

08. Magnets differ from each other due to their shapes.

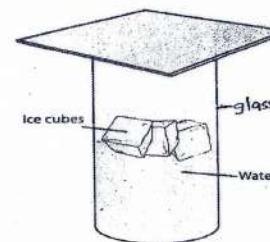


The names of these magnets are shown in the correct order,

1. Horse shoe magnet, Bar magnet, U magnet, Ring magnet
2. U magnet, Bar magnet, Horse shoe magnet, Ring magnet
3. Magnadoor magnet, Bar magnet, U magnet, Tabular magnet
4. Horse shoe magnet, Magnadoor magnet, U magnet, Tabular magnet

09. The activity shown in this figure can be used to show that there is water vapour in the atmosphere. Here what is the observation that confirm the presence of water vapour in the atmosphere?

1. Melting of ice cubes.
2. Cooling of the glass.
3. Breaking down the glass after a while
3. Deposition of water droplets on the outer surface of the glass



10. An instrument that can be used to measure the growth of a plant is,

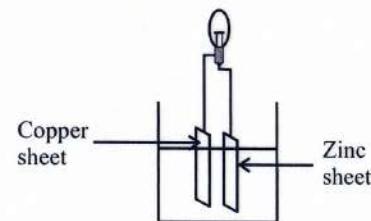
1. Spherometer
2. Auxanometer
3. Hygrometer
4. Photometer

11. An instance of taking place nuclear reactions is,

1. Producing energy by the sun
2. Burning a candle
3. Using solar thermal box stove
4. Lighting the saw dust stove

12. Not a weakness of this simple cell is,

1. dissolving of the zinc sheet
2. dissolving of the copper sheet
3. The bulb goes out after a while
4. difficult to carry the cell here and there



13. Most of the earth surface is water. The percentage of water that can be consumed from it is,

1. 0.01%
2. 2.58%
3. 97.41%
4. 70.0%

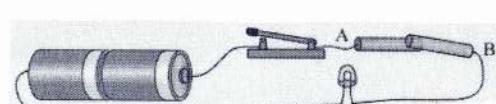
14. When the object denoted as x was brought separately to the two ends of the magnet, only an attraction could be observed. Accordingly the material x is made of can be,

1. Plastic
2. Iron
3. Glass
4. Wood



15. An observation that can be seen when increasing the number of carbon rods applied between A and B in the above circuit is,

1. The brightness of the bulb does not change.
3. Decrease the brightness of the bulb
2. Increase the brightness of the bulb
4. Overheating of carbon rods

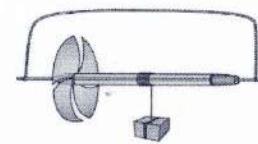


16. Electricity can also be saved depending on how the refrigerator is used in the home. Such an instance is,

1. Opening the door of the refrigerator frequently
2. Keeping the warm food in the refrigerator
3. Keep a space between the wall and the refrigerator
4. Placing the refrigerator in a place with light

17. Consider the observation (A) and the corresponding conclusion (B) when the wind propeller in this figure is directed to the wind.

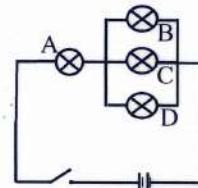
A- The object hanging from the string is lifted up
B- A work can be done by the energy of the wind



1. A and B are incorrect
2. A is correct and B is incorrect
3. A is incorrect and B is correct
4. A and B are correct

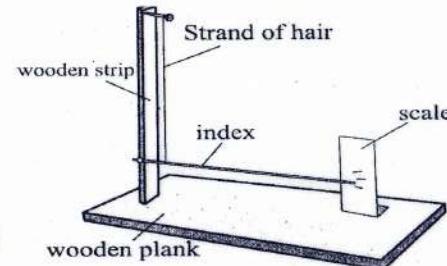
18. A circuit prepared by a student is given in the following figure.
All the bulbs in the above circuit go off when which bulb burns out?

1. A
2. B
3. C
4. D



19. Select the answer that shows the instrument given in the figure and its use.

1. Auxanometer - Measuring the humidity
2. Rain gauge - Measuring the rainfall
3. Anemometer - Measuring the temperature
4. Hygrometer - Measuring the humidity of the atmosphere



20. What is the unit used to measure the rainfall?

1. millibar
2. millimetre
3. milliliter
4. litre

Part II

- First question is compulsory
- Select four other questions and answer five questions altogether

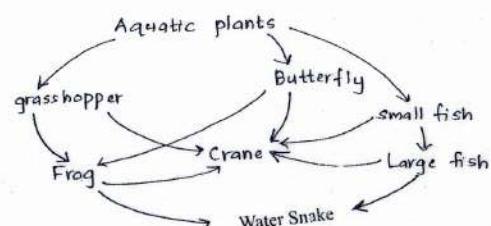
01.

A. A group of students who went to observe the bio diversity had to observe an ecosystem of pond around the school. Assuming that you are also a member of that group answer the following questions

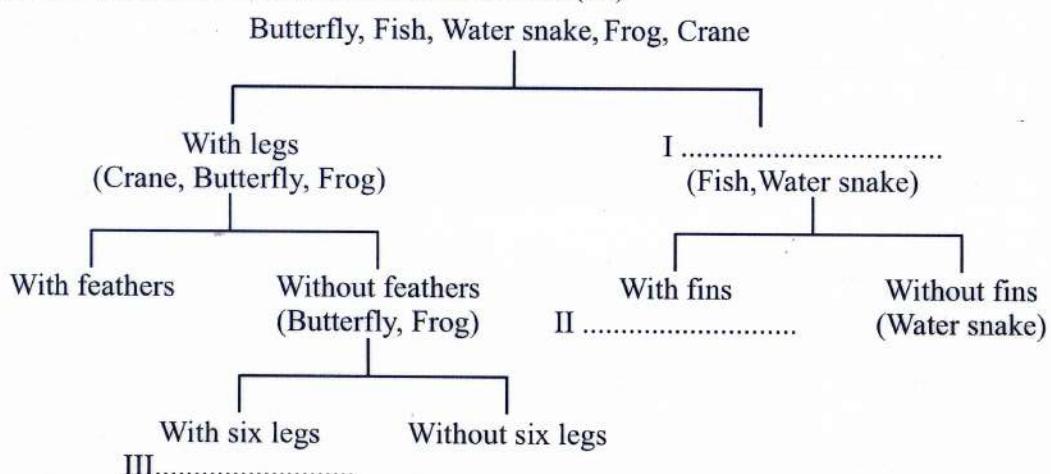
- Mention an advice given by your teacher for your safety when you go to observe that environment.
- Write an equipment that you carried with you on your way there
- Write an organism and a non-living thing that you see in that ecosystem.
- It was advised to measure the temperature of the pond water and the surrounding environment. What equipment was used for that?
- Name a micro-organism found in pond water
- How did you identify that there were micro-organisms in that pond water?
- Name an aquatic plant in pond water.
- During the daytime, air bubbles could be seen evolved from the plants. What was the gas evolved here?

B. A chart that shows the food related interactions is given below.

- What is the name given for the above food related interaction?
- Write a food chain with 4 links from the above chart.
- Name the producer and a carnivore seen in the above chart.



C. Some animals associated with the above pond environment are classified by a dichotomous key as in the below chart. Write the suitable answers in the blanks. (03)



02. The following paragraph is a part of an essay written by a grade 6 student about water. Read it and answer the questions.

Water exists on earth as solids, liquids and gases. Water can be classified based on the salinity as freshwater, marine water and brackish water. The taste of the water also changed according to the amount of salt dissolved in water. Water comes to earth through rain.

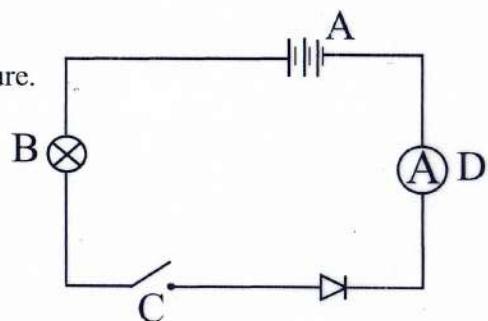
Water is essential for human activities such as drinking, bathing, washing clothes and for maintaining the existence of living beings. Even though water is such a natural resource, there are lot of instances where water is wasted. It is regrettable that people pollute water by adding various wastes to the water themselves.

- Write an example of water present in solids, liquids and gaseous states as mentioned in the paragraph.
Solid : Liquid : Gas :
- Precipitation brings water to the earth. Mention one type of precipitation
- Surface water is classified based on salinity. How do you identify water with the highest salinity?
- Water is useful for human activities. Apart from the uses mentioned in the above paragraph, mention one use of water for human
- Write a way which water is important for animals and plants to maintain their lives.
For animals : For Plants :
- Write an occasion where water is wasted in school, at home or at the street.
- Mention a suggestion to minimize the wastage of water.
- Write a waste that causes water pollution by man.

03. A simple circuit prepared by a student is given in the above figure.

- Name the A, B, C and D parts in the circuit.

A:
B:
C:
D:



- Write an observation that occur when the switch is closed.
- What is happened when change the terminals of the diode ?
- Write an observation that occur when a resistor is connected to the circuit.

v. a) The resistance is changed based on the amount of light falling on a light depending resistor (LDR). What is happened to the resistance when less light falls on LDR?
 b) Draw the symbol of LDR.

vi. Conservation of electricity is a national concern. Mention an action that can be taken for that.

vii. Children as well as adults have met with accidents while using electricity. Write a situation where such accidents can occur.

viii. Mention a measure that can be taken to prevent electrical accidents.

ix. Chemical cells are used for different works in your home. Give an example for a primary cell.

04. In our daily life, we engage in various activities that require energy

- What is energy?
- Bio mass is a natural energy source. Name a type of biomass that is commonly used to generate electricity.

A model prepared for demonstrating the function of a hydro power station is given below.

- Name the parts A and B in this model.
- What is the use of having a bulb in this model?
- Write down a step that can be followed to increase the brightness of the bulb without making any change in the circuit.
- Name 2 energy sources that can be used to generate electricity but are not yet used in Sri Lanka.
- Write an action that can be taken to reduce the energy consumption in a home.
- What is the major environmental damage caused by a diesel or petrol driven vehicles.

05. A. Some of the light sources and energy sources that we find in the environment are given below. Answer should be based on them

A - Lighted candle	B - Bat	C - Shouting cicadas
D - A moving lorry	E - Firefly	F - The playing violin

- Complete the following table using the relevant letters.

	Natural	Artificial
light sources	a.....	b.....
sound sources	c.....	d.....

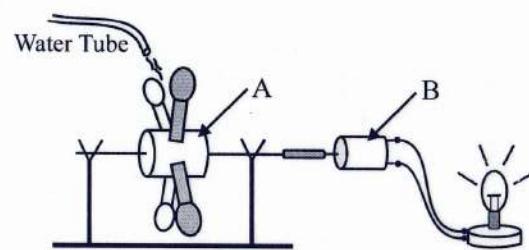
- Which objects produce music and sound respectively.
- What is the similarity between the sound generated by C and D.

B.

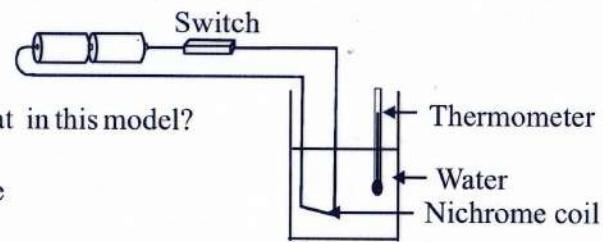
- Name a translucent substance
- Draw a light beam
- Write a use of light
- Write a use of sound.

06. Lot of changes occur in the environment due to the heat. Heat is also a very useful form of energy.

- What is the main energy source that provide energy to the earth.
- Mention an instance of using the heat produced by the energy source you named above.
- Write an instance where heat is produced by burning fuel.



iv. A set-up that can be used to demonstrate a method of generating heat is given below.



- What is the type of energy used to generate heat in this model?
- What is the use of the thermometer?
- Write an observation that can be seen when the switch is closed.
- Write two effects of heat that can be demonstrated using this set up except demonstrating the production of heat.

v. Mention an effect of heat on the environment.

vi. A change of state due to heat is given below.

Liquid → solid

- How does the heat cause this change of state?
- Give an example for such a change of state.

07.

A. Some of the things around us are given below.

P : light

Q : water

R : Pen

S : Heat

T : Air

U : Ball

i. Completed the table by selecting answers match with the characteristics listed in the table using the corresponding letters.

Characteristic	Example
1. Types of energies
2. Matter
3. No definite volume or shape
4. Have a definite shape or volume

ii. a) Name a metal that commonly used to make jwellaries.
b) Write a unique property of that metal that make it suitable for that purpose.

B. i. Write a factor that determines the climate.
ii. What is the difference between the weather and climate?
iii. Name the instrument used to measure the speed of wind.
iv. Mention a benefit to us by being aware of weather forecasts
v. Name a natural disaster caused by climatic changes.

**Answer
Grade 6 - Science**

01. 3	06. 2	11. 1	16. 3
02. 4	07. 3	12. 2	17. 4
03. 4	08. 1	13. 1	18. 1
04. 1	09. 4	14. 2	19. 4
05. 3	10. 2	15. 3	20. 2

Part II

01. A. i. For a given advice (01 Mark)
 ii. Hand lens, bottles for collecting specimen, notebook, thermometer (01 Mark)
 iii. For an organism and a non - living thing (02 Marks)
 iv. Thermometer (01 Mark)
 v. Amoeba / Paramecium (01 Mark)
 vi. Put some pond water on to a glass slide and observe it by the low power of the microscope. (01 Mark)
 vii. for an aquatic plant (01 Mark)
 viii. Oxygen / O₂ (01 Mark)

B. i. A food web (01 Mark)
 ii. for a correct food chain (01 Mark)
 iii. producer and carnivore (02 Marks)

C. i. Without legs (01 Mark)
 ii. fish (01 Mark)
 iii. butterfly (01 Mark) (Total 16 Marks)

02. i. Examples for solids, liquids and gases (03 Marks)
 ii. Rain, hail, sheet (01 Mark)
 iii. marine water (01 Mark)
 iv. To generate electricity, transportation, agriculture, for deferent industries (01 Mark)
 v. For animals : As an excretory medium, to digest food, As a medium of living, for cooling the body (02 Mark)
 For plants : For photosynthesis, For the rigidity of plants, To absorb minerals, To transport nutrients throughout the plant body (01 Mark)
 vi. For an instance of wasting water (01 Mark)
 vii. For a suggestion to prevent (01 Mark)
 viii. Human activity affect for water pollution (01 Mark) (Total 11 Marks)

03. i. A- dry cells / batteries B- Bulb C- Key / switch D- Ammeter / Milliammeter (02 Marks)
 ii. Bulb lights up / Deflects the indicator of the ammeter / milliammeter / Ammeter operates. (01 Mark)
 iii. Bulb go off / ammeter does not act (01 Mark)
 iv. Decrease the brightness of the bulb / Ammeter shows the reduction of the current. (01 Mark)
 v. a) When there is less light, the resistance increases. (01 Mark)
 b) 

vi. Any method (01 Mark)
 vii. An instance of occurring an accident due to electricity. (01 Mark)
 viii. Suggestions for protecting from them (01 Mark)
 ix. dry cells, wrist watch batteries, certain camera batteries. (01 Mark) (Total 11 Marks)

04. i. The ability to do work (01 Mark)
 ii. coal / fire wood (01 Mark)
 iii. a) A- turbine B- Dynamo / Electricity generator (02 Marks)
 b) To identify that the current is generated by B (01 Mark)
 c) Increase the height of the water flow (02 Marks)
 iv. Sea waves / Tidal waves / geo themal energy / Nuclear energy (02 Marks)
 v. Switch off the unnecessary bulbs, Switch off the appliances when they are not in use, ironing clothes at once (01 Mark)
 vi. Air pollution due to the smoke of vehicles. (01 Mark) (Total 11 Marks)

05. A. i. a-E b-A c-C d-D, F (04 Marks)
 ii. Violin, Lorry / cicadas (02 Marks)
 iii. Both sounds are noises (02 Marks)
 B. i. Tissue papers / papers / decorated glass (01 Mark)

ii.				(01 Mark)
iii.	To give signals	For entertainment	For communication	medical field (01 Mark)
	for illuminating	or correct answer		(01 Mark)
iv.	To give signals	For entertainment	For communication	or any correct answer (01 Mark)(Total 11 Marks)
06.	i.	Sun		(01 Mark)
ii.	To produce salt /	For drying substances		(01 Mark)
iii.	Driving vehicles /	For cooking / For boiling water / For warming houses		(01 Mark)
iv.	a)	Electricity		(01 Mark)
	b)	Measuring temperature		(01 Mark)
	c)	Increasing the reading of the thermometer / Evolving air bubbles in water		(01 Mark)
	d)	Increasing temperature / Expansion / Change of state - for any 2 answer		(01 Mark)
v.	occurring drought /	forest fires		(01 Mark)
vi.	a)	removing heat from the liquid		(02 Marks)
	b)	water turns into ice		(01 Mark)
				(01 Mark)(Total 11 Marks)
07.	A.	i.	1. P,S 2. Q,R,T,U 3. T 4. R, U	(01 Mark) (01 Mark) (01 Mark) (01 Mark)
	ii.	a)	Gold / silver	(01 Mark)
		b)	Malleability, Ductility	(01 Mark)
B.	i.	Precipitation / Temperature / Humidity / Speed and direction of wind		(01 Mark)
ii.	for correct explanation			(01 Mark)
iii.	Anemometer			(01 Mark)
iv.	For any correct answer			(01 Mark)
v.	Cyclones, flood, drought, landslides			(01 Mark)(Total 11 Marks)

