

Std-4th science worksheet- S-A-II. ①

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Q.1 Tick (✓) the correct option to complete each sentence.

1) The insoluble part of a mixture which settles at the bottom is called

- a) soluble substance b) immiscible liquid
✓ c) sediment d) Filtrate.

2) It is a universal solvent

- a) oil b) kerosene ✓ c) water d) Petrol

3) Sugar dissolved in water can be separated by

- a) sedimentation b) filtration c) decantation.
✓ d) evaporation.

4) Among two immiscible liquids, the liquid that settles at the bottom is

- ✓ a) heavier b) lighter c) soluble d) Insoluble.

5) The method used to obtain salt from sea water is

- a) Filtration b) sedimentation c) decantation.
✓ d) evaporation.

6) The push that can make an object move is also called

- ✓ a) force b) friction c) work d) heat.

7) An example of work not being done is when

- a) A ball moves on being kicked
b) A chair falls on being pushed
✓ c) A girl pushes a wall it does not move
d) A window is pulled & closed.

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- 8) It is used when work is done,
 a) friction b) Light c) Heat d) Energy
- 9) An example of simple machine is
 a) a washing machine b) an axe
 c) an elevator d) a computer.
- 10) The form of energy that the plants use to make their foods is
 a) coal energy b) wind energy
 c) water energy d) solar energy.
- 11) _____ is a natural resource
 a) Glass b) Plastic c) Fibre d) Soil
- 12) A renewable resource is
 a) water b) Coal c) crude oil d) metal
- 13) A reason for air pollution is
 a) construction of dams b) Growing of crops
 c) bursting of crackers d) production of solar power
- 14) _____ Causes respiratory diseases.
 a) water pollution b) Air pollution
 c) soil pollution d) Noise pollution
- 15) _____ helps to prevent soil erosion.
 a) Reforestation / Afforestation.
 b) Rainwater harvesting d) Rainwater harvesting.
 c) use of LPG

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16) What makes the moon glow?

- a) Light from the planets
- ✓ b) Light from the sun
- c) Light from the stars.
- d) Light from the comets.

17) It is an inner planet

- a) Jupiter
- b) Uranus
- ✓ c) Mars
- d) Neptune.

18) It is a dwarf planet.

- a) Mercury
- b) Venus
- ✓ c) Pluto
- d) Neptune.

19) The outer planets are made up of

- a) rocks
- b) water
- ✓ c) gases
- d) oxygen

20) The number of moons of Uranus is

- a) 12
- b) 62
- c) 14
- ✓ d) 27

21) Unwanted waste material are dumped into water bodies, it results in

- ✓ a) water pollution
- b) soil pollution
- c) Noise pollution
- d) Air pollution

22) The planet closest to the sun is

- ✓ a) Mercury
- b) Jupiter
- c) Mars
- d) Venus.

23) Two liquids that donot mix or ~~dissolved~~ ^{dissolve} in each other are called.

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- a) soluble
- b) Insoluble
- c) solution
- d) Immiscible liquids.

24) The capacity of a body to do work. is
 a) Energy b) work c) force d) gravity.

25) The red planet is
 a) Venus b) Mars ✓
 c) Jupiter d) earth.

Q.2 Fill in the blanks.

- 1) Glass & cloth are insoluble substances.
- 2) Salt is obtained from sea water by evaporation.
- 3) A mixture of rice & water can be separated by sedimentation & deccantation.
- 4) Force can move an object.
- 5) Plant use solar energy to prepare food in their leaves.
- 6) The push or pull is called 'force'.
- 7) An eco-friendly fuel is CNG (Compressed Natural Gas)

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- 8) Storehouse of plants & animals is the forest.
- 9) The largest planet is Jupiter.
- 10) An outer planet is Saturn (Jupiter, Uranus, Neptune).
- 11) The star closest to the earth is The sun.
- 12) Plants should be grown on barren pieces of land to prevent soil erosion.

Q3 write (T) for True & (F) for false statement.

- 1) Water filters have porous candles. ✓ (True)
- 2) Salt is obtained from sea water by decantation. ✗ (False)
- 3) A filter paper is used during the process of evaporation. ✗ (False).
- 4) A football is kicked into a goalpost in the goal. ✓ (True)
- 5) A clock on the wall is not working. ✗ (False).
- 6) A girl is sitting on a chair & thinking about basketball. ✗ (False)
- 7) Wastes from agricultural fields can pollute water. ✓ (True)

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8) Forests are a very important natural resource. ✓ (True)

9) There are eight planets in the solar system. ✓ (True)

10) Moon is an artificial satellite of the earth. X (False)

11) Jupiter can be seen with naked eye in the night sky. ✓ (True)

12) Comets are made up of dust, ice & gases. ✓ (True)

Q.4 Match the following.

①	(A)	(B)	<u>Ans</u>
1)	Salt & water	a) Filtration	(2)
2)	sand & water	b) Decantation	(3)
3)	oil & water	c) Evaporation	(1)

②	(A)	(B)	<u>Ans</u>	<u>Ans</u>
i)	Sources of energy	a) simple machine	(iii)	(iii)
ii)	windmills	b) complex machine	(iv)	(iv)
iii)	Needle	c) water, wind, coal	(9)	(9)
iv)	by Bicycle	d) Liquefied Petroleum Gas	(8)	(8)
v)	LPG	e) produce electricity.	(ii)	(ii)



Q.5 Name the following

- 1) Two common mixtures :- air & soil
- 2) Two soluble substances :- salt & sugar
- 3) Two immiscible liquids :- water & oil
- 4) A force that opposes motion :- force of friction.
- 5) The source of all energy on the earth :- The sun.
- 6) The force you are using when you stretch a rubber band :- Muscular force.
- 7) Natural resources that are not renewed by rapid natural processes :- Non-renewable resources.
- 8) The making of air, water & soil dirty by adding harmful substances to them :- water pollution.
- 9) A bluish-green planets :- Neptune & Uranus
- 10) The planet with the hottest surface :- Venus.
- 11) The planet farthest from the sun :- Neptune.
- 12) Large round heavenly bodies that move around the sun :- planets.

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Q.6

Define ^{the} following terms:

- 1) Mixture \Rightarrow A combination of two or more different substances.
- 2) Decantation \Rightarrow Pouring off the clear liquid from the top of a sediment.
- 3) Filtration \Rightarrow The process of separating insoluble solid particles from a liquid by passing through a porous device.
- 4) Sediment \Rightarrow The insoluble part of mixture which settles at the bottom in a liquid.
- 5) Friction \Rightarrow Force that stops / slows down a moving object.
- 6) Machine \Rightarrow A device that helps to make work easy.
- 7) Energy \Rightarrow The Capacity of a body to do work.
- 8) Renewable Resources \Rightarrow Natural Resources that are being renewed continuously by rapid natural process.
- 9) Non-renewable resources \Rightarrow Natural resources that are available only in limited amounts & are not renewed by rapid natural processes.

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10) Planet: → A large, round, heavenly body that moves around the sun in a fixed orbit

11) Comets: → Small, heavenly bodies with tails.

12) moon: → Natural satellites of planets that get light from the sun.

Q.7 Answer the following in one sentence

1) What are soluble substances? Give two examples

Ans Substances such as salt & sugar that dissolve in water are called soluble substances.
e.g salt & sugar

2) Why is water known as the universal solvent?

Ans Water dissolves the maximum number of things & hence is called the universal solvent.

3) Which substances settle at the bottom of a container as sediments?

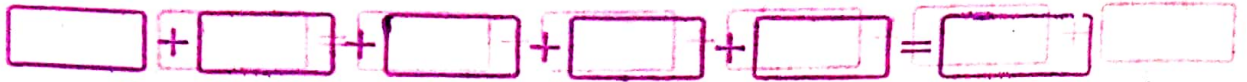
Ans The insoluble substances which are heavy settle at the bottom of a container as sediments.

4) What is a filter?

Ans The porous device used in the porous of filtration is called a filter.

5) What is force?

Ans Push or pull that can move, stop or slow down a moving object is called force.



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10) How does your body get energy to do work?

Ans Our body gets energy to do work from the food we eat

11) When ~~work~~ is work done?

Ans Work is done when an object moves over a distance on application of force.

12) What is reforestation? / Afforestation.

Ans Growing plants in areas where forest have been destroyed is called reforestation.

13) What are some ill-effects of air pollution?

Ans i) Unclear air can make us sick.
ii) It can cause respiratory diseases such as pneumonia & asthma.

14) Why does the sun appear bigger than the other stars?

Ans The sun is the closest star to the earth, & therefore it appears bigger than all other stars.

15) What are asteroids?

Ans Asteroids are small irregular-shaped, rocky bodies that move around the sun.

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Q.8 Answer in two sentences

1) Can soluble substances be filtered out from a solution? why?

Ans No, soluble substances cannot be filtered out from a solution. This is because these substances dissolve in the solution & do not remain separate from it.

2) Describe how the process of evaporation can be used to obtain salt from sea water.

Ans sea water is a solution of salt & water. when collected & stored in large open spaces, the water evaporates leaving behind the solid salt particles. this salt is then collected & further cleaned & packed to be sold in the market.

3) Can force change the direction of a moving object? explain with ~~the~~ a simple example.

Ans Yes, force can change the direction of moving object. for e.g. a cricketer uses force with his bat to change the direction of the ball bowled to him.

4) Differentiate between simple & complex machines.

Ans Machines that are very simple & help us in doing simple tasks easily are called simple machines. e.g. a needle, a hammer.

ii) ~~A~~ machines are made up of many parts of some

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can do complex tasks with ease, such machines are called 'complex machines' eg. a bicycle & a car.

5) Differentiate between renewable resources & non-renewable resources.

Ans

Renewable Resources	Non-Renewable Resources.
i) Natural Resources that are being renewed continuously by rapid natural processes.	i) Natural Resources that are available only in limited amounts.
ii) e.g. plants, animals, water, air & forests.	ii) e.g. coal, metals, crude oil.

6) Explain why it is wiser to use renewable resources instead of non-renewable resources.

Ans i) It is wiser to use renewable resources because they are being rapidly renewed by natural processes.

ii) Further, the renewable sources of energy can clean & cause less harm to the environment.

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7) what is meant by phases of the moon?

Ans i) The moon goes around the earth in a fixed orbit. during this time only a small bright side of moon is visible from some parts of the earth.

ii) Other time only a small bright part of the moon is visible to us.

As result, the moon appears to change its shape every night.

These different shapes of the moon are called phases of the moon.

8) Differentiate between natural & artificial satellites.

Ans i) A naturally heavenly body which orbits around a planet is called a 'natural satellite'.

ii) Many man-made machines are sent into space to orbit the earth, these machines are called artificial satellites.

9) why is the number of animals in Indian forest decreasing?

Ans i) Many large animals such as elephants, tigers, leopards & deer can survive only in the forested regions.

ii) Birds of different types nest in the different types of trees found in forest.

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10) List four sources of energy & their uses.

Ans) The sun, the food, wind & water are four sources of energy.

ii) Solar energy is also used to generate electricity.

The food that we eat provides us energy to do work.

The wind is used to run windmills & produce electricity.

Large turbines can be rotated & electricity generated with the energy containing in flower water.