New Era Public School
Solved Assignment of Term - II
Class: 6th Subject: Science

Lesson No: 14 Topic: Magnets

Short Answer Questions

Q1. What is magnetism?

Ans The force that causes magnetic materials to attract or repel each other is called magnetism.

Q2. What are artificial magnets made of?

Ans: Artifical magnets are of metals like iron, nickel and cobalt and are of different shapes.

Q3. Differentiate between magnetic and non-magnetic substances.

Magnetic substances:

Ans 1: Materials that are attracted by magnets and can be converted into magnets are called magnetic substances.

2. Iron, Cobalt and nickel are some examples of magnetic substances.

Non-magnetic substances:

1. Materials that are not attracted by magnets are called non-magnetic substances. e.g wood, glass

Q4. What is the pole of a magnet?

Ans. The regions of a magnet where the magnetic force is strongest are called the poles of the magnet.

Q5. What do you mean by the directional property of a magnet?

Ans. A freely suspended magnet will always come to rest in the north-south direction.

Q6. How can a magnet be demagnetised?

Ans.

A magnet can be demagnetised, that is, made to lose its magnetism by,

- heating
- hammering, dropping or rough handling
- keeping two magnets side-by-side with their like poles next to each other.

Q7. How should a magnet be stored?

Ans. Bar magnet should be stored with 'keeper' iron that connect the poles of the magnet.

Long Answer Questions

Q1. Why is it said that repulsion is the sure test of a magnet?

Ans: Magnet attracts iron filings and any unmagnetised piece of magnetic material. Any pole of a magnet also attracts the opposite pole of other magnets. So the property of attraction cannot be used to test whether a given object is a magnet or not. However a magnet repels only the similar pole of another magnet. Hence, repulsion is a reliable way of testing a magnet.

Q2. List six uses of magnets?

Ans: The following are some uses of magnets.

1. Electricity meters, refrigrator doors and automobiles use magnets.
2. Magnetic tapes, used as audio and video tapes, consist of a magnetic material coated on a plastic tape.
3. Speakers and microphones use magnets to function.

4. Electric motors and generators use a kind of magnet called the electromagnet to generate electricity.

5. Magnets are used in bulletin boards and toys.

6. Magnetic strips are used in credit, debit and ATM cards to store information.

Q3. Explain how we should take care of a magnet.

Ans: We should take care of a magnet by following some factors need to be kept in mind.

1. Magnets should not be heated as they will lose their magnetic property.

2. Rough handling of magnets should be avoided

3. Magnets should be kept away from mobile phones, televisions and computers

4. Bar magnets should be stored in pairs with their opposite poles lying side-by-side.

A. Multiple choice Questions

1. a) 2. d) 3. c) 4. a)
5. c) 6. b) 7.

B. Fill in the blanks.

1. Magnetite 2. Lodestones
3. Artifical 4. Two 5. Poles 6. repel
7. keepers 8. Mariner's compass

C. TRUE / FALSE

1. T 2. T 3. F 4. F 5. F 6. F
7. T 8. F 9. T

Lesson No. 15

Topic: Light

Exercises

A. Multiple choice Questions

1. a) 2. b) 3. c) 4. c)

5. c) 6. d) 7. b) 8. a)

9. b) 10. a)

B. Fill in the blanks.

1. Lighter 2. $8\frac{1}{4}$ 3. blocked

4. Eclipse 5. Moon, Earth 6. Earth, Moon

7. New 8. Full 9. reflects.

C. TRUE | FALSE

1. T 2. T 3. F 4. F 5. F

6. T 7. F

Lesson No: 16 Topic: Water

Short Answer Questions

Q1. What are natural resources?

Ans: Anything that is found in nature and can be used by us is called a natural resources.

Q2. What are renewable resources?

Ans. Renewable resources are those that will either never run out or will be renewed through relatively rapid natural cycle.

Q3. What are non-renewable resources?

Ans: Non-renewable resources are those that can be exhausted by use. For example resources like coal, oil or natural gas take millions of years to form and hence cannot be renewed quickly.

Q4. Name any two natural resources that can be renewed.

Ans. Light from the sun is a renewable resource that will not run out anytime soon. Groundwater that is replenished through the water cycle.

Q5. About how much of the Earth's surface is covered with water?

Ans: About three-fourths of the Earth's surface is covered by water.

Q6. where does water exist on Earth in the solid state?

Ans: Below 0°C, water exists in the solid state as ice.

Q7. what is groundwater?

Ans: Groundwater is the water that seeps through the soil and collects above the non-porous rocks deep under the ground.

Q8. what is the source of rainwater?

Ans: Rainwater collects in rivers, lakes, Ponds and canals. Rivers are an important source of water.

Q9. How does water pollution affect the amount of clean water available to us?

Ans: The waste from homes and factories are dumped in water bodies such as rivers and lakes, which pollute them. Thus, Pollution further reduces the clean water available to us.

Long Answer Questions:

Q1. Why is water important?

Ans: All living things on Earth depend on water.

1. Plants need water to make food through Photosynthesis. Seeds cannot germinate without water.

2. Animals as well as plants need water to survive and grow. Water is used to transport nutrients and other materials within the animal or plant.

3. All animals and plants contain large amounts of water. The blood in our body is mostly made up of water.

4. Water also helps animals and plants keep cool. It regulates the temperature of the plant or animal body.

Q2. Write a brief note on droughts and floods?

Ans: There are places where there may be no rainfall for several years. This results in a severe shortage of water as lakes and ponds dry up and plants die. Such a condition is known as drought.

FLOODS: Some places have heavy rainfall during the monsoon sedson. Sometimes, the rains are so heavy that the rivers overflow their banks, resulting in Floods.

Q3. How is water polluted?

Ans. The increase in population, and agricultural and industrial growth affect our water resources too. The waste from homes and factories are dumped in waterbodies such as rivers and lakes, which pollute them. Fertilisers and pesticides get washed off by the rain into waterbodies, causing further pollution. Thus, pollution further reduces the clean water available to us.

Q4. How can we conserve water?

Ans: we can conserve water are as follows:

1. we should not waste water. The water used in factories and even homes can be recycled.

2. We should plant more plants and trees as this helps water to percolate into the soil.

3. We should always treat sewage and industrial waste before they are released into water bodies.

4. We should take steps to control floods and store rainwater. Dams should be built across rivers so that more water is stored.

Q5. Explain rainwater harvesting with the help of a diagram.

Ans Rainwater harvesting is the process of collecting and storing rainwater for future productive use.

Land based rainwater harvesting occurs when run-off from land surfaces is collected in ponds, tanks and reservoirs Roof-based rainwater harvesting involves collecting rainwater run-off from roof surfaces. This usually provides a much cleaner source of water. The harvested rainwater is stored either in tanks to meet household needs, or directed into deep holes in the ground to replenish groundwater.

"draw diagram from fig 16.9"

Draw the diagram of water cycle from fig "16.6".

A. Multiple choice Questions

1. c) 2. a) 3. 4. b) 5. a)

6. c) 7. c) 8. c) 9. c) 10) b.

B. Fill in the blanks.

1. Natural 2. Renewable 4. table

5. melting 6. boiling 7. Percipitation

8. cycle 9. drought 10. cyclones

C. True / False.

1. F 2. F 3. F 4. F 5. T.

6. F. 7. F 8. F.

Lesson No: 17 Topic: Air Around Us.

Short Answer Questions

Q1. What are the major constituents of Air?

Ans. The major constituents of air are: Nitrogen = 78%, oxygen = 21%, carbon dioxide = 0.04%, Argon = 0.9%, water vapour = variable and other gases.

Q2. What is the similarity between respiration and combustion?

Ans Respiration and combustion in these two processes oxygen performs a major role, without oxygen there is no combustion and respiration. So the similarity is oxidation or oxygen.

Q3 How does the cutting down of trees affect the oxygen cycle?

Ans The oxygen cycle is delicately balanced Deforestation, that is the excessive cutting down of trees, can cause a serious fall in the amount of oxygen being released into the air. Hence, we must plant more trees and burn less fuel.

Q4. How do fish get oxygen for respiration?

Ans. Fish use their gills to separate the air dissolved in water.

Q5. Name two major air pollutants?

Ans: The two major air pollutants are
1. Nitrogen Oxides
2. Carbon Monoxide.

Long Answer Questions

Q1. Describe the oxygen cycle in nature.

Ans: During the day, oxygen is released by plants during photosynthesis. Plants also take in oxygen for respiration and release carbon dioxide. But the oxygen released by photosynthesis is much more than the oxygen consumed during respiration. Hence there is a net release of oxygen. The cycle in nature, by which oxygen is utilised by plants and animals during respiration and generated by plants during photosynthesis, such that the level of oxygen in the air is constant, is called the oxygen cycle.

Q2. Describe an experiment to show that air contains water vapour?

Ans. Method: Fill a glass with cold water. what do you observe on the outer walls of the glass after some time. You will observe droplets of water on the outer walls of the glass. The water vapour in air condenses on contact with the cold walls of the glass. It shows that air contains water vapour.

Q3. Why do earthworms come out of the soil only during the rainy season?

Ans Earthworms live in the soil and breathe the air trapped between the soil particles. During the rain, the trapped air is replaced with water and so earthworms and other small animals that live in the soil come out to breathe.

Q4. Write a short note on the importance of air.

Ans: The importance of air are as follows.

1. windmills use the movement of air to generate electricity, draw water from tube wells and run flour mills.

2. Wind helps in the movement of gliders aeroplanes, parachutes, balloons, sailing yachts and so on.

3. Wind helps insects, bats and birds to fly.

4. Wind helps in the pollination of many plants.

5. Wind is also useful in scattering the seeds of plants.

A. Multiple choice Questions

1. a) 2. a) 3. d) 4. a)
5. d) 6. b) 7. c) 8. c)
9. c) 10. b).

B. Fill in the blanks

1. atmosphere 2. Nitrogen 3. Nitrogen
4. Respiration, oxygen, carbon dioxide
5. Pollution 6. gills.

C. True / False

1. F 2. F 3. 4.
5. F 6. T 7. T

Lesson No: 18 Topic: Managing waste

Short Answer Questions

Q1. classify each of these as either biodegradable or non-biodegradable.

Biodegradable	non-biodegradable
(i) Orange peel	(i) Metal pieces
(ii) Leaves	(ii) plastic flowers.
(iii) Sawdust	
(iv) Paper	

Q2. Why should you segregate waste into biodegradable and non-biodegradable?

Ans: There is a need to segregate the two types of waste because both the biodegradable wastes and non-biodegradable wastes requires different methods of disposal.

Q3. What is a compost pit used for?

Ans: Compost pit is used for the biodegradable waste is thrown in and covered with soil. The decomposers in the soil decompose the waste and make manure or compost.

Q4. What is recycling? How can metal or glass pieces be recycled?

Ans Recycling involves using waste materials to make new products. Metal and glass can be recycled by melting them and making new products.

Q5. Why should you carry your own bag for shopping?

Ans You should carry your own bag when you go shopping so that you do not need to use the paper or plastic bags offered by shopkeeper.

Long type

Q1. Why is garbage disposal an important issue?

Ans Garbage disposal is an important issue because

- garbage disposals can damage the rules of our environment.
- by burning the waste it causes a large amount of smoke and poisonous gases, which pollute the air.
- If it is thrown into a river or the sea, it polutes the water.
- If the waste is dispose on land, it pollutes the land and also affects the quality of groundwater.

~~Every day, tons of waste are collected fo~~

Q2. Distinguish between biodegradable and non-biodegradable waste.

	Biodegradable waste	Non-biodegradable waste
1.	All waste derived from living matter are called biodegradable waste.	1. All the waste generated from non-living matter is called non-biodegradable waste.
2.	Biodegradable waste decomposes quickly	2. Non-biodegradable waste either cannot be decomposed or takes a very long time to decompose.
3.	Plant waste like vegetable and fruit peels, egg shells and animal waste are example of biodegradable waste	Plastic bags, glass bottles, bulbs and metal containers are examples of non-biodegradable waste.

Q3. What are the advantages of recycling?

Ans: Recycling different wastes has the following advantages.

1. It makes the surroundings cleaner by reducing the amount of waste thrown into garbage dumps.

2. It reduces the need for raw materials

3. It reduces the amount of energy required to manufacture new products as recycling requires less energy as compared to manufacturing

4. It saves money.

A. Multiple choice Questions

1. b) 2. c) 3. b) 4. c. 5. d)

6. c) 7. c) 8. d)

B. Fill in the blanks.

1. Landfill 2. biogedredable 3. Compost

4. Recycling 5. compositing. 6. biodegradable waste

7. Energy.

C. TRUE / FALSE

1. T 2. F 3. T 4. T 5. T, 6. F

7. F . 8. T.

Diagrams

1. Draw a diagram of oxygen cycle fig 17.4
2. Draw a diagram composition of air Fig no. 17.2
3. Draw a diagram of Rainwater harvesting fig no. 16.9.

Q4. Draw a diagram of water cycle fig no. 16.6

Q5. Draw a diagram of change of state of water fig no. 16.5.