

# THE SIPRO MID - TERM III EXAMINATIONS 2022

SUBJECT : INTEGRATED SCIENCE

CLASS : PRIMARY FIVE

DURATION : 2 hours 15 minutes

Name : \_\_\_\_\_

School : \_\_\_\_\_

District : \_\_\_\_\_

## READ THE FOLLOWING INSTRUCTIONS CAREFULLY:

1. This paper has two sections: **A** and **B**.
2. Section **A** has **40** questions (**40** Marks).
3. Section **B** has **15** questions (**60** Marks).
4. Attempt all questions in both sections. All answers to both sections **A** and **B** must be written in the spaces provided.
5. All answers must be written in blue or black ball point pens or ink. Only diagrams and graph work must be done in pencil.
6. Unnecessary alteration of work will lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.
8. Do not fill anything in the boxes indicated:  
**"FOR EXAMINER'S USE ONLY"**

## For Examiner's Use Only;

PAGES	MARKS	INITIALS
Page 1		
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Total		

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## SECTION A: 40 MARKS

Questions 1 to 40 carry one mark each.

1. Which part of a flower attracts birds and insects for pollination?  
\_\_\_\_\_
2. Give **one** example of a biological change in animals.  
\_\_\_\_\_
3. How do trees in the school compound prevent damage of school buildings by wind?  
\_\_\_\_\_
4. Name the part of a fish that protects the gills.  
\_\_\_\_\_
5. Why do most people prefer rearing rabbits to rearing goats in their homes?  
\_\_\_\_\_
6. Give **one** characteristic of social insects.  
\_\_\_\_\_
7. State **one** danger of keeping fingernails long.  
\_\_\_\_\_
8. What First Aid is given to a person who has been burnt by fire on the foot?  
\_\_\_\_\_
9. Name **one** method of food preservation that involves the use of heat.  
\_\_\_\_\_
10. Why is a rat not a friendly animal to a crop farmer?  
\_\_\_\_\_

**The diagram below shows a common item. Study and use it to answer questions 11 and 12.**



11. Name the item shown above.  
\_\_\_\_\_
12. Give **one** type of weather in which the item above is used.  
\_\_\_\_\_



13. Which food deficiency can lead to marasmus?  
\_\_\_\_\_
14. State the type of objects which requires displacement method to find their volume.  
\_\_\_\_\_
15. Give the importance of oxygen to a germinating bean seed.  
\_\_\_\_\_
16. Which part of an irish potato plant is eaten by people?  
\_\_\_\_\_
17. What is the function of a kink in a clinical thermometer?  
\_\_\_\_\_
18. How can salt that has dissolved in water be recovered from its solution?  
\_\_\_\_\_
19. Name **one** common vector with a nymph as a stage in its life cycle.  
\_\_\_\_\_
20. Give any **one** way of preventing tooth decay.  
\_\_\_\_\_
21. State **one** condition needed for bacteria to multiply.  
\_\_\_\_\_
22. How does mulching improve soil fertility?  
\_\_\_\_\_

**The diagram below shows an equipment used in bee keeping. Study and use it to answer questions 23 and 24.**



23. Name the equipment shown above.  
\_\_\_\_\_
24. State the importance of the equipment shown above to a bee keeper.  
\_\_\_\_\_
25. How are pawpaw plants adapted to cross pollination?  
\_\_\_\_\_
26. Apart from meat, name **one** other food product obtained from poultry.  
\_\_\_\_\_





27. Why do Ugandan farmers prefer keeping local breeds of goats to exotic ones?

28. State **one** use of insulators to a mother cooking in the kitchen.

29. Why is dew formed in the night but not during the day?

30. How is reproduction in yeast different from that of a mushroom?

31. In which **one** way is a health parade important in a school?

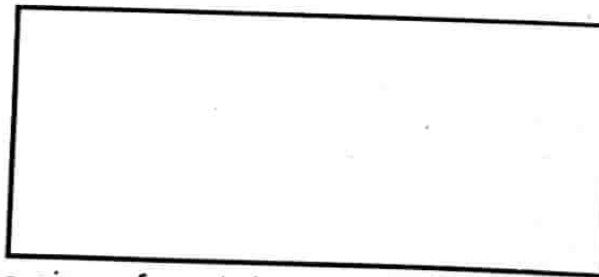
32. State any **one** use of food to the human body.

33. Apart from malaria, name **one** other disease spread through mosquito bites.

34. Why does a nail sink in water?

35. What does a hookworm feed on in the human body?

36. In the space provide below, draw a diagram to show that air exerts pressure.



37. State any **one** sign of pest damage on crops.

38. Name the part of the leaf that allows gaseous exchange.

39. Which method of heat transfer enables a mother to dry washed clothes on the wire?

40. Name **one** tool farmers use for closed castration in male sheep.



## SECTION B: 60 MARKS

Questions 41 to 55 carry four marks each.

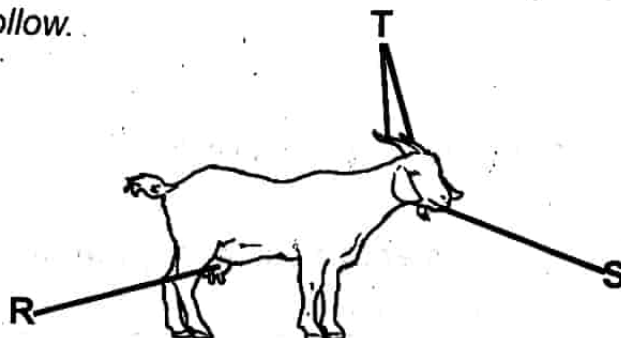
41 (a) State one reason why gaps are left between railway lines.

(b) What would happen to the rail, if the gaps were not left between them especially when it is hot?

(c) Give a reason for your answer in (b) above.

(d) State any one thing that happens to matter on cooling.

42. The diagram below shows a domestic animal. Study and use it to answer the questions that follow.



(a) Name the part marked with letters:-

(i) S

(ii) T

(b) How does the animal above benefit from part marked with letter T?

(c) Mention the product obtained by people from part marked with letter R?

43(a) Write any two methods of rearing poultry that limit the movement of birds.

(i)

(ii)

(b) Give two importance of litter in a poultry house.

(i)

(ii)

44(a) What term describes the process by which plants make their own food?

(b) Mention two raw materials needed for the process in (a) above.

(i)

(ii)

(c) State the importance of chlorophyll during the process in (a) above.



45(a) Write **one** type of fracture.

b) Give **two** materials that can be used for giving First Aid for a fracture.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(c) Why is it important to check on the heartbeat of a casualty before giving First Aid?

46 (a) Give **one** advantage of feeding on a balanced diet.

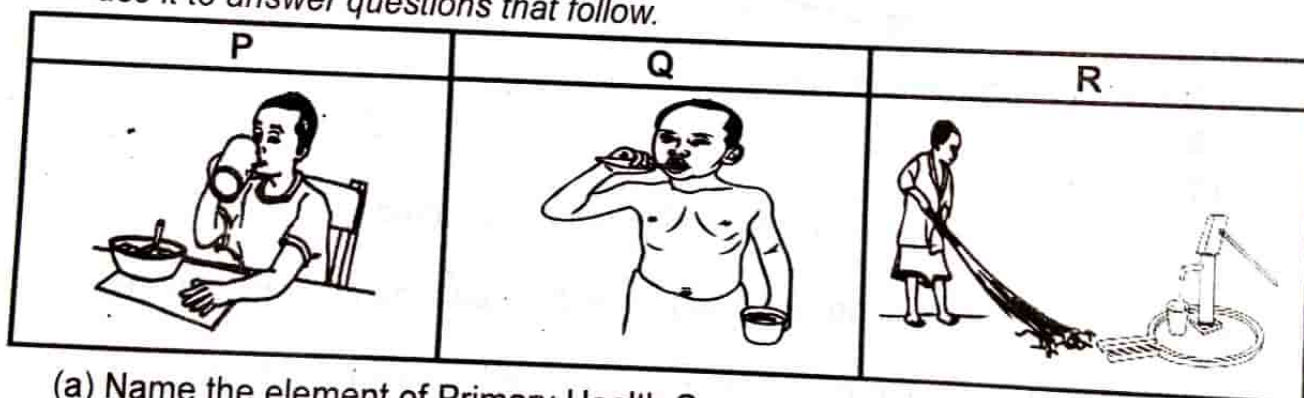
(b) Apart from proteins, give **two** other classes of food that make up a balanced diet.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(c) Write down **one** sign of malnutrition in children.

47. The diagram below shows activities carried out by P.5 pupils. Study it and use it to answer questions that follow.



(a) Name the element of Primary Health Care promoted by the pupil in diagram R.

(b) Apart from the elements being promoted in the diagrams above, name any other element of Primary Health Care.

(c) When is it recommended for the pupils to carry out the activity in diagram Q?

(d) How is activity P useful in the control of diseases?





48 (a) Apart from the elderly, mention **two** other vulnerable groups of people.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) Write **two** ways of caring for the elderly at home.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

49(a) State any **two** non-living components of the environment.

(i) \_\_\_\_\_

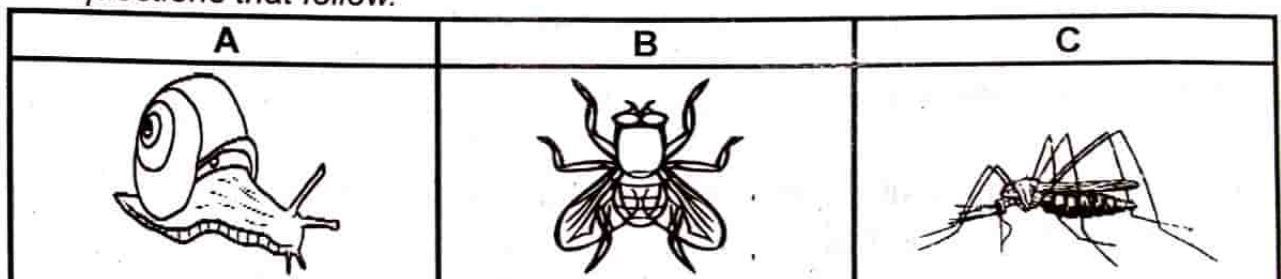
(ii) \_\_\_\_\_

(b) Give **two** ways of caring for plants as a component of the environment.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

50. The diagram below shows common vectors. Study and use it to answer the questions that follow.



(a) Name the vector marked with letter A.

(b) Mention **two** diseases spread by the vector represented by letter marked B.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(c) How does vector C spread diseases among people?

51. Match the body organs in list A to their senses in list B.

**A**

ear

nose

skin

tongue

**Sense**

i) \_\_\_\_\_

ii) \_\_\_\_\_

iii) \_\_\_\_\_

iv) \_\_\_\_\_

**B**

smelling

tasting

hearing

feeling

**Organ**

smelling

tasting

hearing

feeling



52(a) How do the following animals protect themselves against enemies?

(i) snake \_\_\_\_\_

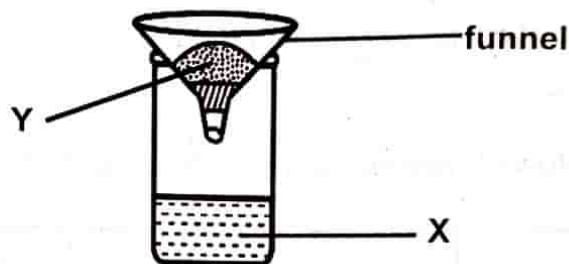
(ii) millipede \_\_\_\_\_

(b) Why do animals move from one place to another? (Give **two** reasons)

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

53. The diagram below shows a method of separating mixtures. Study and use it to answer the questions that follow.



(a) Which method of separating mixtures is shown in the diagram above?

(b) Give **one** example of a mixture that can be separated using the method shown in the above diagram.

(c) Name the substance marked with letter X in the above diagram.

(d) Mention any **one** activity at home carried out using the above method of separating mixtures.

54(a) Give **two** ways of preventing rusting of metallic objects.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) What type of change is rusting?

(c) Apart from rusting, give **one** other example of the changes named in (b) above.

55(a) Write **two** examples of annual crops.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) Give **two** ways of caring for annual crops.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_



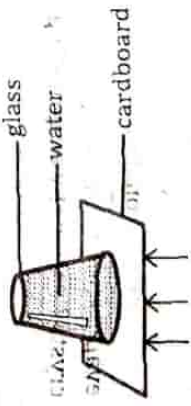
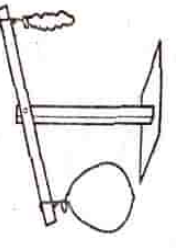


# THE SIPRO PRIMARY FIVE INTEGRATED SCIENCE MID - TERM TWO MARKING GUIDE - 2022

NO.	CLASS LEVEL	CORRECT RESPONSE	MARKING POINT - <del>WRONG RESPONSE</del>	WRONG RESPONSE MARKING POINT	TECHNICAL ADVICE
1.	P.4	Petals/Bright petals/Pollen/Nectar.	Stigma/Sepals.	Things that attract pollination agents.	Use of a real flower to discuss the parts.
2.	P.5	Moulting (ecdysis)/Growth/Fertilisation/Adolescence in humans.	Transpiration/Germination.	Biological change in plants.	Discuss the types of changes in the environment with clear characteristics.
3.	P.5	Trees act as windbreaks/Trees reduce the strength of wind.	Trees trap wind.	Trees as windbreaks..	Discuss the ways of conservation of the environment.
4.	P.3	Gill cover/Operculum.	Gills	Part that protects the gills.	Discuss the parts of a fish, and their importance.
5.	P.4	Rabbits multiply faster than goats/ Rabbits take a smaller space than goats/ Rabbits need less care compared to goats.	Rabbits reproduce fast while goats don't.	Accept a complete comparison.	Train learners on proper question approach.
6.	P.3	Social insects move, live and work together/Live in colonies.	Social insects give us honey/Have six jointed legs.	Characteristics of social insects.	Differentiate between social and solitary insects.
7.	P.2	Long fingernails are hiding places for germs/Long fingernails may harm the skin/Cause cuts to the skin.	Long fingernails cause poor personal hygiene.	Danger of long fingernails.	Go through the steps done to promote personal hygiene.
8.	P.4	Dipping the injured part in cold water/ Place the burnt foot in cold water/Pour cold water on the burnt foot.	Putting salt on the burnt part.	Act done to cool the temperature of the burnt part.	Discuss the control measures of accidents in the community.
9.	P.4	Sun drying/smoking/Dip frying.	Roasting/boiling.	Method of preserving food that involves heat.	Go through the importance of food preservation.
10.	P.3/P.4	A rat eats the crops/A rat destroys the crops/A rat eats the tuber crops.	A rat disturbs the farmer.	Danger of rats to a crop farmer.	Revise the signs of pest damage to crops.
11.	P.2	Umbrella.	Ambrella.	Correct spelling.	Remind the learners of management of different types of weather.
12.	P.2/P.4	Rainy/Rainy weather/Sunny/Sunny weather.	Rainy weather/Rain/Sunshine/Rainfall	Condition of weather where an umbrella is used/Check the spellings.	
13.	P.4/P.2	Deficiency of carbohydrates.	Proteins	Correct spelling, and food value lacked.	Help learners know the deficiency diseases and their causes.

14.	P.5	Irregular objects.-	Regular objects/Stones.	Type of objects with improper objects.	Practically carry out the displacement method in the classroom.
15.	P.3/P.4	Oxygen is used for respiration/Oxygen helps in energy formation.	Oxygen provides energy.	Response should be in line with energy formation (respiration).	Use the school garden to investigate the conditions necessary for respiration.
16.	P.5	Stem tuber	Roots	Food storage part of an Irish potato.	Discuss the food storage parts of different crops.
17.	P.5	To prevent the backward flow of mercury/To stop mercury from flowing backwards.	To keep mercury.	Prevention of the backflow of mercury.	Go through the types of thermometers, and the thermometric liquids.
18.	P.5	By evaporation to dryness/By crystallization/By evaporating the solution to dryness.	By drying the solution.	Correct method.	Practically carry out methods of separating mixtures.
19.	P.4	Cockroach	Cockroach	Correct spelling.	A discussion about insect lifecycles will aid retention.
20.	P.4/P.5	By regular brushing of teeth/By regular rinsing of the mouth/By dental flossing/Avoid eating sugary foods.	By treating teeth.	A preventive measure.	Help learners know the difference between control measures and preventive measures.
21.	P.5	Presence of food/Presence of warmth/Presence of moisture.	Carbon dioxide	Conditions that favour bacteria reproduction.	Differentiate between reproduction in bacteria and that in fungi.
22.	P.4/P.3	Mulches decompose to form humus/Mulches decay to form humus.	Mulches make the soil fertile.	How mulches improve soil fertility.	Use the school garden to discuss the significance of mulching in the garden.
23.	P.5	Swarm catcher/Swarm catching net.	Net	Correct name.	Discuss the factors considered when setting a hive.
24.	P.5	For stocking a new hive/For enabling bees occupy a new hive.	For trapping bees.	Use of a swarm catcher.	
25.	P.4	Pawpaw plants are single sexed/Have the stamen and pistil on different plants.	Pawpaw plants have both flowers.	Adaptation of plants to cross pollination.	Go through the types of pollination in a detailed way.
26.	P.5	Eggs/droppings/Feathers.	Chicken/Beef.	Exempt meat.	Go through the types of chicken, and their examples.
27.	P.5	Local breeds of goats can withstand harsh weather more than exotic ones/Local breeds of goats are more resistant to diseases than exotic ones/Local breeds need less care than exotic ones.	Local breeds grow faster than exotic breeds.	- Advantages of keeping local breeds to exotic ones. -Accept complete comparison.	Take the learners through the breeds of sheep, goats and pigs with the products obtained from them.



28.	P.5	For carrying hot saucepans/For holding hot metals without being burnt.	For putting food.	Roles of insulators in the kitchen.	Use real objects to differentiate insulators and conductors.
29.	P.5	During the night, there isn't sunshine to dry the vapour, while there's sunshine that dries the vapour during day time.	Due to condensation.	Accept a comparative response.	Discuss the different changes in plants and their effects.
30.	P.5	Yeast reproduces by budding while a mushroom reproduces by spore formation.	Yeast reproduces by spores while a mushroom reproduces by cell division.	Reproduction in a mushroom and yeast.	Go through reproduction in fungi and bacteria.
31.	P.5	A health parade helps to promote personal hygiene among pupils/Prevents the spread of skin diseases among pupils/Checks of the hygiene of pupils.	A health parade promotes sanitation.	Importance of health parade.	Go through ways of ensuring health among people.
32.	P.4/P.2	Food provides energy in the body/Food keeps the body healthy/Food helps in body growth.	Food makes a person happy.	Importance of food in the body.	Discuss the different classes of food and their roles in the body.
33.	P.3	Yellow fever/Elephantiasis/Dengue fever/Filariasis.	Typhoid	A mosquito born disease.	Revise about mosquito lifecycles in a detailed way.
34.	P.5	A nail is denser than water/Water is less dense than a nail.	A nail is less dense than water.	Density of a nail in comparison with water.	Practically discuss objects in terms of density.
35.	P.4	Human blood/Blood.	Digested food.	Food for a hookworm.	Discuss the danger of intestinal worms in the body.
36.	P.3			Accept the drawing for air exerts pressure.	Experiments on different properties of air will aid mastery.
37.	P.4	Holes on the leaves/Bitten stems/Rotten roots/Bitten roots/Damaged fruit/Wilting/ stunted growth.	Yellow leaves.	Signs of pest damage.	Use the school garden to show the signs of pest damage to plants.
38.	P.3	Stomata/Stoma.	Spiracles.	Breathing organs on a leaf.	Go through parts of a leaf and their functions.



39.	P.5	Radiation.	Conduction.	Heat transfer through a vacuum.	Go through the methods of heat transfer.
40.	P.5	Burdizzo/Elastrator/Loop/Rubber band.	Knife	A tool used for closed castration.	Revise the animal farm management practices and the tools used.
<b>SECTION B</b>					
41.	P.5	a) To give room for expansion during hot weather. b) The rails would bend. c) The rails would lack enough room for expansion. d) Matter contracts/Shrinks/Loses temperature/Becomes cold.	To give room for expansion and contraction. The rails would rust. The rails would rust. Matter expands.	Reason for leaving gaps in rails. Effect of expansion to rails. Effect of expansion. Effects of heat loss on matter.	- Discuss the effects of heat gain or heat loss on matter; and how to manage them.
42.	P.3	a) S - mouth T - horns. b) Part marked T helps the animal to protect itself. c) Milk	S - beards T - ears For decoration. Meat/Udders.	Correct naming. Use of horns to a goat. Substance obtained from the udder.	- A thorough discussion about parts of domestic animals is paramount.
43.	P.5	a) Cage system/Battery system/Pen system/Fold system/Deep litter system. b) Litter prevents dampness in the poultry house/Keeps the poultry house warm/Prevents eggs from breaking/Makes it easy to clean the poultry house.	Open range system. Litter is cheap/Litter cools the house.	Indoor poultry rearing systems. Correct use of litter in a poultry house/For drinking.	- Visit a nearby poultry farm and identify the systems used. Also ask the farmer about the poultry management practices.
44.	P.4	a) Photosynthesis. b) Carbon dioxide/Water. c) Absorbs sunlight.	Photosynthesis. Chlorophyll/Sunlight. Makes food.	Correct spelling. Raw materials. Role of chlorophyll.	- Have a brief discussion about photosynthesis.
45.	P.5	a) Simple fracture/Compound fracture. b) Bandage/Splints/Short sticks/Tourniquet. c) To ensure circulation of blood/To ensure that the person is still alive.	Natural fracture. Razor blade. To pump blood.	Correct type of fracture. First Aid kit for fractures. Circulation of blood.	- Use the First Aid box at school to show the learners the First Aid kit and their uses.

46.	P.4	a) Keeps the body healthy/Protects the body from deficiency diseases. b) Carbohydrates/Vitamins/Fats and oils/Roughages/Mineral salts/Water. c) Little brown hair/Swollen neck/Emaciated body/Swollen hands and legs/Moon face/Old looking face/Stunted growth.	Prevents death.  Pawpaw.  Sickness.	Importance of a balanced diet.  Classes of food.  Indicators of malnutrition.	<ul style="list-style-type: none"><li>- Go through the components of a balanced diet and their importance.</li><li>- Discuss the signs and symptoms of different deficiency diseases.</li></ul>
47.	P.5	a) Water and sanitation. b) Immunisation/Family planning/Maternal and child health care. c) After every meal. d) Boosts the immunity of the body/Strengthens the body immunity.	Personal hygiene. -Food and nutrition. -Oral hygiene. In the morning. Provides energy.	Correct name. Accept one which isn't part of the diagram. Right time for brushing. Response should be about immunity boost. Exclude the elderly.	<ul style="list-style-type: none"><li>- Go through the principles and elements of PHC in a detailed form.</li><li>- Also revise about the roles of individuals, families and communities in promoting PHC.</li></ul>
48.	P.5	a) Pregnant women/Breastfeeding mother/Weaning babies/The sick. b) By feeding them on a balanced diet/By taking them for regular medical check-up/By feeding them in time/By washing for them clothes.	Very old people. By feeding them.	Ways of caring for very old people.	<ul style="list-style-type: none"><li>- Have a detailed discussion about vulnerable groups and people with special needs.</li></ul>
49.	P.3	a) Mountains/air/wind/sun/water/soil. b) By pruning/watering/spraying using pesticides/By mulching garden.	Trees By planting.	Non - living components. Care for plants.	<ul style="list-style-type: none"><li>- Go through the components of the environment and their importance.</li></ul>
50.	P.4	a) Water snail/Garden snail. b) Cholera/diarrhoea/Dysentery/Trachoma/Typhoid. c) Through bites/Biting.	Slug Malaria Using the hairy body.	Accept snail. Diseases spread by a housefly. Transmission of germs by a mosquito.	<ul style="list-style-type: none"><li>- Take the learners through a detailed discussion about common vectors and germs.</li></ul>
51.	P.1	(i) nose (ii) tongue (iii) ear (iv) skin	(i) tongue (ii) ear (iii) skin (iv) nose	Correct sense organs matched to their uses.	<ul style="list-style-type: none"><li>- Go through the uses of different body parts.</li></ul>
52.	P.2	a) (i) By biting/Through biting the enemy/Spitting venom.	(i) By slithering. (ii) By changing colour.	(i) Protection in a snake.	

THE SIPRO PRIMARY FIVE INTEGRATED SCIENCE



		(ii) By curling/coiling/producing a bad smell. b) To look for water/food and water/For protection/To look for their young ones/ To look for shelter.		(ii) Protection in a millipede. Reason for animal movement.	- Help the learners know the different characteristics of different minerals.
53.	P.5	a) Filtration method. b) Fruit juice with seeds/Fermented juice with sorghum/Water with stones. c) Filtrate. d) Preparing fruit juice/Preparing clean water/Preparing fermented alcohol/ Preparing tea.	Decantation. Seeds with husks. Filtered water. Drinking soda.	Correct name. A mixture of a liquid and a solid. Correct name. Activity that involves filtration.	- Practically carry out the methods of separating mixtures with all the details.
54.	P.5	a) By painting metals/By oiling metals/By galvanizing metals/By enamelling metals/ By keeping them in a dry place. b) Chemical change. c) Fermentation/Digestion/Burning/ Decomposition/Ripening of fruits.	By warming metals. Physical change. Freezing.	Prevention of metal contact with oxygen and water. Irreversible change. Examples of chemical changes.	- Discuss the characteristics and examples of different types of changes in a detailed way.
55.	P.4	a) Cotton/Beans/Groundnuts/Cowpeas/ Maize/Sorghum. b) By pruning/Staking/Mulching/ Watering.	Coffee By washing/By eating them.	Crops that are harvested once. Care for crops.	- Use the school garden to discuss about annual and perennial crops.