) Softens the testa
  - b) Dissolves food in the cotyledon

### **Evaluation activity**

1. State the three conditions a seed needs to germinate.
2. How useful is water during germination

## **Lesson 44**

## **Tropism**

- Define tropism.
- Define the term stimuli.
- Learners will be guided to mention the types of tropism.
  - a) Photo tropism
  - b) Hydro tropism
- Using textbooks teachers will guide learners to explain the types of tropism and draw diagrams to illustrate photo tropism.

## **Evaluation activity**

1. Define the following terms:
  - a) Tropism
  - b) Stimuli
2. Explain the following types of tropism.
  - a) Hydro tropism
  - b) Photo tropism
3. Draw a diagram to illustrate the photo tropism.

## **Lesson 45**

### **SAMPLE TOPICAL QUESTIONS**

1. What are flowering plants?
2. Give the main function of flowers to the plant.
3. Where does an irish potato store its excess food?
4. What is the importance of chlorophyll during photosynthesis?
5. How useful are stomata to plants?
6. Why is a maize grain called a fruit?
7. What name is given to:
  - a) a group of petals
  - b) a group of sepals
8. Name the two systems of a flowering plant.
9. Identify the type of germination which is common in:
  - a) Monocotyledonous plants
  - b) Dicotyledonous plants
10. Why do some flowers have bright coloured petals?
11. Which insect is likely to pollinate flowers at night?
12. What is transpiration?
13. Outline any three factors that may affect the rate of transpiration.
14. How useful are the root hairs to a plant?
15. Identify the two raw materials plants use to make starch.
16. Which gas do plants give off during photosynthesis?
17. List down any three examples of:
  - a) Compound leaves
  - b) Simple leaves
18. Where does fertilization take place in a flower?

19. What is the role of the cotyledon to a maize grain during germination?

20. Why do some plants shed off their leaves during a dry season?

21. Which part of airish potato do we eat?

22. Why is transpiration done in the evening?

23. Which part of an onion do we eat?

24. Mention the four types of underground stems.

25. What is phototropism?

26. (a) What is photosynthesis?

b) List down the four conditions needed for photosynthesis.

27. (a) What is germination?

b) Write the three conditions necessary for photosynthesis.

c) What is the role of water during seed germination.

## **SANITATION**

### **Lesson 46**

- Definition of diseases.
- Definition of germ, vector.
- Groups of germs.
- List examples of insect vectors, animal vectors.

### **Evaluation activity**

1. What do you understand by the term disease?
2. What is the different between a vector and a germ?
3. Name the four groups of germs.
4. List any five examples of insect vectors.
5. List any five examples of animal vectors.

### **Lesson 47**

## **HOUSEFLY**

- How a housefly transmits germs.
- Structure of a housefly.
- Life history of a housefly.

### **Evaluation activity**

1. How does a housefly transmit germs from one place to another?
2. Draw and name the life cycle of a housefly.
3. Which stage in the life cycle of a housefly is dangerous to our lives?
4. Which stage is useful to humans?

## Lesson 48

- Diseases spread by houseflies.
- Signs and symptoms of those diseases.
- Prevention and control of the diseases.

### Evaluation activity

1. Mention any four diseases spread by a housefly.
2. For each of the following diseases, mention two symptoms.
  - a) Typhoid
  - b) Cholera
  - c) Dysentery
  - d) Trachoma
  - e) Diarrhea

## Lesson 49

### COCKROACHES

- Where they live.
- Diseases spread by cockroaches.
- How to prevent the diseases.
- Life cycle of a cockroach.

### Evaluation activity

1. Name any two places where cockroaches live.
2. State four diseases spread by houseflies.
3. Give two ways of preventing diseases spread by cockroaches.
4. Draw and name the lifecycle of a cockroach.

## Lesson 50

### FLEAS

- Where they live.
- Diseases spread by fleas.
- Ways of preventing fleas.

### LICE

- Where they live.
- Types of lice.
- Diseases spread by lice.
- How to control lice.

### **Evaluation activity**

1. Identify two places where we find lice.
2. Name any two diseases spread by fleas.
3. State two ways of preventing fleas.
4. List two places where lice live.
5. Mention two types of lice.
6. State the disease spread by lice.
7. State two ways of controlling lice.

### **Lesson 51**

#### **BED BUGS**

- Characteristics of bed bugs.
- Where they live.
- Prevention and control of bedbugs.

#### **TICKS**

- Characteristics of ticks.
- Where they live.
- Diseases they spread.
- Control.

### **Evaluation activity**

- Mention two characteristics of bed bugs.
- Where do bed bugs live?
- State two ways of preventing and controlling bed bugs.
- Mention the disease spread by ticks.
- Mention the characteristics of ticks.
- Where do ticks live?
- Mention two ways of controlling ticks.

### **Lesson 52**

#### **ITCH MITES**

- Characteristics of itch mites.
- Diseases spread by itch mites.
- How scabies is spread.
- Effects of scabies.
- Prevention of scabies.

### **Evaluation exercise**

1. Mention any two characteristics of itch mites.

2. Name the disease spread by itch mites.
3. Suggest three ways in which scabies is spread.
4. State two effects of scabies to human beings.
5. Identify any two ways of preventing scabies.

## **Lesson 53**

### **ANIMAL VECTORS**

- i) Rats
  - ii) Mice
- Characteristics of rats and mice.
  - Where they live.
  - Dangers of rats and mice in animals.
  - Controlling rats and mice.

#### **Evaluation exercise**

- State two characteristics of rats and mice.
- Name two places where rats and mice live.
- State two dangers of rats and mice.
- Suggest two ways of controlling rats and mice.

## **Lesson 54**

### **MOSQUITOS**

- i) Types of mosquitoes
- ii) History of each mosquito
- iii) Diseases spread by each

#### **Evaluation activity**

1. Name the three types of mosquitoes.
2. Identify the diseases spread by each of the following mosquitoes.
  - a) Female anopheles mosquito
  - b) Culex mosquito
  - c) Aedes/tiger mosquito
3. Draw a diagram showing the life history of the following;
  - a) Anopheles mosquito
  - b) Culex mosquito

## **Lesson 55**

### **ANOPHELES MOSQUITO**

- Diseases spread.



- Signs and symptoms.
- Effects of malaria.
- Control.

### **Evaluation activity**

1. Identify the disease spread by female anopheles mosquito.
2. List the signs and symptoms of the above disease.
  - a) Signs
  - b) Symptoms
3. Write down two effects of malaria.
4. State any two ways of controlling malaria.
5. Name two other mosquitoes and the diseases they spread.

### **Lesson 56**

#### **TOPICAL QUESTIONS**

1. What is sanitation?
2. Name three activities that promote sanitation in homes?
3. Define the following terms;
  - a) Disease
  - b) Vector
  - c) Germ
4. Where do cockroaches live?
5. How is a housefly dangerous to human beings?
6. How many stages does a housefly undergo?
7. Mention any two disease spread by houseflies.
8. Name any one disease spread by fleas.
9. State any two types of lice.
10. Why should we keep our hair short and clean?
11. Outline the 7 Fs mentioned in the spread of germs.
12. State two ways of controlling bedbugs.
13. Where do ticks live?
14. What vector spreads scabies?
15. State two ways of controlling scabies.
16. State two effects of scabies to human beings.
17. Name two places where rats and mice live.
18. State two dangers of mice.
19. How can we control rats and mice in a home?
20. Name any three types of mosquitoes.
21. Give the diseases spread by the above mentioned types.
22. Draw a diagram showing the larva of a culex mosquito.
23. List any two signs and symptoms of malaria.
24. Write down two ways of controlling mosquitoes.

## Lesson 57

### TOPIC: INTERDEPENDENCE OF THINGS IN THE ENVIRONMENT

- Definition of environment.
- Components of the environment.
- Importance of the components of the environment.
- Grouping things in the environment.

#### Evaluation activity

1. What do you understand by the term environment?
2. Mention any four components of the environment.
3. Identify two components of the environment under each of the following.
  - a) Living things
  - b) Non living things
4. Give one importance of each of the following components.
  - a) Water
  - b) Air
  - c) Soil

## Lesson 58

### INTERDEPENDENCE

- What is interdependence?
- How animals and plants depend on each other.
  - a) Plants to animals
  - b) Animals to plants
  - c) Animals to animals

#### Evaluation activity

1. What is interdependence?
2. State two ways in which the following depend on each other.
  - a) Animals to plants
  - b) Plants to animals
  - c) Animals to animals
  - d) Plants to plants

## Lesson 59

### SAMPLE TOPICAL QUESTIONS

1. What do you understand by the term environment?
2. State any two components of the environment.
3. How can you tell that there is air around you?
4. Give two uses of soil.

5. What do you understand by the following terms?
  - a) Predator
  - b) Prey
  - c) Parasite
6. What is interdependence?
7. Define (i) Food chain (ii) Food web
8. Give two importance of each of the following.
  - a) Water
  - b) Air
9. State one natural source of water.
10. Why do plants climb other plants?
11. How do animals depend on plants?
12. Give three ways in which plants depend on animals.
13. Name the type of manure got from animals.
14. Name any animals which live in:
  - a) Soil
  - b) Water
15. Why do bees visit flowers?
16. Why do people put manure in their gardens?
17. Name any two conditions plants need to make their own food.
18. Define the term photosynthesis.