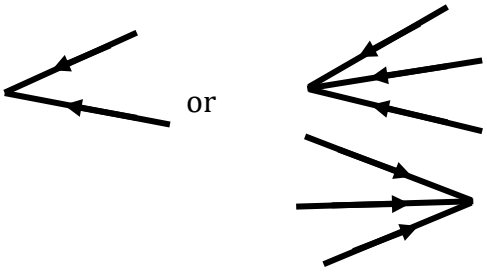
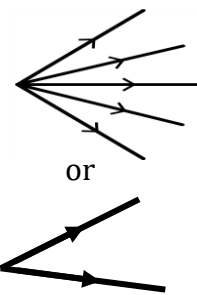


THE SIPRO PRIMARY SEVEN INTEGRATED SCIENCE SET IV MARKING GUIDE 2024

NO	CLASS LEVEL	CORRECT RESPONSE	WRONG RESPONSE	MARKING POINT	TECHNICAL ADVICE
1	P.4	- Irish potato - Cocoyams	White yams /Sweet potatoes/ Carrots/Cassava	Example of stem tubers	Guide pupils to identify tuber crops by showing them real tubers. Differentiate between root and stem tubers with relevant examples and real learning aids.
2	P.5	wool /mohair/ fur/ silk	cotton /banana fibres/ raffia/hides /skins/ hooves	Animal fibres used in a textile industry.	Explain more about items from animals used in a textile industry. Tell pupils more about how a textile industry is different from other industries.
3	P.4	Oxygen occupies space / Oxygen has weight.	Oxygen supports burning/Oxygen is used for respiration.	Why oxygen is regarded as matter.	Guide pupils to know the properties of matter. Experiment some of the properties of matter.
4	P .5	Tongue is used for tasting. /Tongue helps in talking / Tongue turns food into a bolus for easy swallowing /Mixes food with saliva.	Tongue is used for eating.	Use of the tongue.	Discuss more about the human body organs like; lungs, heart, tongue, kidneys, eyes and the brain.
5	P .7	A single movable pulley reduces the effort applied by a half of the load while a single fixed pulley uses the effort equal to the weight of the load.	A single movable pulley reduces the effort applied while single fixed pulley does not.	Advantage of using single movable pulley over a single fixed pulley.	Help learners to know the reason why people prefer using single movable pulleys to single fixed pulleys.
6	P .5	Birds look for their own food. /A poultry farmer does not need to buy poultry feeds in free range system.	It is cheap /Less labour is needed/Birds feed on a balanced diet.	Why free range system is less costly in terms of feeding poultry.	Guide pupils to know why farmers use free range system in rural areas. Discuss more about the systems of keeping poultry.
7	P .4	It makes learners aware of how COVID -19 spreads. / Prevents easy spread of COVID-19 among children.	Coronavirus disease 2019.	The message pupils got from the poster in control of the spread of COVID 19.	Help pupils to know the ways through which COVID-19 spreads from an infected person to another.
8	P .4	Washing hands with clean water and soap./ Sanitizing hands. /Wearing face masks. / Avoiding hand shaking and hugging each other. /Through quarantining the infected people.	Wash hands with clean / water and soap. / Sanitize hands./ Wear face masks./ Avoid hand shaking./ Do not hug each other.	Way the spread of COVID-19 was managed.	Guide pupils on how to give correct responses to the questions about the previous situation. Let pupils understand how to give ways that were done to prevent the spread of COVID-19
9	P .4 /P.5	By radiation	By conduction/By convection	How heat from the sun reaches harvested crops.	Guide the pupils about the methods of heat transfer in three states of matter. Help pupils to know that radiation doesn't occur in the three states of matter.
10	P .3/ P. 4	A rake is used for levelling soil in a nursery bed. /A rake is used for collecting cut grass for mulching.	For sweeping/For digging in hard soils./For collecting rubbish.	The use of the rake to the crop farmer.	Guide pupils to always give answers that match with the occupation of a person. Help pupils to know that a crop farmer doesn't use a rake to promote sanitation by collecting rubbish.
11	P .4	To make soil soft for easy planting.	To control soil erosion./ To control weeds.	Why farmers carry out ploughing before planting seeds.	Discuss more about farming practices and their advantages and disadvantages like mulching, pruning and weeding.

12	P.4	Using proper methods of fishing/ By conserving water bodies/ Avoiding over fishing/Removing water weeds to enable survival of fish in lakes/Treat industrial wastes before releasing them into water bodies to control water pollution.	Boiling/By frying/By packing / By salting / By smoking.	Way in which fish can be conserved.	Discuss more about ways of conserving fish. Help learners to know the difference between fish conservation and preservation.
13	P.6	Pulmonary artery carries de- oxygenated blood while other arteries carry oxygenated blood.	Pulmonary artery carries oxygenated blood while other arteries carry de oxygenated blood.	Correct difference	Discuss more about blood vessels.
14	P.7	Dislocation	Fracture.	-Disorder that involves a bone leaving the normal position.	Guide the pupils about the disorders and the diseases of the muscular and skeletal system.
15	P.7	Regulates the amount of light entering the human eye.	Allows light into the eye.	Correct function for the Irish.	Discuss more about the parts of the human eye and its function.
16	P.7	Letter D	letter c	Correct part	Relate the parts of the eye and those of a camera in terms of their function.
17	P.5	For crushing sperm ducts.	For castration	Importance of burdizzo during castration.	Discuss more about tools used in livestock farm. / Visit a nearby livestock farm for learners to see tools used in a livestock farm.
18	P.4	Makes soil nutrients move to deeper layers of soil where plant roots cannot reach.	Soil leaching causes soil erosion.	- How soil leaching leads to soil infertility	Differentiate between soil leaching and soil erosion. / Help pupils to know how the two reduce on soil erosion.
19	P.4	Carbon dioxide	Oxygen/Nitrogen/ Rare gases	Component of air that bubbles out when a soda bottle is opened.	Help pupils to know the component of air used in preserving bottled drinks.
20	p.5	It causes indigestion./Causes constipation/ It can lead to choking.	To kill hunger./To get energy./To build the body /To get satisfied quickly.	Danger of chewing food hurriedly.	Guide pupils to know the dangers that result from chewing food hurriedly.
21	P.6	Provision of iron tablets. / Immunizing them against tetanus./HIV/ AIDS testing./ Counselling and guidance/ Scanning the foetus.	Giving her food./Feeding her on a balanced diet./ Buying her clothes.	Health service given to pregnant mothers during antenatal care.	Discuss more with children about the services given to pregnant mothers during antenatal care.
22	P.5	Breast milk is no longer nutritious enough to provide all nutrients needed. / To enable the baby get iron.	To get energy./Breast milk contains antibodies that boost the baby's immunity.	Why weaning is done at the age of six (6) months.	Guide pupils about the following; Breastfeeding and its advantages to a baby and a mother. Bottle feeding and its advantages; Weaning in babies.
23	P.6	Hepatitis B.	Diarrhea/Dysentery/ Cholera/Polio	The waterborne disease that affects the liver.	Guide pupils about human body organs and their diseases.
24	P.4	A grasshopper feeds on solid food while a housefly feeds on liquid food./ A grasshopper uses mandibles for eating while a housefly uses proboscis for feeding.	A grasshopper uses mandibles for feeding. A grasshopper feeds on solid foods.	Difference between a grasshopper and an insect in terms of feeding.	Discuss more about the feeding habits of different organisms in the environment.
25	p.6	Fast vibrations produce high pitch of sound.	Fast vibrations produce sound./Fast vibrations produce higher pitch than slow vibrations.	Effect of fast vibrations to pitch of sound.	Carry out experiments about the pitch of sound for pupils to observe and discover.

26	P.7			Correct diagram of a converging beam.	Explain more about the meaning of words like; converge, diverge and parallel for pupils to know their meaning. / Carry out illustrations about the types of beams for pupils to understand them very well.
27	P.6	Scorpion	Tsetse fly/ticks//spiders	An arachnid that gives birth to live young ones as it is in human beings.	Guide pupils to understand the muscles and the modes of reproduction in different organisms.
28	P.6	To increase space in the chest cavity/ To create enough space for the lungs in the chest cavity.	To cater for expansion and contraction of the lungs.	why muscles between the ribs and diaphragm contract during breathing in.	Guide pupils to know the importance of the diaphragm contracting during breathing in.
29	P.4	Terminal bud.	Axillary bud./Fleshy leaves./Scale leaf.	Correct name and spelling.	Discuss more about the parts of an onion./Visit a nearby garden of onions with pupils to see the difference between foliage leaves and other leaves of onions.
30	P.5	Protects inner parts of an onion / Prevents fleshy leaves from drying up.	Make food for an onion / Stores food.	Correct function of part marked N.	Help pupils to know the uses of parts of an onion.
31	P.6	By covering the container./ Sealing the drum tightly.	By condensing alcohol vapor.	How alcohol vapour is prevented from escaping.	Discuss more about distillation method of making alcohol with correct illustration on a chalkboard/ chart.
32	P.6	Human wastes like faeces /Animal wastes like cow dung and urine. / Silt from erosion. / Industrial wastes like used oils. / Agricultural chemicals like pesticides, acaricides etc.	fish/frogs/toads Salamanders	Example of water pollutants.	Guide pupils to know more about water pollution and things that can pollute water.
33	P.6	It causes silting.	It causes soil erosion. / It causes soil exhaustion.	Danger of cultivating along river banks.	Guide pupils to know how dangerous it is to cultivate along river banks. Let pupils know its negative effects.
34	P.6	Dyed clothes can stain white clothes on soaking./ White clothes may get dye stains.	For easy washing./It softens dirt for easy washing.	Disadvantage of soaking white clothes with other clothes.	Discuss more about the steps followed when cleaning clothes. Carry out practicals about the steps followed when cleaning clothes. Involve pupils to practice the steps.
35	P.6	To act as a source of iron which increases the volume of blood in bodies. / To enable their bodies make more blood that replaces the lost blood.	To grow well/To prevent them from food deficiency diseases.	Why adolescent girls are given plenty of vegetables during their menstruation periods.	Help learners to understand the questions which require specific answers./Discuss more about the ways of increasing the volume of blood.
36	P.6	Flightless birds.	Wading birds./Birds of prey./Scratching birds.	Correct group of birds in the list.	Discuss more about the groups of birds with their relevant examples and illustrations.

37	P.6	Birds in the mentioned group move by walking or running very fast while other birds move by flying.	They have small wings compared to their body size./They have bone marrow./They move by running.	Mode of movement in flightless birds in comparison with other birds.	Help pupils to know the modes of movement in different groups of birds.
38	P.4	A leaf is less dense than water. / Water is denser than a leaf.	A leaf is less dense than water. / Water is more denser than a leaf./A leaf is less dense./ Water is denser.	Why a leaf floats on water.	Discuss more about the densities of different objects. Carry out experiments with children about floating and sinking objects.
39	P.4/ P.6	A needle	pin	Correct identification.	Demonstrate for the learners to understand more about first aid tools.
40	P.4 /P.6	For stitching the wounded part.	For fastening the bandage.	Correct use of a needle during First aid.	Discuss more about first aid tools. Use real tools for pupils to understand more. /Demonstration lessons about the use of first aid tools should be conducted to aid content retention.
SECTION B					
41	P.4	a) Crop rotation is the growing of different crops on the same piece of land season after season. / Seasonally	Crop rotation is the growing of crops in the same piece of land.	Correct complete definition of crop rotation.	Guide pupils to clearly understand the proper definition of crop rotation.
		b) It involves the growing of cover crops that prevent soil from direct rain drops./That reduce the speed of fast flowing water.	Crop rotation improves on soil fertility. / Controls crop pests.	How crop rotation controls soil erosion.	Discuss more about the benefits of practicing crop rotation. Help pupils to know how crop rotation improves on soil fertility, controls soil erosion and controlling pests.
		c) Crop rotation improves on soil fertility./It controls pests in the garden. / Increases crop yields.	Legumes/Cereals/ Controls soil erosion.	Importance of crop rotation besides controlling soil erosion.	
42	P.6	a) By vibration of rings of cartilage in their trachea.	By rapid flapping their wings on hind legs. / By vibration of vocal cords. By vibration of an object.	How birds produce sound.	Discuss more about how sound is introduced by different organisms.
		b) Volume is the loudness or softness of sound while pitch is the highness or lowness of sound.	Volume is highness or lowness of sound while pitch is the loudness or softness of sound.	Difference between volume and pitch of sound.	Guide pupils to understand how the length of strings affects the pitch of sound.
		c) The longer the string, the lower the pitch and the shorter the string, the higher the pitch of sound.	By vibration of an object.	How the length of strings of the bow harp affects the pitch produced.	Discuss the factors that determine pitch.
43	P.6	a) Hand milking	Machine milking	Correct method of milking and correct spelling.	Guide pupils about how the methods of milking. Take pupils to a nearby farm of livestock and see the methods of milking used.
		b) To prevent a cow from pouring milk./ To prevent a cow from kicking a person./To prevent a cow from contaminating milk.	To make the cow stand upright. / To get enough milk.	Reason why the hind legs are tied when milking a cow.	Take the learners through the right steps of milking.
		c) Washing hands/Washing milk cans/Washing the udder with clean water./ Testing milk for mastitis.	Getting containers	Activities done to obtain clean milk.	Guide pupils about the procedures of obtaining clean milk.

44	P.7	a) Leprosy	Polio /Tuberculosis/ Rickets	Skeletal disease that causes loss of toes and fingers.	Discuss more about the skeletal and muscular diseases.
		b) Through body contact. / Through eating food contaminated by cockroaches.	Through air	A way leprosy is transmitted among people.	Discuss more about the spread of communicable diseases.
		c) Feeding on a balanced diet. / Performing regular physical exercises. / Drinking boiled water to prevent polio. /Drinking boiled milk to prevent tuberculosis of bones.	By not drinking dirty water.	Prevention of skeletal diseases.	Revise more about the ways of preventing muscular skeletal diseases.
45	P.6	a) Semi-circular canals.	Semi-circle. Cochlea	Correct name of part marked L.	-Revise more about the human ear. -Describe how the human ear works. -Care for the ear.
		b)(i) Part R takes impulses to the brain for interpretation (ii) Part M converts sound vibrations into impulses.	Auditory nerve / Eardrum	Importance of parts R and M in the hearing process.	
		c) By removing wax from the ear / By cleaning the ear using soft materials.	By listening to music.	By listening to music.	
46	P.4	a(i) Members in market A are likely to be affected by diarrhoeal diseases. (ii) Members are likely to be affected by a bad smell./ A problem of many houseflies.	HIV/ AIDS/COVID- 19	Correct sanitary requirement.	Help pupils to understand different requirements needed in a clean environment.
		b) Urinals/ compost pits/ garbage containers/ garbage bags.	Cars/ buckets		
		c) Ensuring proper disposal of rubbish./Carrying out general cleaning of the place./Constructing latrines for proper disposal of faecal materials.	By not defaecating in the bush.	Ways the community can better the standard of market A	Guide pupils on the ways of improving the general cleanliness of a place.
47	P.5	(i) Winnowing (ii) Filtration (iii) Decantation (iv) Crystallization	(i) Filtration (ii) Decantation (iii) Crystallization (iv) Distillation	Correct spelling and matching.	Help pupils to understand the different categories of questions where even questions about matching can be improved by adding a fifth character to confuse learners.
48	P.7	a) Pulleys	Inclined plane/Wheel and axil/Towing car/ Car	Correct group and spelling.	-Discuss more about groups of machines, examples and their illustration. -Help pupils to know other activities carried out by different machines.
		b) Hoisting a flag / Drawing water from underground tanks. / Lifting / moving buildings.	Towing a car / vehicle.	Activities that involve the use of pulleys.	
		c) Oiling its turning points to reduce friction and preventing rusting/ keeping it in clean dry place.	A car climbing another car. A car pulling another car.	Ways of keeping a pulley in a good working condition.	
49	P.4	a) i)Humus	Water/Sand particles	Component of soil that binds particles together.	Discuss more about components of soil and their uses. / Discuss more about the steps followed when making organic fertilizers.
		ii) Water/ moisture	Humus /air/ organisms.	Component of soil used by plants to make starch.	
		b) They stay longer in the soil / They improve on soil structure / They improve on soil aeration. / They prevent water pollution.	They improve the fertility of the soil.	Reasons for organic fertilizers.	

50	P.4	a) Iodine /Calcium/Iron/Potassium	Anaemia/ Goiter/Rickets	Examples of mineral salts that promote good health. /	Discuss more about food deficiency diseases and their control. Use available resources to show pupils foodstuffs, their values and a deficiency disease they prevent.
		b) Goitre /Rickets /Anaemia	Iodine /Calcium/Iron Potassium	Mineral deficiency diseases.	
51	P.6	a) It causes passive smoking /It causes pollution of air./ It may lead to fire outbreak which destroys people’s property.	To feel relaxed / To feel warm	Reasons why public smoking is greatly discouraged.	Discuss more about the types of smoking./Dangers of smoking. / Help pupils to understand how smoking affects a pregnant mother in particular.
		b) Pregnant mothers/ women give birth to under weight babies / It causes premature births.	To show that they are mature.	Effects of smoking to a pregnant mother.	
52	P.4	a)Monocotyledonous plants have seeds that undergo hypogeal germination while dicotyledonous plants have seeds that undergo epigeal germination./ Monocotyledonous plants have fibrous root system while dicotyledonous plants have tap root system./ Monocotyledonous plants have leaves with parallel leaf venation while dicotyledonous plants have leaves with network leaf venation.	Monocotyledonous plants are better than dicotyledonous plants/ Monocots mature faster than dicots./ Monocots are perennial while dicots are annual.	Difference between monocots and dicots.	-Discuss more about monocots and dicots. -Guide pupils to know the type of germination, leaf venation and root system found in monocots and dicots and use them to differentiate them. -Help pupils to understand the natural and artificial methods of plant propagation.
		b) (i) Use of rhizomes/Use of corms/Use of tubers/Use of suckers /Use of leaves./ Use of bulbs.	Budding/Grafting/Layering Marcotting	Examples of natural and artificial methods of vegetation propagation.	
		(ii) Use of stem cuttings/ Use of vines/Budding/Layering /Marcotting/ Grafting	Use of rhizomes/Use of corms/Use of tubers/Use of suckers/Use of leaves.	Artificial methods of propagation.	
53	P.5	a) To reduce infant mortality rate./ For all children to be immunized./ To promote massive immunization among Ugandans.	Some parents don’t have money to pay in the hospital.	Why the government provides free immunization service.	-Help pupils to understand the reason why immunization action is free of charge. -Explain to the pupils how a child health card is useful to parents and health workers.
		b) Child health card/ Immunisation card	Medical card	Correct name and spelling.	
		c) It helps a health worker to know the remaining doze to be given to a child.	It helps the doctor to vaccinate a child.	Uses of a child health card to a health worker.	
54	P.5	a) Speeding cars. /Overloading cars. Drunken drivers/Driving cars which are in dangerous mechanical condition.	Over speeding. / Loading cars.	Causes of motor accidents in our community	-Guide pupils about the causes of motor accidents in our community. -Discuss about the ways of reducing motor accidents in our community.
		b) Crossing busy roads on zebra crossing. / Crossing busy roads on fly overs. Respecting traffic lights. / Using traffic officers to cross busy roads.	Running very fast when crossing the road./ Walking slowly when crossing a road/ By not respecting traffic lights.	Steps that can help to reduce the number of motor accidents in our community.	
55	P.5	a) Z - Potential energy Y- Kinetic energy	Z - kinetic energy Y- potential energy.	-Correct type of energy and spelling.	-Discuss more about the types of energy and energy changes./Help students to understand the types of energy possessed by objects in different situations for example a book on a table and passengers in a moving bus.
		b) Potential energy changes to kinetic energy.	Potential energy changes to light energy and heat energy.	-Forms of energy produced by a stone as it reaches point Z	
		c) Sound energy /Heat energy	Light energy /Friction Potential energy		