**CLASS 8TH  WORK SHEET**

**TOPIC CELL- STRUCTURE AND FUNCTIONS**

Q.1. **MATCH THE FOLLOWING**

|  |  |
| --- | --- |
| A | B |
| AMOEBA | **COLOURLESS PLASTIDS** |
| CHLOROPHYLL | **PLANT CELL** |
| ROBERT HOOKE | **LACK WELL DEFINED NUCLEUS** |
| ROBERT BROWN | **HAVING WELL DEFINED NUCLEUS** |
| PSEUDOPODIA | **GENES** |
| CHROMOSOMES | **FALSE FEET** |
| EUKARYOTES | **DISCOVERED NUCLEUS** |
| PROKARYOTES | **DISCOVERED CELL** |
| CELL WALL | **PHOTOSYNTHESIS** |
| LEUCOPLAST | **SINGLE CELLED ORGANISMS** |

**Q.2. MULTIPLE CHOICE QUESTIONS**

1) Which of the following is a unicellular organism?

|  |  |
| --- | --- |
| a) rat | b) elephant |
| c) humans | d) paramecium |

2) Who discovered cell?

|  |  |
| --- | --- |
| a) Theodar Schwann | b) Alexander Fleming |
| c) Robert Hooke | d) Robert Brown |

3) Genes are present on

|  |  |
| --- | --- |
| a) nucleus | b) chromosomes |
| c) nucleolus | d) nucleoplasm |

4) Which of the following cell organelle is referred as power house of cell

|  |  |
| --- | --- |
| a) mitochondria | b) protoplasm |
| c) plastids | d) ribosomes |

5) Which of the following has a cell wall

|  |  |
| --- | --- |
| a) Animal cell | b) Plant cell |
| c) pseudopodia | d) amoeba |

6) Which of the following cell organelle is called the control centre of the cell

|  |  |
| --- | --- |
| a) Mitochondria | b) Nucleus |
| c) cell membrane | d) cytoplasm |

7) Green plastids which help in photosynthesis are called

|  |  |
| --- | --- |
| a) chloroplast | b) protoplast |
| c) chromoplast | d) leucoplast |

8) Which of the following is a multicelluar organism

|  |  |
| --- | --- |
| a) paramoecium | b) amoeba |
| c) euglena | d) fungi |

9) Which of the following is referred as the kitchen of the cell

|  |  |
| --- | --- |
| a) ribosomes | b) centrosome |
| c) leucoplast | d) chloroplast |

10) Selectively permeable membrane present around the cell is known as

|  |  |
| --- | --- |
| a) nuclear membrane | b) cell membane |
| c) nucleosome | d) cell wall |

 **Q.3 Fill in the blanks**

1) \_\_\_\_\_are referred as suicidal bags of cell.

2) \_\_\_\_\_\_\_are known as power house of cell.

3) Cell wall is not present in \_\_\_\_\_\_\_\_\_\_

4) A group of cells is called\_\_\_\_\_\_\_\_\_\_\_\_

5) The cells having nuclear materials without nuclear membrane are called \_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

6) \_\_\_\_\_\_\_\_\_\_\_\_ pigment is necessary for photosynthesis

7) Empty structure present in cytoplasm is called\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8) Amoeba has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_definite shape

9) Animal cell lacks \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10) \_\_\_\_\_\_\_\_\_\_\_\_\_are known as kitchen of cells.

**Q4. State whether true or false**

1. Cell wall is present in both animal cell and plant cell.
2. The egg of the hen is a cell.
3. Organisms having nuclear materials without nuclear membrane are called eukaryotes.
4. Animal cell lacks nucleus.
5. Plastids are present in both animal and plant cell.
6. Haemoglobin is necessary for photosynthesis.
7. Genes are the hereditary units.
8. Nuclear membrane separates nucleus from the cytoplasm.
9. Genes are present on the chromosomes.
10. Vacuoles are large in plant cells.

**Q.5. Label the following**

**PLANT CELL**





**Q.6. Complete the crossword with the help of clues given below:**

****

**ACROSS**

1. This is necessary for photosynthesis.

**3.** Term for component present in cytoplasm.

**6.** The living substance in the cell.

**8.**  Units of inheritance present on the chromosomes.

**DOWN**

**1.** Green plastids.

**2.** Formed by collection of tissues.

**4.** It separates the contents of the cell from the surrounding medium.

**5.** Empty structure in the cytoplasm.

**7.** A group of cells.

**ANSWER KEY**

**WORKSHEET CELL-STRUCTURE AND FUNCTIONS(CLASS 8TH)**

Ans 1. Match the following

1. Single cell organism
2. Photosynthesis
3. Discovered cell
4. Discovered nucleus
5. False feet
6. Genes
7. Having well defined nucleus
8. Lack well defined nucleus
9. Plant cell
10. Colourless plastids

Ans 2 MCQs

1. (d) paramecium
2. (c) Robert hooke
3. (b) chromosomes
4. (a) mitochondria
5. (b) plant cell
6. (b) nucleus
7. (a) chloroplasts
8. (d) fungi
9. (d) chloroplasts
10. (b) cell membrane

Ans 3 Fill in the blanks

1. Lysosomes
2. Mitochondria
3. Animal cell
4. Tissue
5. Prokaryotes
6. Chlorophyll
7. Vacuole
8. No
9. Cell wall/Plastids
10. Plastids

Ans 4 True/False

1. False
2. True
3. False
4. False
5. False
6. False
7. True
8. True
9. True
10. True

Ans 5





Ans6

ACROSS

1. Chlorophyll

3. Organelles

6. Protoplasm

8. Genes

DOWN

1. Chloroplasts

2. Organ

4. Membrane

5. Vacuole

7. Tissue

**BY**

**MRS SAMIK SAWHNEY**

**T.G.T SCIENCE**

**KV NO 2 JAMMU CANTT**

**Worksheet-Class–VIII Science (Reaching the Age of Adolescence)**

**1. Pituitary gland is located at the base of :-**

a. heart

b. lungs

c. brain

d. pancreas

**2. Pancreas is :-**

a. exocrine gland

b. endocrine gland

c. type of sweat gland

d. both a & b

**3. Baby is going to be a girl or a boy depends on :-**

a. type of sperm

b. type of ovum

c. amount of sex hormone

d. amount of regulatory hormone from pituitary

**4. Deficiency of iodine in adolescent’s diet causes a disease called** :-

a. infertility

b. goitre

c. dwarfism

d. irregular menstruation

**5. Match the column :-**

a. adolescent i) produces sperms

b. larynx ii) master endocrine gland

c. testis iii) produces ova

d. ovary iv) teenager

e. pituitary v) voice box

**6. State whether the following statements are trueor false :-**

 a. During puberty, ovary secretes oestrogen.

b. Oogenesis term represents formation of zygote from mature ovum.

c. Maleness is decided by the presence of Y chromosome.

d. Every egg cell has two X chromosomes.

e. Chromosomes from the female parent decides the sex of the child.

**7. How metamorphosis in frog tadpole is delayed orimproper if iodine is insufficient?**

**8. What are drugs and how are they detrimental to adolescents?**

**9. What does the following picture depicts ?**

**10. Write the correct words by putting letters in correct sequence-**

**i) norsoeget**

**ii) setgoneprore**

**Answer Key:-**

1. c

2. d

3. a

4. b

5. a. iv, b. v, c. i, d. iii, e. ii.

6. true, false, true, false, false.

7. **Metamorphosis** in tadpole larva requires hormone thyroxine which is secreted by

another endocrine gland named thyroid. The formation of thyroxine needs iodine as a

raw material hence in the absence or less amount of iodine, the thyroxine hormone

formed is very less, as a result metamorphosis of tadpole into frog is either delayed or

is improper.

8**. During adolescence**, teens are physically, mentally and emotionally agitated due to lot

of changes taking place in their body and mind. They sometimes feel confused and

insecure due to the stress caused by hormonal secretions. By this time they may prey

to drugs and alcohol. Drugs are medicines that are very addictive and once taken, teen

develops tendency to take them again and again. Drugs harm the body in long run

destroying health and happiness.

**9. It is showing the various stages of a menstrualcycle in human female.**

**10. i) oestrogen**

 **ii) progesterone**

**Worksheet Class–VIII Science**

 **(Chemical Effects of Electric Current)**

**CHOOSE THE BEST OPTION IN THE FOLLOWING:**

|  |  |  |  |
| --- | --- | --- | --- |
| **1** |  | **In LEDs, the longer lead (wire) is always connected to the \_\_\_\_\_\_\_ terminal** |  |
|  | **a)** | negative | **b)** | neutral |  |
|  | **c)** | positive | **d)** | Any terminal |  |
|  |  |  |  |  |  |
| **2** |  | **Tap water is a good conductor of electricity while distilled water is not because** |  |
|  | **a)** | Tap water contain salts | **b)** | Distilled water do not contain salt |  |
|  | **c)** | Only a) is correct | **d)** | Both a &b is correct |  |
|  |  |  |  |  |  |
| **3** |  | **When electrodes are immersed in water and electricity passed, the bubbles formed on the positive terminal is actually \_\_\_\_\_\_\_ gas.** |  |
|  | **a)** | Hydrogen | **b)** | Carbon di oxide |  |
|  | **c)** | Oxygen | **d)** | Nitrogen |  |
|  |  |  |  |  |  |
| **4** |  | **When electrodes are immersed in water and electricity passed, the bubbles formed on the negative terminal is actually \_\_\_\_\_\_\_ gas.** |
|  | **a)** | Hydrogen | **b)** | Carbon di oxide |
|  | **c)** | Oxygen | **d)** | Nitrogen |
|  |  |  |  |  |  |
| **5** |  | **Why do we add little dilute sulphuric acid to copper sulphate solution during electroplating?** |
|  | **a)** | To increase acidity | **b)** | To increase conductivity |
|  | **c)** | So that the colour becomes more prominent | **d)** | To burn copper sulphate |
|  |  |  |  |  |  |
| **6** |  | A coating of \_\_\_\_\_\_\_\_\_is deposited on iron to protect it from corrosion and formation of rust |
|  | **a)** | copper | **b)** | aluminium |
|  | **c)** | Zinc | **d)** | silver |
|  |  |  |  |  |  |
| **7** |  | **Chromium plating is done on many objects such as car parts, bath taps, kitchen gas stove etc. Why?** |
|  | **a)** | It does not corrode butprevents scratches | **b)** | It looks beautiful |
|  | **c)** | It costs less | **d)** | Articles can be sold at higher price |
|  |  |  |  |  |  |
| **8** |  | **The process of depositing a layer of any desired metal on another material by means of electricity is called \_\_\_\_\_\_\_\_\_\_\_.** |
|  | **a)** | Electric plating | **b)** | Electroplating |
|  | **c)** | Electric depositing | **d)** | None of the above |
|  |  |  |  |  |  |
| **9** |  | **Some liquids are good conductors of electricity and some are poor conductors. Which one is a poor conductor?** |
|  | **a)** | Acidic solution | **b)** | Alkaline solution |
|  | **c)** | Common Salt solution | **d)** | Distilled water |
|  |  |  |  |  |  |
| **10** |  | **Tin cans, used for storing food, are made by electroplating tin onto iron. Why?**  |
|  | **a)** | Tin gives a shiny appearance | **b)** | To make the vessel cheap |
|  | **c)** | Tinis less reactive than iron. | **d)** | To make the vessel lighter |
|  |  |  |  |  |  |

 **Q2 Fill in the blanks**

(a) Most liquids that conduct electricity are solutions of ,
\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

(b) The passage of an electric current through a solution causes
\_\_\_\_\_\_\_\_\_\_\_\_\_\_ effects.

(c) If you pass current through copper sulphate solution, copper gets
deposited on the plate connected to the terminal of the
battery.

**3 Match the column :-**

**I II**

a. electro deposition i) ionize partially
b. weak electrolyte ii) collect on positively charged electrode
c. cations iii) ionize completely
d. anions iv) electroplating
e. strong electrolyte v) collect on negatively charged electrode

 **5 State whether the following statements are true or false :-**

a. Natural water that runs down the hills is 100% pure water.
b. Formation of a new chemical compound by electricity is electrolysis.
c. Kerosene is a non electrolyte.
d. Lemon juice is an electrolyte.
e. All liquids conduct electricity.

**6** Are conductors and electrolytes same? If not explain differences between them with
examples.
**7.** Purification of metals is possible through electrolysis. Describe this application.
**8** Pick the odd word out of the following:
Sulphur, Quartz, Glass, Brass, Plastic, Dry wood.

 **9** What is the name of the given electric device?What is thesmaller and larger component of it called as?



**10**  **Label the figure shown below**



**11** .The bulb does not glow in the setup shown in the figure below List the possible
reasons. Explain your answer.



**12**  In case of a fire, before the firemen use the water hoses, they shut off the
main electrical supply for the area. Explain why they do this.

**13** A child staying in a coastal region tests the drinking water and also the
seawater with his tester. He finds that the compass needle deflects more
in the case of seawater. Can you explain the reason?

**14** Is it safe for the electrician to carry out electrical repairs outdoors during
heavy downpour? Explain.

 **15** Paheli had heard that rainwater is as good as distilled water. So she
collected some rainwater in a clean glass tumbler and tested it using a
tester. To her surprise she found that the compass needle showed
deflection. What could be the reasons?

**16**  Prepare a list of objects around you that are electroplated.

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**ASSIGNMENT/WORKSHEET BASED ON ‘FRICTION’**

Q.1 A moving ball on a ground stops after some time. Name the force responsible for it. ............................................................................................................................

Q. 2 Name the Type of friction in following two cases:

................................................ .............................................

Q. 3 Match the following:

1. Bird a) Measures the force acting on an object.
2. Spring Balance b) Static friction
3. Moving body c) Lubricant
4. Reduces friction d) Drag

4. Choose the correct option:

i) Static friction comes to play when the object is

a) Rolling b) Sliding

 c) Moves from rest d) None

ii) Rolling friction comes to play when the object is.

a) Rolling b) Sliding

 c) Comes to rest d) all of these

iii) In many machines, friction is reduced by using :

 a) Ball-Bearing b) Lubricants

 c) Both a & b d) None

iv) A ball is rolling in north direction, in which direction, does the frictional force act.

 a) North b) South

 c) East d) West

5. Sometimes, force of friction is desirable, give three examples.

i) ............................................................................................................................

ii) ............................................................................................................................

iii) ............................................................................................................................

.

Q. 6 Explain Why, it is easier to drag a mat on floor when nobody is sitting on it but much more difficult to drag the same mat when a person is sitting on it.

Q. 7 What are the factors affecting friction? Explain with examples.

Q. 8 What is the cause of friction? Explain with the help of labeled diagram.

Q. 9 Which type of surfaces produce {a} least friction, and {b} too much friction?

Q. 10 What is the direction of force of friction acting on a moving object?

Q. 11 A car is moving towards North. What will be the direction of force of friction acting on this car due to surface of road?

Q.12 When a pencil cell is released from a certain point on an inclined wooden board, it travels a distance of 35 cm on floor A before it comes to rest. When the same pencil cell is released from the same point on the same inclined board, it travels a distance of 20 cm on floor B before coming to rest. Which floor, A or B, offers greater friction? Give reason for your answer.

Q. 13 What kind of friction comes into play: (a) When a block of wood kept on table moves slowly? (b) When a block of wood kept on table just tends to move ( or slip) (c) When a block of wood kept on cylindrical iron rods moves?

Q. 14 Out of sliding friction, static friction & rolling friction: (a) Which one is the smallest? (b) Which one is the largest?

Q. 15 Explain why, sliding friction is less than static friction.

Q. 16 What is meant by ‘rolling friction’?

Q. 17 Why does a man slip when he steps on a banana peel thrown on the road?

Q. 18 Explain why:

 (a) a pencil will write on paper but not on glass

(b) The handles of motor cycle are covered with a rubber sheet with spikes.

(c) The soles of our shoes wear out gradually.

 (d) Tyres of car wear out gradually.

Q. 19 Why does a matchstick light when we strike it on a rough surface?

Q. 20 Why do brake pads of bicycles have to be replaced quite often?

Q. 21 What prevents you from slipping every time you take a step forward?

Q.22 What happens when you rub your hands vigorously for a few seconds? Why does this happen?

Q.23 What enables us to fix a nail in a wall & knot to be tied?

Q.24 How does bicycle stop when its brakes are applied?

Q.25 What makes the steps of foot over-bridges at Railway stations to wear out slowly?

Q.26 State two advantages & two disadvantages of friction.

Q. 27 Why do gymnasts apply a coarse substance to their hands?

Q.28 Why do kabaddi players rub their hands with dry soil?

Q. 29 Why are grooves provided in the soles of shoes?

Q.30 Why are treads made in the surface of tyres?

Q. 31 Explain why, oil or grease is applied to those parts of machine which are in motion.

Q. 32 Fill in the blanks: (a) Sprinkling of powder on the carom board ………………. Friction. (b) Ball bearings reduce friction because they …………………rather than slide.

Q.33 Two men tried to push a heavy box & could succeed. Finally wheels were fitted to the box & now a single man could move it. Justify.

Q.34 What is the special name of frictional force exerted by fluids (like air or water)?

Q.35 What are the factors that affect the fluid friction?

Q.36 What is the name of ‘special shape’ which is given to objects moving through fluids to reduce drag?

Q.37 Why are cars, airplanes & rockets streamlined?

Q. 38 Fill in the blanks:

 i) Force acting on a body can be measured by a -----------------.

 ii) Friction is caused by the -------- on the two surfaces in contact

 iii) Frictional force exerted by fluids is also called -------------

 iv) The frictional force on an object in a fluid depends on its -------,----------- and----------------.

1. ---------------- can be used to reduce friction
2. ---------is also produced with friction.
3. Shape of the objects moving in the fluid is ------ to overcome friction exerted by liquids.
4. ------- are used in the machines to protect their surfaces from wear due to friction.
5. Soapy floor is slippery due to -------- friction.
6. Ball bearing are used to convert static friction into ----- friction.

 Q. 39 Why is it difficult to walk on a smooth and wet floor?

Q. 40 Why front portion of an aeroplane has a spherical shape or is streamlined?

Q. 41 On what principle do ball bearings work?

 Q. 42 Give constrction and working of a spring balance. Draw the diagram also.

Q. 43 “ force of friction is much greater on a rough surface”

Q. 44 Give some advantages of friction.

Q. 45 What kind of tyres are used in the racing cars and why?

MANOJ KUMAR, KV NO 2 ARMY CANTT BHUJ

**WORKSHEET FOR CLASS VIII**

**MATERIALS:- METALS AND NON-METALS**

**FILL IN THE BLANKS WITH SUITABLE WORDS:-**

1. Metal oxides are -------------------- in nature.
2. The property of metals by which they can be beaten into thin sheets is called--------------------.
3. The property of metal by which it can be drawn into wires is called--------------------------.
4. Non-metallic oxides are --------------------in nature.
5. Metals react with acids to produce------------------------.

**CHOOSE THE CORRECT OPTION:-**

1. Metals show the property of malleability except-
2. Iron
3. Graphite
4. Aluminium
5. Silver
6. Which of the following is a good conductor of electricity-
7. Iron
8. Plastic
9. Wood
10. Glass
11. Which metal is found in liquid state at room temperature-
12. Iron
13. Zinc
14. Mercury
15. Aluminium
16. Non-metals are used in –
17. Aeroplanes
18. Electric equipments
19. Water boilers
20. Fertilisers
21. Meta used in thermometers-
22. Copper
23. Mercury
24. Aluminium
25. Iron

**GIVE REASON WHY-**

1. Sodium is stored in kerosene because---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------.
2. Gold and silver are used in jewellery because-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------.
3. Utensils are made of metals because----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------.
4. When iron nails are put in copper-sulphate solution the blue colour of copper sulphate changes to green because------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------.
5. Powder graphite is used as a dry lubricant because----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------.

**Paste or draw a picture showing use of metal and non-metal.**

**MAMTA**

**KV SAC AHMEDABAD**

 **Worksheet**

**Class–VIII Science (Microorganisms: Friend and Foe)**

1. Viruses can be :-

a. stored

b. crystallised

c. isolated

d. all the above

2. The group of microorganisms where all members contain chlorophyll is:-

a. fungi

b. bacteria

c. protozoa

d. algae

3. Louis Pasteur discovered :-

a. Pasteurisation b. Fermentation

c. both a & b

d. Putrefaction

4. Fixation of nitrogen can occur :-

a. naturally

b. artificially

c. both a & b

d. only during rains

5. Match the column :-

**Disease organism affected**

a. Foot and mouth disease i) wheat

b. Anthrax ii) bhindi

c. Smut iii) humans

d. Blast iv) cattle

e. Yellow vein mosaic v) rice

6. State whether the following statements are true or false :-

a. Chemical compound produced by certain microbes that inhibit the growth of

other microbes are called vaccines.

b. Food preservative chemicals increase the shelf life of perishable food items.

c. Polio drops given to children are actually vaccines.

d. Yeast can also make fruit juices unfit for consumption due to formation of

alcohol.

e. Snack packets are evacuated and flushed with nitrogen free oxygen.

7. What makes the dough rise while preparing idli, dosa, bhaturas and dhoklas ?

8. How can be communicable diseases prevented ?

9. What is botulism? Name the organism causing it.

10. Write the correct sequence for vaccinationi)

Body produces antibodies.

ii) Introduction of weak or dead microbes.

iii) Antibodies protect from future microbial infection.

iv) Vaccine reaches internal parts of body.

**Answer Key:-**

1. d

2. d

3. c

4. c

5. a. iv, b. iii, c. i, d. v, e. ii.

6. false, true, true, true, false .

7. Yeast is a beneficial fungus. Through the process of fermentation it breaks down sugar

and produces alcohol and carbon dioxide. Bubbles of carbon dioxide gas fills the

spaces in dough and make it to rise.

8. To avoid the spreading of communicable diseases :

i) we should cover our nose and mouth while we sneeze or cough.

ii) we should take care of personal and community hygiene.

iii) we must keep food and water covered to prevent contamination.

iv) we must wash our hands before eating food .

9. When cooked food is kept for long time, some microbes grow on it and produces

toxins over there that makes food poisonous. If such spoiled food is consumed it leads

to food poisoning.

Food poisoning caused by a bacterium named Clostridium botulinum is called

botulism.

10. ii), iv), i), iii).

**ALKA RANI**

**K.V. LAKHANPUR JAMMU**

 ***WORKSHEET-2***

 ***POLLUTION OF AIR AND WATER***

 1. Name the constituent part of air.

 2. What is air pollution?

 3. Name the air pollutants.

 4. Name the disease caused by air pollution.

 5. What do you mean by carbon monoxide in concerned with air pollution.

 6. Define smog and name of the disease caused by it.

 7. How petroleum refineries cause air pollution?

 8. Name the air pollutant which damage the ozone layer, and where it is used.

 9. Mathura refinery is responsible to produce ———————and——————which harms the whitish

 marble stone of Tajmahal.

 10. Define Acid rain.

 11. What do you mean by MARBLE CANCER?

 12. Supreme court has ordered industries to switch to cleaner fuels like ————and ————-.

 13. Define green house effect. Name at least four constituent which are responsible for green house

 effect. Among them —————–are the main constituent. they are also called—————gases.

 14. Name the natural causes which are responsible to produce carbon dioxide gas in the atmosphere.

 15. List main activities of human which are responsible to produce carbon dioxide gas in the atmosphere.

 16. What is global warming?

 17. List at least six steps to prevent air pollution.

 18. In which month vanmahotsava is celebrated d how?

 19. Name the water pollutants

 20. Acronym of WWF is —————————.

 21. What do you mean to say that a river is dead?

 22. Pesticides and weedicides pollute the water. How?

 23. Algae and use of excessive chemical affect the aquatic and marine life .How?

 24. List five human activities which are responsible to pollute the river water.

 25. The chemical released by industries include ——————-,—————, and —————-which   lead

 to toxicity in plants and animals.

 26. Untreated sewage contains —————–,——————–,——————, etc.

 27. Name the diseases caused due to contaminated water.

 28. What is potable water?

 29. How water can be made safe for drinking?

 30. What do you mean by three ‘R”?

 **CBSE Worksheet-1**

**Class–VIII Science (Pollution of Air and Water)**

1. Water is pure when:-

 a. transparent

 b. clear

 c. free of physical, chemical and biological impurities

 d. treated with HCl

2. Ozone gas is:-

 a. [O]

 b. O**2**

 c. OZn

 d. O**3**

3. A region of a lake turned into a dead zone, reason may be :-

 a. eutrophication

 b. acid rain

 c. washed off fertilizers in the lake

 d. all the above

4. Process used to obtain pure water for industrial purpose is :-

 a. distillation

 b. sedimentation

 c. filtration

 d. chlorination

5. Match the column:-

Pollutant Impact on health

a. Nitrogen oxide i) unconsciousness

b. Sulphur dioxide ii) chest pain

c. Carbon monoxide iii) heart diseases

d. Lead iv) reduced visibility

e. Flyash v) decreased Hemoglobin

6. State whether the following statements are true or false:-

a. High temperature waste water from industries leads to thermal pollution.

b. Pesticides get washed off by rain into water sources and make ground water germ

 Free.

c. Chemical fertilizers and pesticides decompose by natural methods.

d. Germs can be killed by adding iodine to the water.

e. Water completely free from all solid and dissolved impurities is not necessarily

 potable as well.

7. What is reverse osmosis? Mention its uses.

8. Explain the phenomenon of eutrophication?

9. Pick the odd word out of the following:

 lead, arsenic, chlorine, cadmium, mercury, nickel.

10. Name the phenomenon that is depicted in the following images of earth?

Answer Key:-

1. c

2. d

3. d

4. a

5. a. ii, b. iii, c. i, d. v, e. iv.

6. true, false, false, false, true.

7. In the method of RO, sea water (saline water) is taken in a tank fitted with a semi

permeable membrane. A high pressure is applied on saline water so that pure water

passes through the membrane to the other side and can be used for drinking purpose

and impurities cannot pass through the membrane. These days domestic water

purification systems have RO technology in them as they remove solid and chemical

impurities and germs as well.

8. When too much of fertilizers and organic waste is present in the water bodies, aquatic

organisms like blue – green algae (cyanobacteria) and other microbes grow rapidly.

This occurs because organic matter supplies plenty of nutrients for their growth and

during their growth dissolved oxygen is used up fast that results in increased

BOD (biological oxygen demand). Rest of the aquatic animals and plants due to less

oxygen in water begin to die and this process is called eutrophication. On the surface

of a eutrophic lake you can easily find algal blooms floating over that add up to the

death of aquatic organisms (refer worksheet 1 Q 9.)

9. Chlorine is a non metal and used in water purification but all others are toxic metals.

10. The images represent ozone depletion leading to formation of ozone hole.

 **NARAYAN SINGH**

 **K.V. I.M.A. DEHRADUN**

**CBSE Worksheet-14**

**Class–VIII Science (Synthetic fibres and plastics)**

1. The purest natural form of cellulose is :-

a. rayon

b. cotton

c. wool

d. silk

2. Rayon clothes are comfortable to wear in:-

a. winters

b. rainy season

c. both a & b

d. summers

3. The first fully synthetic plastic was :-

a. bakelite

b. melamine

c. teflon

d. polythene

4. The non stick coating on pans and other cooking utensils is made from :-

a. rayon

b. teflon

c. melamine

d. PVC

5. Match the column :-

**Synthetic plastic use/article made**

a. Bakelite i) thermocole

b. Melamine ii) shoes

c. Teflon iii) combs

d. Polystyrene iv) unbreakable dinner set

e. PVC v) nonstick cookware

6. State whether the following statements are true or false :-

a. Rayon is made from methanol.

b. Nylon is also known as artificial silk.

c. Polyester is prepared from petroleum products.

d. Clothes made from acrylic fibres are low in cost than those made from wool.

e. PVC is a thermoplastic.

7. Define a thermosetting plastic and give examples.

8. Why has government banned the use of polythene bags ?

9. Pick the odd word out of the following:

Nylon, Teflon, Terrycot, Polyester, Acrylic.

10. Which synthetic fibre is the following cloth made up of ?

**Answer Key:-**

1. b

2. d

3. a

4. b

5. a. iii, b. iv, c. v, d. i, e. ii.

6. false, false, true, true, true.

7. A plastic substance which once moulded into a shape cannot be melted or made soft

on reheating is said to be a thermosetting plastic. Hence these plastics cannot be

reprocessed and they can maintain their shape and size even at very high

temperatures. For example Bakelite and melamine are thermosetting plastics.

8. Polythenes or plastic bags are non biodegradable i.e. they cannot be decomposed or

recycled by the microorganisms. Besides this an improper disposal of polythenes leads

to following environmental problems:

i) soil and water pollution.

ii) Blockage and choking of drains and sewer lines.

iii) Death of animals that chew these polythene bags along with any food.

9. Only terrycot is a fibre made by blending polyester with cotton while all others are

unblended pure fibres/ plastics.

10. acrylic

 **JANAK RAJ**

 **KV NO 1 JAMMU**