

5th. Worksheet S.A-II (science) ①

+ + + + =

(Syllabus \rightarrow L-3, L-4, L-5, L-6, L-7) Std. 5th

Q1 Tick the correct option to complete each sentence.

1) These add oxygen in the air.

- a) Bacteria b) plants c) Fish d) insects

2) The most abundant gas in the air is

- a) Oxygen b) Hydrogen c) Nitrogen d) Carbon dioxide

3) Nitrogen is required by the body to make

- a) proteins b) Vitamins c) Carbohydrates d) Fats

4) Animals living on the land breathe through their

- a) Gills b) Lungs c) Skin d) Stomata

5) When water vapour in the air condenses on a surface, especially during the night it is called

- a) Rain b) hail c) Snow d) dew

6) A simple machine used to lift heavy weights with the help of a rope is

- a) An inclined plane b) A pulley
c) A wheel & axle d) A wedge

7) An example of a wedge is a

- a) crane b) Ramp c) door knob d) Needle

8) A pair of scissors is an example of

- a) An inclined plane b) A screw

- c) A first class lever d) A pulley

324
2213201
5415



9) A fixed point of a lever around which it can move is called

- ✓ a) Fulcrum b) Load c) Effort d) Axle

10) In a second class lever

- a) The fulcrum is in the middle
- ✓ b) The load is in the middle.
- c) The effort is in the middle.
- d) The load is at one free end.

11) A shadow is formed when light rays

- a) Pass through an object
- b) Travel very fast
- ✓ c) Are blocked by an object
- d) Cannot travel.

12) Light can pass completely through a/an object.

- a) Hard b) Opaque c) Soft ✓ d) Transparent

13) A Lunar eclipse occurs when the

- a) Moon is between the sun & the earth.
- ✓ b) Earth is between the sun & the moon.
- c) moon appears bright in the sky.
- d) Sun cannot be seen in the sky.

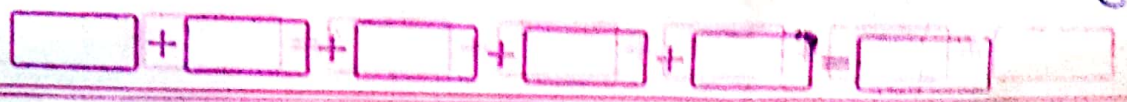
14) Light cannot pass through a bent pipe as light rays travel in a

- ✓ a) Straight line b) Curved line
- c) Open space d) Airtight space.

$$\square + \square + \square + \square + \square = \square$$

- 15) When the object is near the source of light, the shadow formed is
 a) Long b) Round c) Small d) Curved.
- 16) The addition of harmful substances to natural resources is called
 a) Composting b) pollution c) Recycling
 d) Landfilling
- 17) Lung diseases are caused due to
 a) water pollution b) soil pollution
 c) noise pollution d) Air pollution.
- 18) _____ is a biodegradable waste.
 a) Coconut shell b) Plastic spoon
 c) Metal plate d) Glass bowl.
- 19) _____ is a non-biodegradable waste.
 a) Wood block b) Fruit peel
 c) Cow dung d) Metal key
- 20) _____ is a fuel made from cow & buffalo dung.
 a) Diesel b) Petrol c) Biogas d) CNG.
- 21) _____ is a natural calamity that cannot be predicted.
 a) Cyclone b) storm c) Earthquake d) Flood.

222
221 224
5715



22) The RIAN is used for measuring earthquakes.
✓ a) Richter scale b) Meter scale
c) Inches scale d) Centimeter scale.

23) When a forceful earthquake occurs under the sea, the land experiences a
a) storm b) forest fire c) volcano
✓ d) tsunami

24) A region is more prone to cyclone.
a) Desert b) Mountain top
✓ c) Coastal d) dense forest

25) A is a natural calamity.
a) Snake bite b) House fire
c) Road Accident ✓ d) storm.

26)

Q.2) Fill in the blanks

1) smoke is added into the air by various human activities.

2) Nitrogen needs to be converted into nitrates for plants ~~as~~ to be able to use it

3) Living things need oxygen to survive.

4) plants take in air through tiny pores in the leaves called stomata.



- 5) When water vapour present in the air condenses onto different surfaces especially at night dew is formed.
- 6) Seesaw is a first class lever.
- 7) The grooves of screw are all inclined planes.
- 8) A wheel & axle is used to move heavy objects.
- 9) The winding road leading from on height of a hill to another height is also like a screw.
- 10) A ramp is an example of a/an inclined plane.
- 11) A shadow is always formed on the opposite side of the source of light.
- 12) A small shadow is formed when an object is kept close to the source of light.
- 13) The size & location of the shadow depends upon the position of the source of light.
- 14) Non-biodegradable waste remains unchanged for many years & cause soil pollution.

$\square + \square + \square + \square + \square = \square$

15) Cooked food can ^{be} stored in a Refrigerator so that it can last longer.

16) The ground starts shaking during an ~~earthquake~~ earthquake.

17) An earthquake with a magnitude of more than on the Richter scale is considered harmful.

18) Changing the natural drainage systems can cause Floods.

19) Cyclones usually bring heavy rains with them.

20) Wearing highs ^{boots} ~~coverings~~ can prevent the feet from getting injured after a storm.

Q.3 write (T) for true & (F) for false statements.

1) Oxygen is given out by living beings during respiration. → False (X)

2) The gaseous form of water is called water vapour. → True (✓)

3) The air protects the earth from becoming too hot or too cold. → True (✓)



- 4) Fine particles of dust keep rising up in the air all the time. → True (✓)
- 5) Nitrogen is used by all plants to make carbohydrates. False (X)
- 6) Example of first class lever is Tweezers → false. (X)
- 7) A shadow formed by early in the morning is the shortest → False (X)
- 8) Eclipses occur because the position of earth is fixed around the sun. → True (✓)
- 9) A lunar eclipse always occurs during the day. → False (X)
- 10) Air pollution results in a rise in the earth's temperature → True (✓)
- 11) Soil pollution affects the quality of ground water → True (✓)
- 12) Microorganism present in the waste material help in the process of composting → True (✓)
- 13) Sanitary landfills are made in the centre of cities so that waste can be easily dumped in them → False (X)

□ + □ + □ + □ + □ = □

14) Biodegradable waste is the major contributor to soil pollution → False (X)

15) During a storm we should remain outside the house → False (X)

16) we should help the sick and injured people, If we come across them after a natural Calamity → True (✓)

Q.4 Name the following

- 1) The layer of air that surrounds the earth → Atmosphere.
- 2) The respiratory organ of fish → Gills.
- 3) The most abundant gas present in air → Nitrogen.
- 4) Categories of machines → Simple & Complex
- 5) A machine which uses many pulleys → Crane.
- 6) The push or pull that moves an object → Force.
- 7) The fixed point or support of a lever → Fulcrum.

5th → Science - Worksheet - S.A-II.

9

$\square + \square + \square + \square + \square = \square$

8) The phase of the moon during which a solar eclipse occurs → New moon.

9) The phase of moon during which a lunar eclipse occurs → Full moon.

10) Substances that cause pollution → Pollutants.

11) Making Environment dirty → Environmental Pollution.

12) Diseases caused by polluted water → Diarrhoea

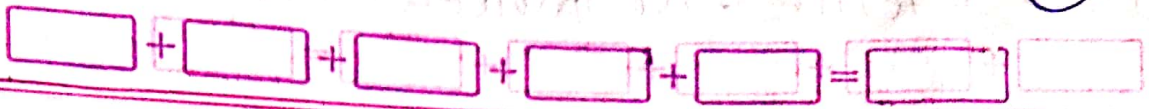
13) The region prone to floods → low-lying regions.

14) The natural calamity that cannot be predicted → Earthquake.

15) The natural calamity that occurs when a forceful earthquake occurs under a sea → Tsunami.

Q.5 Match the following.

- | | (A) | (B) | Ans |
|------|------------------------|------------------------|-------|
| i) | Air Inflates a balloon | a) Air exerts pressure | (iii) |
| ii) | Air makes a ball heavy | b) Air occupies space | (i) |
| iii) | Air can push a paper | c) Air has mass | (ii) |



Q.5

2)	(A)	(B)	<u>Ans</u>
i)	Natural source of light	a) Candle	(ii)
ii)	Artificial source of light	b) wooden board	(iv)
iii)	Bouncing back of light	c) Glass	(v)
iv)	Opaque object	d) The sun	(i)
v)	Transparent object	e) Reflection of light	(vi) (vii)

Q.6 Defines the following terms

- | | |
|-----------------------|----------------------|
| 1) Atmosphere | 2) Nitrogen fixation |
| 3) Transpiration | 4) Inclined plane |
| 5) Wedge | 6) pulley |
| 7) Opaque | 8) Translucent |
| 9) Solar Eclipse | 10) Lunar Eclipse |
| 11) Composting | 12) Biodegradable |
| 13) Non-Biodegradable | 14) Flood |
| 15) cyclone | 16) Earthquake. |

[] + [] + [] + [] + [] = []

- 1) Atmosphere :-> The layer of air that surrounds the earth.
- 2) Nitrogen fixation :-> The process of conversion of nitrogen present in the air into nitrates.
- 3) Transpiration :-> The process by which water keeps escaping from the open stomata present on ^{the} leaves of plants.
- 4) Inclined Plane :-> A gradual sloping surface that connects a lower level to higher level.
- 5) Wedge :-> A simple machine made up of two inclined planes & has at least one slanting side forming a sharp edge.
- 6) Pulley :-> A grooved wheel with a rope or cable around it.
- 7) Opaque :-> An object that does not let any light pass through it.
- 8) Translucent :-> An object that allows only some light to pass through it.
- 9) Solar eclipse :-> occurs when the moon blocks sunlight from falling on the earth & a shadow of the moon is formed on the earth.

$$\square + \square + \square + \square + \square = \square$$

- 10) Lunar eclipse :-> Occurs when the earth blocks sunlight from falling on the moon & a shadow of the earth is formed on the moon.
- 11) Biodegradable :-> materials that can break down naturally & become a part of the soil.
- 12) Non-biodegradable :-> materials that cannot break down on their own in the environment.
- 13) Composting :-> A method of recycling biodegradable waste to produce compost or manure.
- 14) Earthquake :-> Movement in the upper layers of earth because of the pressure created in the inner layers.
- 15) Flood :-> Overflowing of a river especially during the rainy season due to excessive rainfall.
- 16) Cyclone :-> A severe storm with strong winds that usually occurs in the coastal areas.

(13)

$$\boxed{} + \boxed{} + \boxed{} + \boxed{} + \boxed{} = \boxed{} + \boxed{}$$

Q-7 Answer in one sentence

1) Name three gases commonly found in the air?

Ans Three gases found in the air are nitrogen, oxygen & carbon dioxide.

2) What is nitrogen fixation?

Ans The process of conversion of nitrogen present in the air into nitrates is called 'nitrogen fixation'.

3) How is oxygen added to the air?

Ans Oxygen is added to the air by plants & some plant-like microorganisms.

4) What is a lever?

Ans A lever is a straight, rigid bar that can turn at a fixed point.

5) How does an inclined plane help to make work easy?

Ans ~~A wedge~~ An inclined plane is a flat surface that connects a lower level to a higher level, so it takes less effort to push an object on a gradual slope in comparison to that on a steep slope.

6) What are uses of a pulley?

Ans A pulley is used to draw water from a well & to lift heavy loads with the help of crane.

Waste is the major cont...

[] + [] + [] + [] + [] = []

32-1
421 32-1
87115

7) when is a shadow formed?

Ans when an object that does not let light pass through it, is kept in the path of light, a shadow is formed.

8) what is an eclipse? when does a lunar eclipse occurs?

Ans The blocking of light due to which a heavenly body cannot be seen is called an eclipse.

It occurs when the earth blocks sunlight from falling on the moon & a shadow of earth is formed on the moon.

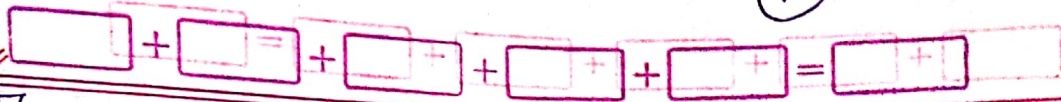
9) Differentiate between a total solar ^{eclipse} & a partial solar eclipse.

Ans When the sun gets completely blocked by the moon, a total solar eclipse occurs. When the sun is not completely blocked by the moon, a partial solar eclipse occurs.

10) List three human activities that contribute to environmental pollution.

Ans Human activities such as cutting down of trees, hunting animals & production of smoke & harmful gases from vehicles contribute to environmental pollution.

11) why is the waste in a landfill covered with soil?



15

Ans The waste in a landfill is covered with soil in order to prevent breeding of insects & to avoid animals from picking on the waste.

12) What is biogas?

Ans Biogas is a fuel produced from organic matter decomposed by microorganism in the absence of oxygen.

13) What is an earthquake?

Ans Earthquake is a sudden movement in the upper layers of the earth because of the pressure created in the inner layers.

14) What causes a tsunami?

Ans A forceful earthquake under a sea / an ocean causes a tsunami.

15) When do floods occur?

Ans A Flood occurs when a river overflows especially during the rainy season due to excessive rainfall.

Q.8 Answer in two sentences.

1) Describe two ways in which the air is important.

Ans a) The air protects the earth from becoming too hot / too cold. The hot air from warmer regions moves to cooler region, thereby preventing the warmer region from becoming too hot & cooler region from becoming too cold.

$$\square + \square + \square + \square + \square = \square$$

b) The layer of ozone gas in the air absorbs harmful ultraviolet rays of sun & thus prevents them from reaching ^{to the} surface of earth.

2) Describe three properties of air? with examples.

Ans

i) Air occupies space: \Rightarrow Air is made up of matter & matter always occupies space. e.g. when air is filled in a balloon it inflates & becomes bigger in size.

ii) Air has mass: \Rightarrow Air is matter & always has mass. e.g. when we let air escape from an inflated balloon, it loses its mass & becomes light.

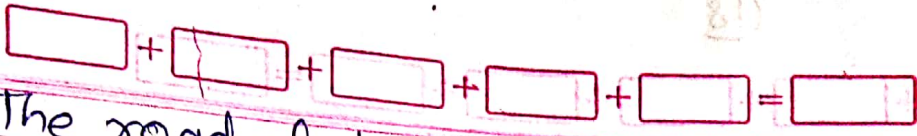
iii) Air exerts pressure: - Anything that has mass exerts pressure. e.g. Air exerts equal pressure on all sides that is upwards, downwards & sideways.

3) Differentiate between the first & third class of levers?

Ans In first class lever, the fulcrum is always between load & effort.

In third class lever, the effort is always between the fulcrum & load.

4) Why are the roads on a hill made winding & not straight from the base to the top of hill?



Ans

The road of hill is made winding from base to top & not straight because it is easier to climb on a winding road than a straight slope. The winding road leads from one height of a hill to another height just like grooves of a screw.

5) How does the distance between the source of light & an object affect the size of shadow formed?

Ans

The size of the shadow depends on the distance of source of light from the object when an object is kept close to source of light, a small shadow is seen to be formed. If the same object is taken further away from the source of light, the shadow becomes longer.

6) Why is a shadow formed during the afternoon shorter than the shadow formed during sunset?

Ans

The shadow formed in the afternoon is small as the sun is directly overhead, so distance between source of light & object is less. But shadow of the same object becomes longer during sunset because the sun is further away in the sky during sunset.

7) Why should non-biodegradable materials be handed over to the vendors after separation?

Ans

After separation of non-biodegradable materials, they should be sold-off to vendors who purchase them. Such vendors sell of these items to specific factories who recycle these materials.



8) Differentiate between biodegradable & non-biodegradable.

Bio-degradable wastes

Non-biodegradable wastes

i) The wastes that break down naturally & become a part of soil are called 'biodegradable wastes'.

i) The wastes that do not breakdown naturally/mix with soil are called non Biodegradable wastes.

ii) They do not pollute the environment.

ii) They pollute the environment.

iii) e.g. leaves, woods, paper & cloths.

iii) e.g. plastics, metals, glass, ceramics.

g) What kind of damage can a cyclone cause?

Ans cyclones cause flooding of coastal areas, destroy crops, uproot trees, disrupt power supply & telephone lines, spread water-borne disease & damage house, building & vehicles.

10) How are human beings responsible for causing floods?

Ans Floods may occur as a result of different human actions such as widespread of deforestation, construction of river beds & changing of natural drainage system.