

PLE INTEGRATED SCIENCE MARKING GUIDE FOR 2019

1. the sun// sun
2. ticks// lice// louse
3. cutting// grooming fingernails// toe nails
 - shortening / used in shaving hair.
4. Growth// ripening of fruits// germination of seeds// shedding leaves// flowering// fruiting// fertilization (**Reject:** pollination// photosynthesis// seed and fruit dispersal// tropism)
5. Reptiles// reptalia
6. Pivot joint
7. Brain
8. Draught cattle// work type cattle// work cattle
9. Transparent materials// transparent objects
10. Sand soil has larger particles than clay soil
 - Sand soil has bigger particles than clay soil
11. The eardrum vibrates and sends the vibrates to the middle ear
 - It converts/ changes sound waves to sound vibrations
12. Removing the shade// watering// reduced watering// spraying (**Reject:** weeding/ thinning)
13. **The incisor teeth are;** sharp
 - sharp with flat edges
 - chisel shaped
14. Removing rubbish
 - burning rubbish
 - proper disposal of human faeces// wastes//
- smoking latrines
- cleaning latrines regularly
- burying decaying matter
- spraying insecticides at rubbish pits
- promote/ observe sanitation
15. Beriberi
16. Sucker
17. For attachment onto the intestinal walls
18. Prevent common diseases
 - Cure
 - safe if used correctly
 - cheap// affordable
 - accessible
 - effective
 - reduce signs and symptoms
 - meet people's common health needs
19. For growing flowers/ vegetables// raising seedlings//
 - carrying/ holding/ storing construction materials
 - feeding troughs
 - holding animal feeds
 - used in making crafts
 - play material
 - fermenting alcohol
 - laying nests
 - drenching animals

- carrying harvested crops
 - dustbins
20. Carnivorous animals feed on herbivorous animals
- primary consumers
 - plant eaters
21. Non renewable resources can get exhausted
- finished// exist in limited amounts
 - cannot be replaced naturally once used up
22. An artery carries oxygenated blood except the pulmonary artery while a vein carries deoxygenated blood except the pulmonary vein
- An artery carries blood away from the heart while a vein carries blood towards the heart.
 - An artery carries blood with high pressure while a vein carries blood with low pressure.
23. Strengthen muscles// make muscles flexible// proper functioning of the body// make digestion easy// blood circulation easy// reduce fats // body fitness// refreshes the mind
24. Its mesocarp has air spaces
- has spongy mesocarp
 - it is light
 - has hollow mesocarp
 - has harder testa
25. Sunny weather// hot weather
26. Due to expansion (**Reject:** to allow expansion// to leave room for expansion)
27. **Alcohol** has low freezing point
- expands easily
 - does not solidify easily
 - expands faster
28. It opens the air ways
- restore// restart breathing
29. The hairs trap dust//
- clean air
 - filter air
 - trap germs
 - traps foreign bodies/ insects
30. Hepatitis B// hepatitis A// yellow fever
31. Black Austrolop // Cornish white// New Hampshire// Orpington// Jersey black giant// Rhode Island Red// Jersey white giant
32. Ear canker
33. Increasing the speed of riding // rotation
- increasing the number of turns in coils
 - strengthening the magnetic field
 - strengthening the magnet
34. It floats on water// remains on top of water
35. Presence of moisture// warmth// water// food// air// oxygen
36. Carrots// beetroots// sugar beets// parsnips// radishes// turnips// ruta bagas (moolis)
37. Arthropods// arthropoda
38. Encourages children to abstain sex//creates awareness abt HIV/AIDS

- equip pupils with life skills like decision making assertiveness// self-control//
- helps children to avoid risky behaviours

39. In order to get quality seeds that can germinate health seedlings//

- get good yields
- proper utilization of space
- reduce chances of gap filling
- avoid time wastage
- choose right variety
- choose species you want
- get viable seeds

40. Kidneys// lungs

41. (a) (i) oxygen// O_2

(ii) carbon dioxide// CO_2

(b) **Wind**; causes accidents

- food contamination
- air pollution
- leads to soil erosion
- raises dust
- spreads airborne diseases
- destroys crops// blows off house roofs
- causes shame when it lifts off people's clothes

42. (a) tsetse fly

(b) larva stage

(c) blood

(d) through bites// biting// sucking blood

43. (a) high temperature in the environment// high fever// inhaling in very hot air// allergies// fractured skull// sinuses// rupture of blood vessels caused by high pressure// over blowing of the nose// strong sneezing// punch on the nose// standing under sunshine for long// nose picking// ebola// muburg

(i) reduce// control flow of blood from the nose

(ii) promote clotting of blood// stop bleeding

44. (a) Volume – loudness or softness of sound

(b) Pitch – highness or lowness of sound

(c) Frequency – Number of vibrations per second.

(d) Echo – Reflected sound

45. (a) Toads are cold blooded// live both on land and in water

- use gills to breathe at their early stages//
- lay eggs covered in jelly //
- under external fertilization//
- hibernate//
- move by hopping//
- have external ears//
- have webbed toes//
- lives both on land and in water

(b) Fish use gills to breathe while amphibians use lungs and moist skin to breathe//

- Fish have scales while amphibians have moist or rough skin

- Fish have lateral line to detect sound while amphibians use external ears to hear.
- Fish use fins for movement while amphibians use limbs.
- Fish live their entire life in water while amphibians live both in water and on land

46. (a) common diseases that affect people

- latrine coverage
- information on food security
- immunisation coverage
- housing status
- population status
- birth and death rates
- source of water
- level of health education
- economic status of the people
- sanitation information

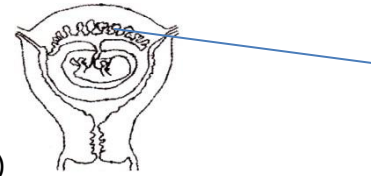
(b) helps in identifying health needs

- determines health status of people
- creates awareness about health challenges
- sensitization// providing health services
- planning of better health services
- monitoring health programmes
- helps government mobilize funds

47. (a) amniotic fluid

(b) transports oxygen// carbon dioxide// hormones// antibodies//

- digested food waste materials to or from the foetus
- attaches the foetus to the placenta



(c)

48. (a) saanen// toggenburg// angora// jamna pali// alpine goats

(b) mohair// skin

(c) Goats don't need a lot of pasture// care// attention than cattle

- have low water demand than cattle
- provide a quicker source of income turnover than cattle
- multiply faster than cattle
- cheaper to maintain than cattle// need a smaller space than cattle

49. (a) **Weeds**; compete with crops for light// water// space// plant nutrients// hide pests//spread crop diseases

(b) **By**; slashing//weeding//use of herbicides//digging//uprooting// practicing crop rotation//biological control//planting cover crops// flooding//mulching

(c) **By**; spraying//Mulching//manure application// fertilizer application //Fencing//staking// trellising// plant training// propping//timely Harvesting//controlling pests// diseases//pruning//thinning//watering

50. (a) wheels and axle

(b) drawing or fetching water from deep wells//removing soil from pits

- raising // lowering building materials

(c) friction// frictional force// gravity// force of gravity// gravitational force// tension// tensional force

(d) roller skates// wheel chairs// egg beaters// radio knobs// engineers' vice// sewing machine// gear wheels// conveyor belts// pencil sharpener// steering wheels// bicycle pedals// screw driver// door knobs// bicycle handles// brace//

51. (a) saliva

(b) **food is;** chewed// broken down// masticated// softened// moistened// lubricated// cooled// rolled into bolus// mixed with enzymes// digested

(c) constipation

52. (a) capital// land// drainage of soil// management// water source// tree species// site// labour

(b) For; employment// tourist attraction// income// poles// bee farming// food// fruits// shade// rain formation// fresh air// shade// timber// herbal medicine// firewood// charcoal// raw materials// study purposes// recreation centres// purifying of air

53. (a) chlorophyll

(b) Ferns make their own food while mushrooms absorb water from decaying matter

- Ferns feed autotrophically while mushrooms feed saprophytically

(c) mosses// liverworts// horsetails// algae// hornworts// quillworts

54. (a) (i) orange

(ii) violet

(b) Due to difference in speed of wavelength that pass through the glass

- Due difference in speed of light different colours

(c) **Light rays are;** split

- Refracted
- dispersed by raindrops
- white light is separated by raindrops

55. (a) bushy compound// poor disposal of faeces// rubbish// domestic waste// dirty// dusty classroom// dirty water sources/ kitchen// dormitories// littered compound// pools of water in the compound//

(b) malaria// sleeping sickness// bilharziasis// typhoid// dysentery// cholera// dengue// polio//