

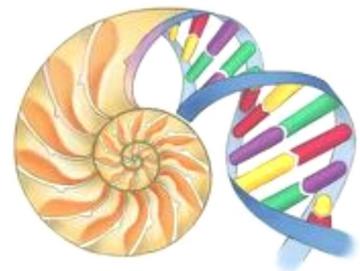
**CBSE-NCERT**

**PRINTABLE**

**WORKSHEETS**

**SCIENCE**

**(Class 7)**



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**CBSE Worksheet-01**  
**Class – VII Science (Nutrition in Plants)**

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1. Plants prepare their food by the process of
  - a. Respiration
  - b. Photosynthesis
  - c. Transpiration
  - d. All of these.
2. The organism that can prepare their own food are called
  - a. Heterotrophs
  - b. Consumers
  - c. Decomposers
  - d. Autotrophs
3. Which of the following is not required by plant for food synthesis?
  - a. Water
  - b. Oxygen
  - c. Carbon dioxide
  - d. Chlorophyll
4. Which one is an insectivorous plant?
  - a. Banyan tree
  - b. Cuscuta
  - c. Pitcher plant
  - d. Neem plant

5. Match the following.

Column A

- a. Autotrophs
- b. Heterotrophs
- c. Carnivores
- d. Saprophytes
- e. Parasite

Column B

- i. Tiger
- ii. Mushroom
- iii. Cuscuta
- iv. Green plants
- v. Animals

---

6. Fill in the blanks

- a. Green plants are called -----, since they synthesize their own food.
- b. Oxygen is released by plants during -----.
- c. ----- live on dead and decaying animals.
- d. ----- is the green coloured pigments present in leaves.
- e. The food synthesized by the plants is stored as -----.

7. What is photosynthesis?

8. Distinguished between parasite and saprophytes.

9. What are insectivorous plants? Give two examples.

10. Observe the diagrams of organisms given below. Name them and write their category.



(A)

(B)

(C)

---

---

**Answer key**

1. b
2. d
3. b
4. c
5. (a) – (iv), (b) – (v), (c) – (i), (d) – (ii), (e) – (iv).
6. (a) Autotrophs (b) photosynthesis (c) saprophytes (d) chlorophylls(e) starch
7. The process by which green plants synthesis their food using sunlight, carbohydrates, water and chlorophyll is called photosynthesis.
8. Those organisms that obtain their food from other organism by harming them are called parasite. For example-Cuscuta, lice, mosquito. Those organisms that obtain food from dead and decaying materials are called saprophytes. For example- bacteria and fungi.
9. Those plants that eat insects by trapping them are called insectivorous plants. They obtain protein from insects. For example- Pitcher plants and Drosophila.
10. (A) Name- Mushroom.  
Category - Saprophytes.  
(B) Name – Pitcher plant.  
Category – Insectivores.  
(C) Name – Cuscuta.  
Category – Parasites.

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**CBSE Worksheet-02**  
**Class – VII Science (Nutrition in Plants)**

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1. In the process of photosynthesis, the gas given out by green leaves is
  - a. Oxygen
  - b. Carbon dioxide
  - c. Nitrogen
  - d. Ozone
2. To test the presence of starch by iodine, the green leaf is first boiled in alcohol to
  - a. Dissolve chlorophyll
  - b. Remove starch
  - c. Make the leaf soft
  - d. Make the leaf transparent
3. Which of the following is an insectivorous plant?
  - a. Cuscuta
  - b. Croton
  - c. Nepenthes
  - d. Lichen
4. Plant eating animals are called
  - a. Omnivorous
  - b. Carnivorous
  - c. Herbivorous
  - d. Insectivorous

5. Match the following:

Column A

- a. Exchange of gases
- b. Nitrogen
- c. Autotrophs
- d. Omnivores
- e. Photosynthesis

Column B

- i. Rhizobium
- ii. Chlorophyll
- iii. Stomata
- iv. Green plants
- v. Bear

- 
- 
6. Write T for true and F for false statements.
- Green plants prepare their food hence they are Autotrophs.
  - Carbon dioxide gas is released in the process of photosynthesis.
  - Carnivores are flesh eating animals.
  - Minute pores on the leaf surface are called stomata.
  - Cuscuta is an insectivorous plant.
7. What is the mode of nutrition in plants?
8. What is symbiotic relationship? How it benefits the organisms?
9. Why green leaf is boiled in alcohol before testing it for starch.
10. Rearrange the letters to find out the words related to plant nutrition.
- ROPHYLCHLO
  - UNLISUNHGT
  - TERAW
  - TOSAMTA
- 

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**Answer key**

1. a
2. a
3. c
4. d
5. (a) – (iii), (b) – (i), (c) – (iv), (d) – (v), (e) – (ii).
6. (a) T (b) F (c) T (d) T (e) F.
7. The mode of nutrition in plants is autotrophic. Plants prepare their food by the process of photosynthesis using inorganic substance.
8. It is the relationship between two organisms in which both organisms get benefited from each other. Symbiotic relationship between algae and fungi is called lichen.
9. Green leaf is boiled in alcohols for testing the starch to dissolve the chlorophyll present in the leaves. After boiling in alcohols leaf will lose its green colour.
10. (a) CHLOROPHYLL  
(b) SUNLIGHT  
(c) WATER  
(d) STOMATA

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**CBSE Worksheet-03**  
**Class – VII Science (Nutrition in Plants)**

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1. Green pigments present in the leaves are called
  - a. Leucoplasts
  - b. Chloroplasts
  - c. Chromoplast
  - d. Amphiplast
2. Which one is saprophytic organism?
  - a. Neem plant
  - b. Mushroom
  - c. Cuscuta
  - d. Pitcher plant.
3. Insectivorous plants are found mostly in areas which are
  - a. Dry and sandy
  - b. Wet and marshy
  - c. Nitrogen deficient
  - d. Nitrogen rich
4. Exchange of gases in leaves takes place through
  - a. Stomata
  - b. Lenticels
  - c. Epidermis
  - d. Guard cells

5. Match the following

Column A

- a. Herbivores
- b. Carnivores
- c. Omnivores
- d. Saprophytes
- e. Parasite

Column B

- i. Amarbel
- ii. Yeast
- iii. Cow
- iv. Lion
- v. Cat

---

6. Fill the blanks with suitable words.

- a. During photosynthesis, solar energy is trapped by the pigment called -----.
- b. ----- is the ultimate source of energy.
- c. Gas released during photosynthesis is -----.
- d. Plant eating animals are called -----.
- e. Minute pores on leaf surface for exchange of gases are known as -----.

7. What are Heterotrophs? Give two examples.

8. What are nutrients? Name main nutrients.

9. Why is sun said to be ultimate source of energy?

10. Name the following.

- a. A parasitic plant which is devoid of leaves, having yellow, slender tubular stem.
- b. A solution used to test the presence of carbohydrates.
- c. A plant that has both autotrophic and heterotrophic nutrition.
- d. The by which organism obtain energy from the digested food.

---

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### Answer key

1. b
2. b
3. c
4. a
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (ii), (e) – (i).
6. (a) Chlorophyll (b) Sun(c) Oxygen (d) Herbivores (e) Stomata.
7. The living organisms that obtain their food directly or indirectly from plants are called Heterotrophs. It includes all animals, human, dog and horse.
8. The components of food that provides us energy to work, to grow and gives us resistance against disease are called nutrients. Main nutrients are carbohydrates, fats, proteins, vitamins and minerals,
9. Sun is the ultimate source of energy as all organisms obtain their food from plants and plants obtain energy from sun during photosynthesis. The energy present in coal and petroleum are also from sun.
10. (a) Cuscuta  
(b) Iodine solution  
(c) Pitcher plant  
(d) Respiration.

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**CBSE Worksheet-04**  
**Class – VII Science (Nutrition in Plants)**

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1. The green colour in plants is due to a pigment called
  - a. Xanthophylls
  - b. Chlorophyll
  - c. Protein
  - d. Hemoglobin
2. The balance between CO<sub>2</sub> and O<sub>2</sub> is maintained by
  - a. Respiration
  - b. Transpiration
  - c. Photosynthesis
  - d. Translocation
3. Which of the following is an omnivorous organism?
  - a. Horse
  - b. Cow
  - c. Buffalo
  - d. Dog
4. Rate of photosynthesis is not dependent upon
  - a. Water
  - b. Carbon dioxide
  - c. Temperature
  - d. Oxygen

5. Match the following

Column A

- a. Lichens
- b. Pitcher plant
- c. Amarbel
- d. Dear
- e. Stomata

Column B

- i. Herbivores
- ii. Parasitic
- iii. Insectivores
- iv. Exchange of gases
- v. Symbiotic association

- 
6. Write T for true and F for false statements.
- Plants obtain nitrogen from soil.
  - Human being is an omnivorous organism.
  - Plant intake carbon dioxide during respiration.
  - Solar energy is captured by leaves.
  - Mushroom is a saprophytic organism.
7. What is parasitic nutrition? Give two examples.
8. Name the raw materials required for photosynthesis.
9. Why do organisms need to take food?
10. Classify the following organism as herbivores, carnivores and omnivores.

Dog, Cat, Human beings, Elephant, Crow, Cow, horse, deer, Tiger, Lion.

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**Answer key**

1. b
2. c
3. d
4. d
5. (a) – (v), (b) – (iii), (c) – (ii), (d) – (i), (e) – (iv).
6. (a) T (b) T (c) F (d) T (e) T.

7. It is a type of heterotrophic nutrition in which one organism obtains their food from other organism by harming them but not killing. The organism that obtains food is called parasite and other organism is called host. Cuscuta, mosquito.

8. Following thing are required for photosynthesis:

- a. Carbon dioxide
- b. Water
- c. Chlorophyll
- d. Sunlight

9. Organisms need food to obtain energy for various metabolic activities and to maintain the body parts for wear and tear. It also provides nutrients for protection against the disease.

10.

Herbivores

Elephant

Horse

Cow

Carnivores

Tiger

Lion

Omnivores

Dog

Cat

Human beings

Crow

---

**CBSE Worksheet-05**  
**Class – VII Science (Nutrition in Animals)**

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1. What is the mode of nutrition in animals?
  - a. Heterotrophic
  - b. Autotrophic
  - c. Symbiotic
  - d. All of these.
2. Which of the following is the longest part of the digestive system?
  - a. Large intestine
  - b. Small intestine
  - c. Oesophagus
  - d. Rectum
3. Bile juice secreted by the liver plays an important role in the digestion of
  - a. Protein
  - b. Carbohydrates
  - c. Cellulose
  - d. Fats
4. Finger-like projection called villi are found in the inner wall of
  - a. Small intestine
  - b. Large intestine
  - c. Rectum
  - d. Pharynx

5. Match the following

Column A

- a. Liver
- b. Large intestine
- c. Rectum
- d. Stomach
- e. Villi

Column B

- i. Acid release
- ii. Release of faecal matter
- iii. Absorption of digested food
- iv. Bile release
- v. Absorption of water

---

6. Fill in the blanks.

- a. Saliva is secreted in the mouth by -----.
- b. Largest gland in human body is -----.
- c. Tongue help in ----- and -----.
- d. Insulin is released by -----.
- e. HCl is released by ----- in the stomach.

7. What is mastication?

8. What are enzymes? Give one example.

9. What is digestion? Why it is important?

10. Name the enzyme released from the following glands in human digestive system.

- a. Salivary glands
- b. Gastric glands
- c. Pancreas
- d. Liver

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### Answer key

1. a
2. b
3. d
4. a
5. (a) – (iv), (b) – (v), (c) – (ii), (d) – (i), (e) – (iii).
6. (a) Salivary glands (b) Liver (c) Chewing, mixing (d) Pancreas (e) Gastric gland.
7. The process of chewing of food is called mastication. In this process, saliva is mixed with food.
8. Enzymes are bio-catalyst that helps in digestion of food. They are released from the endocrine glands present in different parts of digestive system. For example pepsin is released from gastric gland help in digestion of protein.
9. The mechanism of breaking down complex organic foods into simpler form by the action of enzyme is called digestion. It is essential for utilization of food components to obtain energy and maintenance of body.
10. Enzyme released from
  - a. Salivary glands – Salivary amylase.
  - b. Gastric glands - pepsin
  - c. Pancreas- pancreatic amylase, lipase and trypsin.
  - d. Liver – Bile salts.

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CBSE Worksheet-06

Class – VII Science (Nutrition in Animals)

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1. Amoeba capture food with the help of

- a. Tentacles
- b. Villi
- c. Pseudopodia
- d. Food cup

2. Canines are well developed in

- a. Human beings
- b. Cattle
- c. Dogs
- d. Elephants

3. Which of the following is a dual gland?

- a. Pancreas
- b. Liver
- c. Gastric gland
- d. Salivary gland

4. Enzymes are

- a. Carbohydrates
- b. Acids
- c. Bio-catalyst
- d. Bases

5. Match the following

Column A

- a. Incisor
- b. Canine
- c. Molar
- d. Tongue
- e. Salivary gland

Column B

- i. Grinding and crushing food
- ii. Biting the food
- iii. Tearing food
- iv. Release enzyme
- v. Mixing of food

---

6. Write T for true and F for false statement.

- a. The large intestine absorbs water and minerals.
- b. Pancreas is the largest gland in our body.
- c. Amoeba ingests food with the help of pseudopodia.
- d. Villi help in digestion of food.
- e. Animals can digest cellulose.

7. Where is bile produced? Which component of the food does it help to digest?

8. What are villi? Write its function?

9. What are ruminants? How do they digest cellulose?

10. Provide single term for the following:

- a. The organ which stores bile.
- b. Finger-like outgrowth in the small intestine.
- c. The part of amoeba which help in capturing food.
- d. The longest part of alimentary canal.
- e. The part which feels the taste of different food items.

---

---

**Answer key**

1. c

2. c

3. a

4. c

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

6. (a) T (b) F (c) T (d) F (e) F.

7. Bile is produced in liver. Bile contains bile juices which emulsify the fats into smaller fat globules to make it easier for digestion of fat.

8. Villi are small finger-like projection in the small intestine. It increases the surface area for absorption of digested food. Rich supply of blood help in transport of food to all parts of the body.

9. The animals having four chambered stomach are called chewing animals or ruminants animals. For example cow, which always seems to chew something throughout the day.

10. Single words

a. Gall bladder.

b. Villi.

c. Pseudopodia

d. Small intestine

e. Tongue.

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CBSE Worksheet-07

Class – VII Science (Nutrition in Animals)

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1. A substance which kills bacteria in stomach
  - a. Water
  - b. Hydrochloric acid
  - c. Sulphuric acid
  - d. Citric acid
2. Animals that chew cud are called
  - a. Herbivores
  - b. Omnivores
  - c. Ruminant
  - d. Grass eating
3. Total number of canines teeth in adult human beings are
  - a. 2
  - b. 4
  - c. 6
  - d. 8
4. Gastric juice contain enzyme
  - a. Lipase
  - b. Amylase
  - c. Cellulase
  - d. Pepsin

5. Match the following

Column A

- a. Mastication
- b. Ruminant
- c. Ptyalin
- d. Ingestion in amoeba
- e. Bile storing organ

Column B

- i. Gall bladder
- ii. Pseudopodia
- iii. Teeth
- iv. Cellulose digesting
- v. Saliva

---

6. Fill in the blanks

- a. Saliva is secreted in mouth by -----.
- b. ----- is produced by liver.
- c. Food is pushed down into the stomach by -----.
- d. Amoeba digest its food in the -----.
- e. Digestion of starch starts in -----.

7. Which gland release gastric juice? What is its function?

8. What are ruminants? Name the four compartments of their stomach?

9. What Oral Rehydration Solution?

10. Mention the important functions of pancreas.

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### Answer key

1. b
2. c
3. b
4. d
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (ii), (e) – (i).
6. (a) Salivary glands (b) Bile juice (c) peristaltic movement (d) food vacuole (e) mouth.
7. Gastric juice is released by gastric glands present in wall of stomach. It contains HCl, pepsin, and mucus that help in digestion of food.
8. Grass eating animals are called ruminants. They can digest cellulose. The stomach of these animals is four chambered.
9. ORS is boiled but cooled water with a pinch of salt and some sugar dissolved in it. Excess loss of water from the body can be maintained by giving ORS solution frequently.
10. Pancreas is a dual gland that releases hormone as well as enzyme. The main hormone released by pancreas is insulin that control sugar level in blood. The enzyme released by pancreas includes amylase, trypsin, lipase.

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**CBSE Worksheet-08**

**Class – VII Science (Nutrition in Animals)**

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1. Fat is completely digested in
  - a. Stomach
  - b. Small intestine
  - c. Mouth
  - d. Large intestine
2. Water from undigested food is absorbed by
  - a. Small intestine
  - b. Large intestine
  - c. Food pipe
  - d. Liver
3. Which one is not a ruminant animal?
  - a. Dog
  - b. Cow
  - c. Buffalo
  - d. Deer
4. Utilization of digested food to obtain energy is called
  - a. Ingestion
  - b. Digestion
  - c. Absorption
  - d. Assimilation

5. Match the following

<u>Column A</u>	<u>Column B</u>
a. Carbohydrates	i. Do not contain nutrient.
b. Proteins	ii. Glucose
c. Fats	iii. Amino acids
d. Vitamins	iv. Fatty acids
e. Roughage	v. Provide immunity

---

6. Write T for true and F for false statements.

- a. Tongue help in mixing of food with saliva.
- b. Large intestine absorbs digested food.
- c. Rhythmic contraction and relaxation of food pipe is called peristalsis.
- d. Small finger-like projection in small intestine help in digestion of food.
- e. There are 8 premolars and molars in adult mouth.

7. Why do we get instant energy from glucose?

8. Write one similarity and one difference in nutrition in amoeba and human beings.

9. Name the main organs of human digestive system.

10. Which part of digestive canal is involved in

- a. Absorption of food
- b. Chewing of food
- c. Killing of Bacteria
- d. Complete digestion of food
- e. Formation of faeces

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### Answer key

1. b
2. b
3. a
4. d
5. (a) – (ii), (b) – (iii), (c) – (iv), (d) – (v), (e) – (i).
6. (a) T (b) F (c) T (d) F (e) T.
7. We get instant energy from glucose as glucose need not to be digested. It is absorbed by small intestine and send to blood. Through blood it riches to each cells and provide energy instantly.
8. The mode of nutrition is holozoic, both in amoeba and human beings. But in amoeba digestion is intra-cellular but in human beings digestion is extra-cellular.
9. The main organs of digestive system are
  - a. Mouth
  - b. Oesophagus
  - c. Stomach
  - d. Small intestine
  - e. Large intestine
  - f. Rectum
  - g. Anus.
10. Organs involved are
  - a. Small intestine
  - b. Mouth
  - c. Stomach
  - d. Small intestine
  - e. Rectum.

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**CBSE Worksheet-09**  
**Class – VII Science (Fibre to Fabric)**

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1. Silkworms feeds on leaves of
  - a. Guava
  - b. Mulberry
  - c. Mango
  - d. Banana
2. The process of removal of fleece from the body of sheep is called
  - a. Cleaning
  - b. Carding
  - c. Shearing
  - d. Removal
3. Silk thread is obtained from
  - a. Adult moth
  - b. Pupa
  - c. Caterpillar
  - d. Cocoon
4. Which one of the following is not an example of natural fibre?
  - a. Silk
  - b. Rayon
  - c. Cotton
  - d. Wood

5. Match the following

Column A

- a. Science of rearing silk worm
- b. A type of synthetic fibre
- c. Mulberry silk moth
- d. The substance that gives structure to cotton
- e. The machine that combs loose wool into sheet

Column B

- i. Bombyx mori
- ii. Cellulose
- iii. Carding machine
- iv. Sericulture
- v. Nylon

---

6. Fill in the blanks:

- a. Wool and silk are ----- fibres.
- b. The best quality of wool is obtained from -----.
- c. The silk cocoons are ----- to kill the insects inside them.
- d. Silk is natural ----- fibre.
- e. The thick coat of hair on a sheep's body is called -----.

7. Name the three animals from which we get wool.

8. What are cocoon?

9. What is carding? Why it is necessary?

10. Make meaningful words from the following jumbled words related to wool and silk.

- a. NCOOCO
- b. YERMBULR
- c. YXBMOB OMIR
- d. EECELF

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**Answer key**

1. b
2. c
3. d
4. b
5. (a) – (iv), (b) – (v), (c) – (i), (d) – (ii), (e) – (iii).
6. (a) Natural (b) Merino sheep (c) boiled in water (d) protein (e) fleece.
7. Three animals from which we get wool are
  - a. Sheep
  - b. Goat
  - c. Camel
8. Cocoons are silk containing silk moth. The body of silk moth is surrounded by silk weaving for their protection. It takes about 6-8 days to make a cocoon.
9. Carding is the process of combing the loose wool fibres into sheet. It is done by a machine called carding machine.
10. (a) COCOON  
(b) MULBERRY  
(c) BOMBYX MORI  
(d) FLEECE

---

**CBSE Worksheet-10**  
**Class – VII Science (Fibre to Fabric)**

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1. The silk and wool are made of a kind of
  - a. Fats
  - b. Carbohydrates
  - c. Proteins
  - d. Vitamins
2. The process of rearing silk worms in order to obtain silk is called
  - a. Piece culture
  - b. Sericulture
  - c. Horticulture
  - d. Monoculture
3. Which of the following is natural fibre?
  - a. Nylon
  - b. Rayon
  - c. Polyester
  - d. Jute
4. The process of obtaining silk fibre from cocoons is called
  - a. Reeling
  - b. Shearing
  - c. Carding
  - d. Yarning

5. Match the following

Column A

- a. Finest wool
- b. Boiling cocoon
- c. Mulberry silk moth
- d. A type of natural fibre
- e. A silk yarn

Column B

- i. Bombyx mori
- ii. Wool
- iii. As strong as steel
- iv. Merino
- v. Kills pupa

---

6. Write T for true and F for false statements.

- a. Wool is a synthetic fibre.
- b. Camel is wool giving animal.
- c. Silk was discovered in china.
- d. Animal fibres include mohair, angora and cashmere.
- e. Silk is made by the caterpillar of the silkworm.

7. What is sericulture?

8. What is shearing? How it is done?

9. Write three uses of wool?

10. Classify the following fibres as synthetic, animal and plant fibre.

Wool, cotton, rayon, jute, silk, nylon, hemp, polyester.

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**Answer key**

1. c
2. b
3. d
4. b
5. (a) – (iv), (b) – (v), (c) – (i), (d) – (ii), (e) – (iii).
6. (a) F (b) T (c) T (d) F (e) T.
7. The process of rearing silk worms in order to obtain silk is called sericulture. In sericulture, tiny eggs of silkworm are incubated until they hatch and become worms.
8. The process of removing fleece from the sheep's body is called shearing. It is done with the help of special clippers.
9. Uses of wool:
  - a. It is used for making fabrics, clothes and shawls.
  - b. It is used for making carpets, blankets.
  - c. It is used for sound proofing.

10.

Animal fibre

wool

silk

Plant fibre

cotton

jute

hemp

Synthetic fibre

rayon

nylon

polyester

---

**CBSE Worksheet-11**  
**Class – VII Science (Fibre to Fabric)**

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1. Silk worm is a
  - a. Caterpillar
  - b. Larva
  - c. Egg
  - d. Adult moth
2. Which of the following do not yield wool?
  - a. Yak
  - b. Camel
  - c. Goat
  - d. Woolly dog
3. Sheep are reared for getting
  - a. Cotton
  - b. Jute
  - c. Wool
  - d. Rayon
4. Silk was discovered in
  - a. Indian
  - b. Indonesia
  - c. Malaysia
  - d. China

5. Match the following

Column A

- a. Scouring
- b. Yak
- c. Cocoon
- d. Mulberry leaves
- e. Fleece

Column B

- i. Yield silk fibre
- ii. Food of silk worm
- iii. Hair of sheep
- iv. Wool yielding animal
- v. Cleaning seared skin

---

6. Fill in the blanks with suitable words

- a. Silk was discovered in -----.
- b. A weaver weaves silk thread into -----.
- c. Cotton and jute are ----- fibre.
- d. A female silk moth lays -----.
- e. Sorters disease is caused by bacterium -----.

7. What are caterpillars?

8. Why wool yielding animals bears thick hair on their body?

9. Name any three Indian breeds of sheep along with state in which they are found.

10. Arrange the following as sequence of steps in processing of wool.

Sorting, Shearing, cleaning, silver, carding, woolen cloths.

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**Answer key**

1. a
2. d
3. c
4. d
5. (a) – (v), (b) – (iv), (c) – (i), (d) – (ii), (e) – (iii).
6. (a) China (b) silk cloth (c) plant (d) eggs (e) anthrax.
7. The silkworms hatch from the tiny eggs on the mulberry. From the eggs caterpillars are released. On reaching adult stage, they start producing threads of silk.
8. Wool yielding animals bear thick hair coat on their body that protects them from cold conditions as the woolly hair is a bad conductor of heat.
9. 

Indian breeds of sheep	States
a. Lohi	Rajasthan, Punjab
b. Bakharwal	Haryana, Punjab
c. Marwari	Gujarat
10. Steps of wool processing:
  - a. Shearing
  - b. Cleaning
  - c. Sorting
  - d. Spinning
  - e. Weaving

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**CBSE Worksheet-12**  
**Class – VII Science (Heat)**

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1. The heat in metals is conducted by the process of
  - a. Radiation
  - b. Convection
  - c. Conduction
  - d. Absorption
2. Glass, plastic, wood are examples of
  - a. Conductor
  - b. Insulator
  - c. Convectors
  - d. Radiators
3. During the night
  - a. Land cools more quickly than the sea
  - b. Sea cools quickly than the land
  - c. Land heats up
  - d. Sea water heats up
4. Temperature is measured with the help of
  - a. Thermometer
  - b. Barometer
  - c. Ammeter
  - d. Voltmeter
5. Match the following

<u>Column A</u>	<u>Column B</u>
a. Sea breeze	i. Insulator
b. Land breeze	ii. From sea to land
c. Light colour	iii. From land to sea
d. Glass	iv. Direct molecular contact
e. Conduction	v. Summer

---

6. Fill in the blanks.

- a. Water and air are ----- conductor of heat.
- b. ----- is the liquid used in thermometer.
- c. ----- is the degree of hotness of the body.
- d. Liquid and gases transfer heat by ----- method.
- e. Metals are ----- conductor of heat.

7. What is convection? How heat is transferred by this method?

8. Why is mercury used in thermometers?

9. What is heat? How heat is different from temperature?

10. Classify the following as conductors and insulators:

Glass, Iron, Aluminium, Air, Water, Woolen cloth, Silver, Paper.

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**Answer key**

1. c
2. b
3. a
4. a
5. (a) – (ii), (b) – (iii), (c) – (v), (d) – (i), (e) – (iv).
6. (a) bad(b) Mercury(c) Temperature (d) conduction (e) good.
7. Convection is the transfer of heat by the movement of molecules of liquids and gases.  
On heating, liquids and gases become lighter and rise up. The cooler, heavier fluids move down and take the place of warmer fluids.
8. Mercury is used in thermometer because :
  - a. Expansion of mercury is uniform over a wide range of temperature.
  - b. Can be seen from outside glass.
  - c. Does not stick to the glass.
9. Heat is a form of energy. On the other hand, temperature is the degree of hotness and coldness of a substance. Temperature can be changed by changing providing heat energy to the body.

10.

Conductor

Glass

Air

Woolen cloth

Paper

Insulator

Iron

Aluminium

Water

Silver

---

**CBSE Worksheet-13**  
**Class – VII Science (Heat)**

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1. Heat gets transferred by the
  - a. Conduction
  - b. Convection
  - c. Radiation
  - d. All of these.
2. Thermos flask keeps hot liquid hot and cold liquid cold by
  - a. Cooling
  - b. Heating
  - c. Preventing heat loss
  - d. Using coolant
3. Heat of sun reaches to earth by
  - a. Conduction
  - b. Convection
  - c. Radiation
  - d. Through air.
4. Clinical thermometer has marking from  $35^{\circ}\text{C}$  to
  - a.  $32^{\circ}\text{C}$
  - b.  $42^{\circ}\text{C}$
  - c.  $52^{\circ}\text{C}$
  - d.  $62^{\circ}\text{C}$

5. Match the following

Column A

- a. Heat
- b. Temperature
- c. Radiation
- d. Convection
- e. Metals

Column B

- i. Good conductor
- ii. Sea breeze
- iii. Form of energy
- iv. degree of hotness
- v. Sun's energy

---

6. Write T for true and F for false statement.

- a. The boiling point of water is 100°C.
- b. Light coloured clothes are better absorbers of heat.
- c. Heat of Sun reaches to earth by convection.
- d. Heat is a form of energy.
- e. Substances that do not conduct heat are known as insulators.

7. Why people advised to wear white clothes in summer?

8. What is boiling point? What is the boiling point of pure water?

9. What is land breeze? How it keep the land cool during the day?

10. Mention the type of heat transfer in following:

- a. Heating of water
- b. Reaching of Solar energy to earth
- c. Heating of iron rod
- d. Sea breeze in coastal area
- e. Cooking of food in utensils.

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**Answer key**

1. d
2. c
3. c
4. b
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (ii), (e) – (i).
6. (a) T (b) F (c) F (d) T (e) T.
7. In summer people prefer to use white coloured clothes because white coloured cloth do not absorb the heat and reflect most of the light falling on it to keep us cool.
8. The temperature at which liquid start boiling is called its boiling point. Boiling point of pure water is 100°C.
9. During the day, land heat up more quickly than water. The air above the land gets heated and moves towards the cooler sea water. This movement of air from land to sea is called land breeze.
10. (a) Convection  
(b) Radiation  
(c) Conduction  
(d) Convection  
(e) Conduction.

---

**CBSE Worksheet-14**  
**Class – VII Science (Heat)**

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1. Conduction takes place in
  - a. Solid only
  - b. Liquid only
  - c. Gases only
  - d. All of the above.
2. Ventilation in room is due to
  - a. Conduction
  - b. Convection
  - c. Radiation
  - d. Both radiation and conduction
3. Method of heat transfer in steel rod is
  - a. Conduction
  - b. Convection
  - c. Radiation
  - d. All of these
4. Which of the following is a insulator
  - a. Copper rod
  - b. Aluminium rod
  - c. Air
  - d. Graphite

5. Match the following

Column A

- a. Clinical thermometer
- b. Laboratory thermometer
- c. Thermos flask
- d. Chimney
- e. Black colour

Column B

- i. Maintain the temperature hot or cold
- ii. Absorbs light
- iii. Smoke moves upward
- iv. Have kink
- v. Without kink.

---

6. Fill in the blanks with suitable words.

- a. S.I unit of heat is -----.
- b. Heat is a form of -----.
- c. Mercury level falls easily in a ----- thermometer.
- d. Cooking vessels should be made up of ----- conductor.
- e. Range of clinical thermometer is from \_\_\_\_\_°C to \_\_\_\_\_°C.

7. Why do we feel cold when our body sweats?

8. Write difference between laboratory and clinical thermometer?

9. How thermos flask keeps the liquids hot or cold?

10. Name the following

- a. Fastest mode of transfer of heat.
- b. Mode of transfer of heat where no medium is required.
- c. The metal used in the bulb of thermometer.
- d. Mode of transfer of heat where the medium does not get heated.

---

---

**Answer key**

1. a
2. b
3. a
4. c
5. (a) – (iv), (b) – (v), (c) – (i), (d) – (iii), (e) – (ii).
6. (a) Joule (b) energy (c) laboratory (d) good (e) 35, 42.
7. We feel cold when our body sweats because evaporation of sweat causes cooling. Heat required for evaporation is absorbed from the body that causes cooling effect.
8. In laboratory thermometer kink is not present but clinical thermometer have kink.  
The range of laboratory thermometer is more than clinical thermometer.
9. Thermos flasks have two layers. In between these layers vacuum is created to prevent the loss of heat by conduction or convection. Since rate of heat loss is very slow through radiation it remains hot for longer time.
10. (a) Conduction  
(b) Radiation  
(c) Mercury  
(d) Radiation

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**CBSE Worksheet-15**  
**Class – VII Science (Heat)**

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1. A wooden spoon is dipped in cup of ice-cream, its other end
  - a. Become cold by conduction
  - b. Become cold by convection
  - c. Become cold by radiation
  - d. Does not become cold.
2. The bottom of stainless steel pan have copper because
  - a. Copper is more durable
  - b. Copper is more attractive
  - c. Copper is better conductor
  - d. Copper is easier to clean.
3. Heat is a form
  - a. Temperature
  - b. Energy
  - c. Power
  - d. Work
4.  $10^{\circ}\text{C}$  is equal to
  - a. 173 K
  - b. 273 K
  - c. 283 K
  - d. 183 K

5. Match the following

<u>Column A</u>	<u>Column B</u>
a. Boiling point of water	i. 273 K
b. Freezing point of water	ii. $27^{\circ}\text{C}$
c. Normal body temperature	iii. $100^{\circ}\text{C}$
d. $300\text{K} =$	iv. $0^{\circ}\text{C}$
e. $0^{\circ}\text{C} =$	v. $37^{\circ}\text{C}$

---

6. Write T for true F for false statements.

- a. S.I unit of temperature is joule.
- b. Kink is present in clinical thermometer.
- c. Mercury is used in thermometer as it expands uniformly.
- d. Convection is the fastest mode of heat transfer.
- e.  $100^{\circ}\text{C}$  is equal to  $373\text{ K}$ .

7. What is radiation? Give an example of heat transfer through radiation.

8. Why metals are good conductor of heat?

9. Why is the handle of a metallic kettle covered with strips of cane?

10. Answer the following:

- a. Which material has the highest melting point?
- b. Which material has the lowest melting point?
- c. What is the temperature range of laboratory thermometer?
- d. What is temperature?

---

---

**Answer key**

1. d
2. c
3. b
4. c
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (ii), (e) – (i).
6. (a) F (b) T (c) T (d) F (e) T.
7. When the heat is passed from one object to another without the help of any medium the transfer is called radiation. Sun's energy reaches to earth by radiation.
8. Metals are good conductor of heat as the metals are solid and particles are very close to each other. Heat is transferred from one molecule to other very quickly through metals.
9. Handles of metallic kettle is covered with strips of cane as cane is bad conductor of heat. Kettle can be handled easily using strips of cane.
10. (a) Gold  
(b) Mercury  
(c) 0°C to 110°C  
(d) Degree of hotness or coldness.

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**CBSE Worksheet-16**

**Class – VII Science (Acids, Bases and Salts)**

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1. Which one is an organic acid?
  - a. Sulphuric acid
  - b. Hydrochloric acid
  - c. Nitric acid
  - d. Lactic acid
  
2. Acid turns blue litmus
  - a. Red
  - b. Orange
  - c. Pink
  - d. green
  
3. Which of the following is a strong acid?
  - a. Citric acid
  - b. Acetic acid
  - c. Malic acid
  - d. Sulphuric acid
  
4. Which gas is released when acid reacts with metals?
  - a. Hydrogen
  - b. Oxygen
  - c. Nitrogen
  - d. Carbon dioxide
  
5. Match the following

<u>Column A</u>	<u>Column B</u>
a. Hydrochloric acid	i. Natural indicator
b. Carbonic acid	ii. Turns red in acid
c. Sodium hydroxide	iii. Strong acid
d. Turmeric	iv. Organic acid
e. Blue litmus	v. Strong base

---

6. Fill in the blanks

- a. When acid and base react together a new compound called ----- is formed.
- b. All acids contain -----.
- c. Metal on heating or burning produce ----- of metals.
- d. Turmeric is a ----- indicator.
- e. Minerals acids are obtained from -----.

7. What are indicators? Give two examples.

8. What is neutralization reaction?

9. What are alkalies? Give two examples.

10. Classify the following as organic and mineral acids?

Hydrochloric acid, Citric acid, Malic acid, Nitric acid, Oxalic acid, Sulphuric acid.

---

---

**Answer key**

1. d
2. a
3. d
4. a
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (i), (e) – (ii).
6. (a) Salt (b) hydrogen (c) oxide (d) natural (e) minerals.
7. Those substances that give different colour with acid and base are called indicators.  
Litmus paper and methyl orange are two common indicators.

8. The reaction between an acid and a base to form salt and water is called neutralization reaction.



9. Metal oxides are basic in nature. Those bases that dissolve in water are called alkalies.  
Sodium hydroxide and Potassium hydroxide are two common examples of alkalies.

10.

Organic acids

Citric acid

Malic acid

Oxalic acid.

Mineral acids

Hydrochloric acid

Nitric acid

Hydrochloric acid

---

CBSE Worksheet-17

Class – VII Science (Acids, Bases and Salts)

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1. Reaction between acid and base to form salt is called

- a. Combination reaction
- b. Neutralization reaction
- c. Decomposition reaction
- d. Addition reaction

2. Which of the following is a natural indicator

- a. Methyl orange
- b. Phenolphthalein
- c. Turmeric
- d. Oxalic acid.

3. In case of indigestion, we use

- a. Antacids
- b. Antipyretic
- c. Antibiotic
- d. Alcohols

4. All acids contain

- a. Oxygen
- b. Nitrogen
- c. Carbon
- d. Hydrogen

5. Match the following

Column A

- a. Turns blue litmus red
- b. Turns red litmus blue
- c. Reaction between acid and base
- d. Gas released when acid react with metal
- e. Gas turns lime water milky

Column B

- i. Carbon dioxide
- ii. Hydrogen
- iii. Acids
- iv. Bases
- v. Salts

- 
6. Write T for true and F for false statement.
- Sulphuric acid is a strong acid.
  - Sodium chloride is a base.
  - Litmus is a natural indicator.
  - Water soluble bases are called alkalies.
  - Bases are non-corrosive in nature.
7. What is difference between concentrated and dilute acid?
8. Why acid solutions are good conductor of electricity?
9. Write the properties of bases?
10. Write the colour change when HCl and NaOH is added to
- Blue litmus
  - Red litmus
  - Methyl orange
  - Phenolphthalein
- 

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### Answer key

1. b
2. c
3. a
4. d
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (ii), (e) – (i).
6. (a) T (b) F (c) T (d) T (e) F.
7. The acids that contain very less amount of water are called concentrated acid. On the other hand acids that contain more water and less acid are called dilute acids.
8. Acid solution are good conductor of electricity as acids produce hydrogen ions ( $H^+$ ) in water that conduct the electric current.
9. Properties of bases:
  - a. They are soapy to touch.
  - b. They are bitter in taste.
  - c. They are corrosive in nature.
  - d. They are antacids.
10. Colour changes of HCl and NaOH with indicators are:

<u>Indicators</u>	<u>HCl</u>	<u>NaOH</u>
Blue litmus	Red	No change
Red litmus	No change	Blue
Methyl orange	Red	Yellow
Phenolphthalein	No change	Pink

---

CBSE Worksheet-18

Class – VII Science (Acids, Bases and Salts)

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- Which of the following is a strong acid?
  - Nitric acid
  - Citric acid
  - Tartaric acid
  - Acetic acid
- What is the common name of sodium carbonate?
  - Caustic soda
  - Baking soda
  - Phenol
  - Blue vitriol
- Which one of the following metal does not release hydrogen gas with acids?
  - Iron
  - Copper
  - Zinc
  - Magnesium
- Sodium chloride turns
  - Blue litmus red
  - Red litmus blue
  - Methyl orange yellow
  - No change in colour

5. Match the following

Column A

- Sulphuric acid
- Sodium hydroxide
- Citric acid
- Calcium hydroxide
- Sodium chloride

Column B

- Neutral salt
- Weak base
- Strong acid
- Weak acid
- Strong base

---

6. Fill in the blanks with suitable words.

- a. The sour things we eat contain -----.
- b. Ammonium hydroxide is a -----.
- c. Milk contains -----.
- d. Litmus is extracted from -----.
- e. An acid contain more ----- ions.

7. What is acid rain? How it happen?

8. Why curd and sour substance should not be stored in metal containers?

9. Differentiate between strong and weak acids with example?

10. Rearrange the jumbled letter to obtain name of a indicator.

a. METURICR

b. MUSLIT

c. EEBTOOTR

d. HCINA ORSE

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### Answer key

1. a
2. b
3. b
4. d
5. (a) – (iii), (b) – (v), (c) – (iv), (d) – (ii), (e) – (i).
6. (a) Acids (b) base (c) lactic acid (d) lichen (e) hydrogen.
7. Rain water containing acids due to presence of Sulphur oxide and nitrogen oxide in air as pollutant is called acid rain. It reduces the pH of rain water less than 5.6.
8. Curds and sour substances contain acids that may react with metals to form metal salt and hydrogen gas. This may makes the food items toxic and metal container also get corroded.
9. Those acids that completely dissociate into ions when mixed with water are called strong acids. For example Sulphuric acid. Those acids that partially dissociates into ions are called weak acid. For example citric acid.
10. (a) TURMERIC  
(b) LITMUS  
(c) BEET ROOT  
(d) CHINA ROSE.

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**CBSE Worksheet-19**

**Class – VII Science (Physical and Chemical Changes)**

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1. Melting of ice is a
  - a. Chemical change
  - b. Physical change
  - c. Periodic change
  - d. Both physical and chemical change
2. Which of these is the smallest particle?
  - a. An atom
  - b. A molecule
  - c. A speck of dust
  - d. A water drop
3. Formation of a compound is
  - a. Physical change
  - b. Temporary change
  - c. Chemical change
  - d. Reversible change
4. Sea water is a
  - a. Element
  - b. Compound
  - c. Mixture
  - d. Molecule

5. Match the following

Column A

- a. Burning of candle
- b. Tearing of paper
- c. Burning petrol
- d. Water
- e. Air

Column B

- i. Mixture
- ii. Compound
- iii. Physical change
- iv. Chemical change
- v. Both physical and chemical change

---

6. Fill in the blanks

- a. Burning of magnesium is a ----- change.
- b. The changes that occur in chemical reactions are -----.
- c. Matters are classified as element, compound and -----.
- d. Chemical name of  $H_2SO_4$  is -----.
- e. In chemical reaction reactants changes into -----.

7. What are physical changes? Give an example.

8. Why water is a compound but air is a mixture?

9. What is crystallization? Give it uses in day today life.

10. Classify as physical and chemical changes.

- a. Melting of ice
- b. Formation of water
- c. Tearing of paper
- d. Ripening of fruit
- e. Formation of curd from milk
- f. Stitching of cloth

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### Answer key

1. b
2. a
3. c
4. c
5. (a) – (v), (b) – (iii), (c) – (iv), (d) – (ii), (e) – (i).
6. (a) Chemical (b) irreversible (c) mixture (d) Sulphuric acid (e) products.
7. A physical change is a change in which a substance undergoes a change in its physical properties only and no new substance is formed.
8. Water is a compound because it is formed from hydrogen and oxygen, which is irreversible, having different properties but air is a combination of different gases in any proportion.
9. The method of separation of pure crystals of a substance from its hot and super saturated solution on cooling is called crystallization.

10.

Physical change

Melting of ice

Tearing of paper

Stitching of cloth

Chemical change

Formation of water

Ripening of fruit

Formation of curd from milk

---

---

**CBSE Worksheet-20**

**Class – VII Science (Physical and Chemical Changes)**

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1. Which of the following is a reversible change?
  - a. Melting of ice
  - b. Burning of match stick
  - c. Changing of milk into curd
  - d. Germination of seed
2. Which of the following is an example of chemical change?
  - a. Melting of wax
  - b. Burning of candle wick
  - c. Heating of iron rod
  - d. Woolen yarn to knitted sweater
3. In a chemical change
  - a. Molecule of substance do not change
  - b. Molecule of substance change
  - c. Substance remain the same
  - d. Change is reversible
4. Which of the following is an example of physical change?
  - a. A bud turning into a flower
  - b. Rusting of iron
  - c. Ripening of a tomato
  - d. Boiling of water

5. Match the following

Column A

- a. Milk changes to curd
- b. Temporary change
- c. Change of season
- d. Rusting of iron
- e. Air

Column B

- i. slow change
- ii. irreversible change
- iii. physical change
- iv. can be compressed easily
- v. chemical change

---

6. Fill in the blanks with suitable words.

- a. Rotation of fan is ----- change.
- b. Dissolving salt in water is a -----.
- c. The glowing of tube light is a -----.
- d. A bud turning into a flower cannot be a -----.
- e. Change in which a new substance is formed, are called -----.

7. How melting of wax is different from burning of wax?

8. Define rusting? Write the condition essential for rusting of iron?

9. Write the characteristic of chemical changes?

10. Write the following chemical changes with the help of chemical formulae:

- a. Magnesium + Oxygen  $\rightarrow$  Magnesium oxide
- b. Magnesium oxide + water  $\rightarrow$  Magnesium hydroxide
- c. Copper sulphate + Iron  $\rightarrow$  Iron sulphate + Copper.

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### Answer key

1. a
2. b
3. b
4. d
5. (a) – (v), (b) – (iii), (c) – (i), (d) – (ii), (e) – (iv).
6. (a) Periodic (b) physical (c) physical (d) reversible (e) chemical change.
7. Melting of wax is a physical change as no new substance is formed. On the other hand burning of wax is a chemical change in which new substance like carbon dioxide is formed.
8. Action of air and water on iron surface to change its properties and colour is called rusting. Presence of moisture and air is necessary for rusting of iron.
9. Characteristic of chemical changes:
  - a. They are irreversible.
  - b. New substances are produced.
  - c. Change of energy.
  - d. Permanent changes.
10. (a)  $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$ .  
(b)  $\text{MgO} + \text{H}_2\text{O} \rightarrow \text{Mg}(\text{OH})_2$   
(c)  $\text{CuSO}_4 + \text{Fe} \rightarrow \text{FeSO}_4 + \text{Cu}$

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**CBSE Worksheet-21**

**Class – VII Science (Physical and Chemical Changes)**

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1. Which of the following is a chemical change?

- a. Melting of ice
- b. Rusting of iron
- c. Changing of water into ice
- d. Dissolving of common salt into water

2. Physical changes are

- a. Irreversible
- b. Periodic
- c. Reversible
- d. All of these

3. Chemical change are characterised by

- a. Formation of new substance
- b. Release of energy
- c. Absorption of energy
- d. Reversible

4. Symbol that represent sodium is

- a. S
- b. K
- c. Na
- d. Fe

5. Match the following

Column A

- a. Freezing of water
- b. Photosynthesis
- c. Rusting of iron
- d. Burning of coal
- e. Changes of season

Column B

- i. Periodic change
- ii. Chemical change
- iii. Reversible change
- iv. Irreversible change
- v. Permanent change

- 
6. Write T for true and F for false statements.
    - a. Iron pipes coated with zinc do not rust.
    - b. Condensation of steam is a chemical change.
    - c. Iron and rust are same things.
    - d. Cutting of log of wood is a chemical change.
    - e. Heating of iron and Sulphur is a chemical change.
  7. What happen when Carbon dioxide gas is passed through lime water? Which compound is formed?
  8. What is Galvanization? Why iron articles are galvanized?
  9. Write some methods to prevent rusting?
  10. When iron nail is put into a beaker containing copper sulphate solution, the blue colour of solution slowly change into green.
    - a. Why does the colour of the solution change?
    - b. Write the equation involved in this process?
    - c. Is it a chemical or physical change?

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### Answer Key

1. b
2. c
3. a
4. c
5. (a) – (iii), (b) – (iv), (c) – (ii), (d) – (ii), (e) – (i).
6. (a) T (b) F (c) F (d) F (e) T.
7. When Carbon dioxide gas is passed through lime water, lime water turns milky. This is due to formation of white precipitate of calcium carbonate insoluble in water.
8. Formation of thin layer of zinc over the iron article is called galvanization. Galvanized irons do not rust easily.
9. Rusting of iron can be prevented by
  - a. Galvanization.
  - b. Painting and greasing
  - c. Alloying
  - d. Anodizing.
10. (a) Colour of copper sulphate solution changes due to displacement of copper by iron.  
(b)  $\text{CuSO}_4 + \text{Fe} \rightarrow \text{FeSO}_4 + \text{Cu}$ .  
(c) It is a chemical change.

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**CBSE Worksheet-22**

**Class – VII Science (Weather, Climate and Adaptations of Animals to Climate)**

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1. An animal found in desert
  - a. Penguin
  - b. Frog
  - c. Camel
  - d. Polar bear
2. Blubber is a layer of fat below the skin in some animals to
  - a. Protect from heat
  - b. Protect from extreme cold
  - c. Provide food during unfavorable condition
  - d. Protect the internal organ from injury.
3. Which one is not an adaptation of camel for desert condition
  - a. It excrete very little of urine and dry dung.
  - b. It perspires a lot to keep the body cool
  - c. Its feet are broad with paddy soles
  - d. It has hump which stores fat
4. Atmospheric pressure is measured with the help of
  - a. Barometer
  - b. Thermometer
  - c. Hygrometer
  - d. All of these.

5. Match the following

Column A

- a. Desert
- b. Seal
- c. Hibernation
- d. Blubber
- e. Snail

Column B

- i. Slowest mover
- ii. Winter sleep
- iii. Camel
- iv. Polar region
- v. Layer of fat deposit

---

6. Fill in the blanks.

- a. The average weather condition over a long period of time is termed as -----.
- b. In ----- the temperature is high and scanty rainfall.
- c. The temperature in ----- dips to as low as  $-37^{\circ}\text{C}$  during winter.
- d. ----- are found in tropical rainforests.
- e. Penguins are found in ----- region.

7. Why do some animals develop the ability to camouflage?

8. How does a camel adapt in the hot deserts?

9. Name three elements that determine the weather of a place.

10. Write the adaptive features of following animals in very cold climate.

- a. Polar bear
- b. Penguin
- c. Seals

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**Answer key**

1. c
2. b
3. b
4. a
5. (a) – (iii), (b) – (iv), (c) – (ii), (d) – (v), (e) – (i).
6. (a) Climate (b) desert (c) poles (d) toucan (e) polar.
7. Some animals develop the ability of camouflage because it helps them to mix up with the surroundings. This helps them to protect against the predators.
8. Camels have following adaptive features to sustain in desert:
  - a. Can drink 50 litres of water in one gulp.
  - b. It does not perspire.
  - c. It has broad feet for walking
  - d. Long legs to avoid heat of sand.
9. Weather of a place depends upon:
  - a. Humidity
  - b. Temperature
  - c. Wind.
10. Adaptive features of
  - a. Polar bear- thick layer of fur, strong sense of smell.
  - b. Penguin – stream lined body, thick skin and white body part.
  - c. Seals – stream lined body, thick layer of fat is present in the skin.

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**CBSE Worksheet-23**

**Class – VII Science (Weather, Climate and Adaptations of Animals to Climate)**

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1. In India tropical rainforests are located in
  - a. Eastern ghats
  - b. Western ghats
  - c. Northern ghant
  - d. Southern ghats
2. Toucans is big birds with long
  - a. Tail
  - b. Beaks
  - c. Legs
  - d. Feathers
3. A long winter sleep of animals is called
  - a. Aestivation
  - b. Hibernation
  - c. Cold sleep
  - d. Deep sleep
4. Cold blooded animals
  - a. Change their body temperature with environment
  - b. Keep their body temperature uniform
  - c. Body temperature keeps always high
  - d. Body temperature always remains less.

5. Match the following

Column A

- a. Frog
- b. Camel
- c. Siberian crane
- d. Polar bear
- e. Elephant

Column B

- i. keep moving big ears to keep body cool
- ii. cold blooded animals
- iii. ship of desert
- iv. migration
- v. thick coat of white fur

---

6. Write T for true and F for false statements.

- a. The amount of water vapour in atmosphere is called humidity.
- b. Barometer is used to measure amount of rainfall.
- c. Snail secrete mucous around their shells when the climate is hot and dry.
- d. Camel perspire more to keep their body cool.
- e. A male peacock has shining feathers.

7. What is climate? How it differ from weather?

8. Why tropical rainforests have larger population of animals?

9. What are amphibians? Give two examples.

10. Classify them as hot climate, cold climate animals.

Camel, polar bear, penguin, birds, monkey, dog, snails, seal

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**Answer key**

1. b
2. b
3. b
4. a
5. (a) – (ii), (b) – (iii), (c) – (v), (d) – (v), (e) – (iv).
6. (a) T (b) F (c) T (d) F (e) T.
7. Long term prevalent weather condition of an area determined by latitude, altitude etc.  
weather is analysed for shorter period of time but is a long time analysis of weather condition of a place.
8. The climate a condition of tropical rainforest is very supporting to animals  
temperature is neither too cold nor too hot. Rain fall is plenty that help the organism to survive well.
9. Those animals that change their body temperature according to environmental condition are called cold blooded animals. For example frog, snake, lizards etc.
- 10.

**Hot climate animals**

Camel  
Birds  
Dog  
Monkey

**Cold climate animals**

Polar bear  
Penguin  
Seal

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CBSE Worksheet-24

Class – VII Science (Weather, Climate and Adaptations of Animals to Climate)

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1. Which is not a cold blooded animal?
  - a. Fish
  - b. Frog
  - c. Birds
  - d. Snakes
2. Blubber is found in
  - a. Polar bear
  - b. Penguin
  - c. Seals
  - d. Toucans
3. Climate of a place do not depends on
  - a. Temperature
  - b. Humidity
  - c. Altitude
  - d. Vegetation
4. Wet and dry bulb hygrometer is an instrument which measures
  - a. Maximum and minimum temperature.
  - b. Rainfall in a given period of time.
  - c. Predicts the rainfall.
  - d. The amount of humidity in the atmosphere
5. Match the following

<u>Column A</u>	<u>Column B</u>
a. Thermometer	i. amount of rainfall
b. Barometer	ii. direction
c. Hygrometer	iii. temperature
d. Rain gauge	iv. pressure
e. Magnetic compass	v. humidity.

---

6. Fill in the blanks.

- a. The average weather taken over a long time is called -----.
- b. Two regions of the earth with extreme climatic conditions are ----- and -----.
- c. Climate of a place having high rainfall is -----.
- d. Camel can cover about ----- Km in a day.
- e. Reptiles are ----- animals.

7. How do elephants living in the tropical rainforest adapt itself?

8. Write the adaptive features of polar bear to live in extremely cold conditions.

9. How would you find out the climate of the area of a given region?

10. Following are the some characteristic of animals. Write the name of organism having

particular features:

- a. White fur
- b. Layer of fat under skin
- c. Strong tails
- d. Long and large beak
- e. Need to migrate

---

---

Answer key

1. c
2. c
3. d
4. d
5. (a) – (iii). (b) – (iv). (c) – (v), (d) – (i), (e) – (ii).
6. (a) Climate (b) poles, equator (c) tropical (d) 100 (e) cold blooded.
7. Elephants have adapted in Indian tropical rainforests as per the conditions of the rainforest. Elephants keep moving their big ears to keep their body cool.
8. polar bear possesses following adaptive features:
  - a. Body covered with thick coat of white fur.
  - b. Thick layer of fat below fur.
  - c. Wide and large paws.
  - d. Strong sense of smell.
9. The climate of a place is arrived at after the weather of the place is analysed over long period of time. Climate means the average pattern in which the weather of changes from time to time.
10. (a) Penguin (b) Seals (c) Monkeys (d) Toucans (e) Siberian birds.

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**CBSE Worksheet-25**

**Class – VII Science (Winds, Storms and Cyclones)**

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1. Cyclone is also known as
  - a. Storms
  - b. Tsunamis
  - c. Hurricanes
  - d. Thunder
2. A wind vane is used to measure the
  - a. Wind speed
  - b. Wind direction
  - c. Air pressure
  - d. Air humidity
3. Lightning is usually accompanied by
  - a. Floods
  - b. Earthquake
  - c. Thunder
  - d. Rain
4. During flood drinking water should be
  - a. Boiled
  - b. Filtered
  - c. Sedimented
  - d. All of above

5. Match the following

Column A

- a. Increased wind speed
- b. Flood
- c. Wind speed 170 km/hr
- d. Benjamin Franklin
- e. Philipines

Column B

- i. Cyclone
- ii. Typhoon
- iii. Lightening
- iv. Reduced air pressure
- v. Shortage of drinking water

- 
- 
6. Fill in the blanks.
    - a. Wind at high speed results in -----, which can be highly destructive.
    - b. Flood result from heavy ----- and cyclones.
    - c. Warm air being lighter rises and results in reduced -----.
    - d. Cyclones are also known as -----.
    - e. Air expands on -----.
  7. What is wind? How does it blow?
  8. List some effects of flood?
  9. Why ventilators are made near the ceiling?
  10. Give one words for the following:
    - a. Instrument used to measure wind direction.
    - b. Sudden occurrence of light due to friction of clouds.
    - c. Loud sound, it occurs with lighting.
    - d. Submergence of land areas with water.
    - e. Violent storms accompanied by high wind speed.

---

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**Answer key**

1. c
2. b
3. c
4. a
5. (a) – (iv), (b) – (i), (c) – (ii), (d) – (iii), (e) –(v).
6. (a) Storms (b) rain(c) air pressure (d) hurricanes (e) heating.
7. Moving air is called wind. At a slow speed it is pleasant, but when it blows at a high speed it can be destructive as it possesses a large amount of kinetic energy.
8. Flood results in large scale damage to life and property. Severe injuries and breakdown of epidemics results from floods. Contamination of water causes shortage of drinking water.
9. Ventilators are made near the ceiling for escape of hot air from the room as warm air is lighter than colder air. On heating air becomes lighter.
10. (a) Wind vane  
(b) Lightning  
(c) Thunder  
(d) Flood  
(e) Cyclone.

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**CBSE Worksheet-26**

**Class – VII Science (Winds, Storms and Cyclones)**

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1. Benjamin Franklin discovered that
  - a. Building can be protected by using lightening rod at top of building.
  - b. Effects of flood on life of man
  - c. Causes of earthquake
  - d. Wind blows from high to low pressure.
2. A balloon when taken near candle burst because
  - a. Balloon melts
  - b. Balloon reduced in size
  - c. Air inside expands
  - d. Air inside condense
3. The centre of cyclone is known as
  - a. Ear of hurricanes
  - b. Nose of hurricanes
  - c. Eyes of hurricanes
  - d. Middle of hurricanes
4. Temporary submergence of large areas is called
  - a. Cyclone
  - b. Hurricanes
  - c. Thunder
  - d. Flood
5. Match the following

<u>Column A</u>	<u>Column B</u>
a. Strom	i. Rapid expansion of air due to lightening.
b. Cyclone	ii. Negatively charged clouds meet with positive charge.
c. Floods	iii. Difference pressure of two places.
d. Lightening	iv. Submergence of large area under water
e. Thunder	v. Violent storms with high speed wind.

---

6. Write T for true and F for false statements.

- a. Lightening is followed by thunder.
- b. Cyclone occurs in desert area.
- c. Wind mill is used to measure speed of wind.
- d. Boiled water should be used in flood affected area.
- e. Skyscrapers do not need lightening rod.

7. What is flood? Name two flood prone areas of India.

8. List some safety measures that should be taken in cyclone hit areas.

9. Mention some activities that should be followed during flood.

10. Why natural disaster can not be predicted? Name some disasters that harm life and property.

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### Answer key

1. a
  2. c
  3. c
  4. d
  5. (a) – (iii), (b)- (v), (c) – (iv), (d) – (ii), (e) – (i).
  6. (a) T (b) F(c) F (d) T (e) F.
  7. Floods are temporary submergence of large areas due to rivers flooding their banks because of heavy rains, high winds, cyclones or dam bursts.  
  
Flood prone areas are the Ganga and Meghna basin in the indo Gangetic -Brahmputra plains in north and north east.
  8. Safety measures in cyclone hit areas:
    - a. A hazard map should be drawn to mark the most vulnerable areas that may get struck by cyclone.
    - b. Minimum use of marked area to minimize the loss.
    - c. Multipurpose cyclone shelters of suitable design should be constructed.
  9. During flood following activities should be used:
    - a. To evacuate people from the flood affected area.
    - b. To control spread of water borne disease.
    - c. Water should be boiled before drinking.
  10. Natural disaster can not be predicted as they occur suddenly in very short interval of time. On the basis of direction of wind, development of low pressure is cyclone and flood can be warned in advance. Earthquake, cyclone, floods are common natural disasters.
-

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CBSE Worksheet-27

Class – VII Science (Wind, Storm and Cyclones)

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1. Which of the following place is unlikely to be affected by cyclone?
  - a. Puri
  - b. Chennai
  - c. Amritsar
  - d. Mangaluru
2. In Japan cyclone is known as
  - a. Typhoon
  - b. Hurricane
  - c. Storm
  - d. Thunderstorm
3. Cyclone warning is issued
  - a. 12 hrs advance
  - b. 24 hrs advance
  - c. 36 hrs advance
  - d. 48 hrs advance
4. Dark funnel shaped cloud reaches to earth from sky are called
  - a. Lightening
  - b. Tornado
  - c. Typhoon
  - d. Cloud burst

5. Match the following

Column A

- a. Cyclone watch
- b. Cyclone warning
- c. Warm air
- d. Cold air
- e. Wind

Column B

- i. Moving air
- ii. Lighter
- iii. Heavier
- iv. 24 hrs advance
- v. 48 hrs advance.

---

6. Fill in the blanks with suitable words.

a. Wind is ----- air.

b. Winds are generated due to ----- heating of earth surface.

c. Wind of 90 km/hr is term as -----.

d. Wind carrying ----- cause rain.

e. High speed wind and ----- cause cyclone.

7. Why holes are made in hanging hoarding and banner?

8. What causes the wind blow? Explain.

9. What is difference between lightening and thunder?

10. Write the steps that cause storm or cyclone?

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### Answer key

1. c
2. a
3. b
4. c
5. (a) – (v), (b) – (iv), (c) – (ii), (d) – (iii), (e) – (i).
6. (a) Moving (b) unequal(c) storm (d) water vapour (e) wind pressure.
7. Hanging hoarding and banners have holes to reduce the air pressure due to wind.  
Larger surface area have more pressure, the holes allows the air to pass through that reduce the pressure.
8. Uneven heating of earth surface at two places develops high and low pressure that cause to move air from high pressure to low pressure called wind.
9. When negatively charged clouds come near earth surface, an opposite charge is induced on the object directly below it to move electron from cloud to earth called lightening. The heat cause sudden increase in energy to cause thunder.
10. Steps that causes storm:
  - a. Uneven heating different place on earth.
  - b. Development of high and low pressure.
  - c. Movement of air from high to low pressure.
  - d. Fast wind speed develop storm.

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**CBSE Worksheet-28**  
**Class - VII Science (Soil)**

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1. The water holding capacity is the highest in
  - a. Clayey soil
  - b. Sandy soil
  - c. Loamy soil
  - d. Mixture of sand and loam.
2. In addition to the rock particles, the soil contains
  - a. Air and water
  - b. Wood
  - c. Water and plant
  - d. Minerals, organic matter, air and water.
3. Which layer is formed of decayed organic matter?
  - a. Air
  - b. Humus
  - c. Minerals
  - d. Clay
4. Soil erosion is a process of
  - a. Soil pollution
  - b. Soil formation
  - c. Weathering
  - d. Removal of top soil

5. Match the following

Column A

- a. Red latosol
- b. Khadar
- c. Black soil
- d. Cultivation of coffee
- e. Deforestation

Column B

- i. Floods
- ii. Basaltic rock
- iii. Red soil
- iv. Litorite soil
- v. Alluvial soil

---

6. Fill in the blanks.

- a. Alluvial soil is also called -----.
- b. A dead and decaying material produced by plants in soil is called -----.
- c. ----- is the process in which soil is washed out by rain water.
- d. ----- soil has the maximum water retention capacity.
- e. ----- is another name of black soil.

7. What is soil? How is it formed?

8. What is soil profile?

9. Write the three functions of soil?

10. Following are organic and inorganic constituent of soil. Classify them.

Dead and decaying plant matter, nitrate, phosphates, human excreta, carbonates, iron, sodium, dead microorganism.

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### Answer key

1. a
2. d
3. b
4. d
5. (a) – (iii), (b) – (v), (c) – (ii), (d) – (iv), (e) – (i).
6. (a) Khadar (b) humus (c) soil erosion (d) clayey (e) Regar.
7. Soil is the uppermost fertile layer crust of the earth. It is formed by the action of rain, wind, temperature and microbes, plant and animals.
8. Different layer of soil having characteristic features are called soil profile. Each profile is divided into a series of layers called horizons.
9. Functions of soil:
  - a. Soil anchors the plants and firmly fixes them.
  - b. It serves as reservoir of food materials and water.
  - c. Soil helps plants to get oxygen from the soil through roots.
10. Organic matters: Dead and decaying plant matter, human excreta, dead microorganisms.  
Inorganic matters: Nitrate, phosphate, carbonate, iron, sodium.

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**CBSE Worksheet-29**  
**Class - VII Science (Soil)**

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1. Uppermost fertile layer of earth crust is called
  - a. Minerals
  - b. Rocks
  - c. Soil
  - d. Humus.
2. Breaking down of big pieces of rock into smaller pieces is called
  - a. Weathering
  - b. Soiling
  - c. Mounding
  - d. Curving
3. Which soil is made from basaltic rock?
  - a. Red soil
  - b. Black soil
  - c. Alluvial soil
  - d. Desert soil
4. Soil best suited for cultivation of wheat, rice and sugarcane is
  - a. Laterite soil
  - b. Mountain soil
  - c. Alluvial soil
  - d. Red soil

5. Match the following

Column A

- a. Red soil
- b. Black soil
- c. Alluvial soil
- d. Desert soil
- e. Laterite soil

Column B

- i. Tamil Nadu, Andhra Pradesh, Assam
- ii. Rajasthan, Gujrat
- iii. Kerala, Tamil Nadu
- iv. Maharashtra, Madhya Pradesh
- v. Uttar Pradesh, Bihar, Haryana.

---

6. Write T for true and F for false statement.

- a. Soil is important natural resources.
- b. Process of removal of top layer of soil is called weathering.
- c. Earthworms are called farmer's friend.
- d. Red soil is also known as red latosol.
- e. Loamy soil has excellent water holding capacity.

7. Why different crops are grown in different areas?

8. How is clayey soil useful for crops?

9. What is soil erosion? How it can be prevented?

10. Provide single suitable word for the following:

- a. Removal of top fertile soil by the action of air, wind and water.
- b. Breaking down of rocks by the action of wind, wind water and climate.
- c. The dead decaying matter found in the soil.
- d. The soil containing greater proportion of big particles.
- e. The best soil which is good for growing plants.

---

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### Answer key

1. c
2. a
3. b
4. c
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (ii), (e) – (v).
6. (a) T (b) F(c) T (d) T (e) F.
7. Nutritional requirement of different plant are different and different kinds of soil have composition different form each other. The climatic conditions are also responsible for deciding crops.
8. Clayey soil has excellent water retention capacity. It is good for growth of plants because of rich minerals present in it.
9. Removal of top soil due to the action of wind and water causes soil erosion. It can be prevented by planting more trees and preventing from over-grazing.
10. (a) Soil erosion (b) Weathering (c) Humus (d) Desert soil (e) Loamy soil.

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**CBSE Worksheet-30**  
**Class - VII Science (Soil)**

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1. In which horizon of soil weathering is taking place?
  - a. O-horizon.
  - b. A-horizon
  - c. B-horizon
  - d. C-horizon
  
2. Which one is not a natural force that causes weathering of rock?
  - a. Wind
  - b. Water
  - c. Glacier
  - d. Earthquake.
  
3. Clayey particles are of size
  - a. Less than 0.2 mm
  - b. More than 0.2 mm
  - c. Less than 0.4 mm
  - d. More than 0.4 mm
  
4. 'Khadar' is another name of
  - a. Desert soil
  - b. Alluvial soil
  - c. Black soil
  - d. Red soil

5. Match the following

Column A

- a. Upper layer of soil
- b. Middle layer of soil
- c. Sandy soil
- d. A home of living organism
- e. Clayey soil

Column B

- i. Large particles
- ii. All kind of soil
- iii. Small particles
- iv. Lesser amount of humus
- v. Dark colour

---

6. Fill in the blanks

- a. Soil is the mixture of rock particles and -----.
- b. ----- soil is not suitable for cultivation as it does not retain water.
- c. Mountain soil is found in ----- and north-east of India.
- d. Planting of more trees is called -----.
- e. Air is present in soil between ----- particles.

7. What is water retention capacity? Why is it important?

8. What is deforestation? What are its causes?

9. Why is soil an important natural resource?

10. Rearrange the jumble words to make suitable words related to soil.

a. MUSHU

b. RINGTHEEAW

c. FOLIRSESP

d. ORHSONI

e. TERUXET

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**Answer key**

1. d
2. d
3. a
4. b
5. (a) – (v), (b) – (i), (c) – (iv), (d) – (ii), (e) – (iii).
6. (a) Humus (b) Sandy (c) Himalayan region (d) Aforestation (e) Soil.
7. The amount of water retained by soil is called water holding or retention capacity. It is least for sandy soil and very high for Clayey soil.
8. Deforestation is the removal or felling of trees for human habitation of industrialization. Deforestation cause soil erosion faster as root holds the soil firmly.
9. Soil is important natural resource as
  - a. Soil gives us food, cloth and shelter.
  - b. Minerals are obtained from soil.
  - c. Ground water is obtained from soil.
10. (a) HUMUS  
(b) WEATHERING  
(c) PROFILES  
(d) HORIZONS  
(e) TEXTURE

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**CBSE Worksheet-31**

**Class – VII Science (Respiration in Organisms)**

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1. In insects, air enters the body through
  - a. Lungs
  - b. Gills
  - c. Skin
  - d. Spiracles
2. During exhalation, the ribs move
  - a. Upwards
  - b. Downwards
  - c. Outwards
  - d. To normal position
3. Plants breathe through their stomata located in their
  - a. Leaves
  - b. Stem
  - c. Roots
  - d. Flowers
4. Gills are respiratory organs in
  - a. Fish
  - b. Cockroach
  - c. Amoeba
  - d. Earthworm

5. Match the following

Column A

- a. Yeast
- b. Stomata
- c. Larynx
- d. Diaphragm
- e. Lungs**

Column B

- i. Man
- ii. Chest cavity
- iii. Voice box
- iv. Alcohol
- v. Plants

---

6. Fill in the blanks.

- a. The leaves of plants have small pore called -----.
- b. The larynx is also called -----,
- c. ----- respiration takes place in presence of oxygen.
- d. The oxygen carrying components in blood is -----.
- e. The small thin walled air sacs inside the lungs are called -----.

7. Define respiration?

8. What is residual volume of air? What is its importance?

9. What are stomata? Write its function?

10. Name the respiratory organs of following organisms.

a. Amoeba

b. Earthworm

c. Fish

d. Frog

e. Insects

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### Answer key

1. d
2. b
3. a
4. a
5. (a) – (iv), (b) – (v), (c) – (iii), (d) – (ii), (e) – (i).
6. (a) Stomata (b) voice box (c) Aerobic (d) hemoglobin (e) alveoli.
7. The process by which living organism intake oxygen for oxidation of food to obtain energy along with carbon dioxide and water is called respiration.
8. The amount of air that always remains in lungs during inhalation and inhalation is called residual volume. It is important for exchange of gases between blood and alveoli of lung.
9. The tiny pores present on leaf surface are called stomata. Through stomata exchange of gases and transpiration takes place in plants.
10. Respiratory organs are:
  - a. Cell membrane
  - b. Moist skin
  - c. Gills
  - d. Lungs and skin
  - e. Spiracles.

---

CBSE Worksheet-32

Class – VII Science (Respiration in Organisms)

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1. Breathing is a
  - a. Chemical process
  - b. Physical process
  - c. Biological process
  - d. Biochemical process
2. In anaerobic respiration which chemical substance is produced?
  - a. Lactic acid
  - b. Formic acid
  - c. Alcohol
  - d. Citric acid
3. Inhalation is the
  - a. Intake of oxygen
  - b. Release of oxygen
  - c. Intake of carbon dioxide
  - d. Release of carbon dioxide
4. More energy is released in
  - a. Anaerobic respiration
  - b. Aerobic respiration
  - c. Fermentation
  - d. Breathing

5. Match the following

Column A

- a. Aerobic respiration
- b. Anaerobic respiration
- c. Fermentation
- d. External respiration
- e. Internal respiration

Column B

- i. Oxidation of food in the body
- ii. Breathing
- iii. Absence of oxygen
- iv. Alcohol formation
- v. Energy and carbon dioxide gas

---

6. Write T for true and F for false statements.

- a. Tiny air sacs of lungs are called alveoli.
- b. Haemoglobin is present in white blood cell of mammals.
- c. Anaerobic respiration produces more energy than aerobic respiration.
- d. Gill is the respiratory organ in fish.
- e. Stomata are present in leaves.

7. What is tidal volume? What effect it have during exercise?

8. What is epiglottis? What is the function of epiglottis?

9. Why do our body cells require oxygen?

10. Find the words in the square given below related to respiration using clues given below.

D	O	E	S	P	R	A	G	H	T	A
I	S	P	I	R	A	C	L	E	S	M
A	I	C	O	C	K	R	O	A	C	H
P	N	K	L	M	N	I	O	P	A	C
H	S	T	R	A	C	H	E	A	T	H
R	E	Q	P	R	L	U	N	G	P	K
A	C	T	T	J	K	P	N	R	D	M
G	T	A	G	I	L	L	S	S	D	N
M	S	T	U	D	E	N	T	P	C	D
A	K	R	S	T	O	M	A	T	A	P

- a. Tiny pores on the surface of leaves.
  - b. Respiratory organs of man.
  - c. Respiratory organs of fish.
  - d. Small opening present on the side of body of insects.
  - e. Muscular floor of chest cavity.
-

**Answer key**

1. b
2. c
3. a
4. b
5. (a) – (v), (b) – (iii), (c) – (iv), (d) – (ii), (e) – (i).
6. (a) T (b) F (c) F (d) T (e) T.
7. The volume of air that moves in or goes out in single process of breathing is around 500 mL. This volume is called the tidal volume. During exercise, tidal volume increases and lowers when resting.
8. The opening of the pharynx to the larynx is guarded by the epiglottis. This opening closes when we swallow food. It is kept open while breathing.
9. Our body cells require oxygen for oxidation of food to release energy. Oxygen reaches to cells through Haemoglobin present in RBC.
- 10.

e. D	O	E	S	P	R	A	G	H	T	A
I	d. S	P	I	R	A	C	L	E	S	M
A	I	C	O	C	K	R	O	A	C	H
P	N	K	L	M	N	I	O	P	A	C
H	S	T	R	A	C	H	E	A	T	H
R	E	Q	P	R	b. L	U	N	G	P	K
A	C	T	T	J	K	P	N	R	D	M
G	T	A	c. G	I	L	L	S	S	D	N
M	S	T	U	D	E	N	T	P	C	D
A	K	R	a. S	T	O	M	A	T	A	P

---

CBSE Worksheet-33

Class – VII Science (Respiration in Organisms)

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1. Haemoglobin is present in
  - a. Red blood cells
  - b. White blood cells
  - c. Platelets
  - d. Plasma
2. The opening of the pharynx to larynx is guarded by
  - a. Alveoli
  - b. Epiglottis
  - c. Trachea
  - d. Adam's apple
3. In plants, exchange of gases takes place through
  - a. Guard cells
  - b. Accessories cells
  - c. Stomata
  - d. Epidermis
4. Oxidation of food inside cell takes place in
  - a. Mitochondria
  - b. Golgi bodies
  - c. Chromosome
  - d. Ribosome

5. Match the following

Column A

- a. Lungs
- b. Spiracles
- c. gills
- d. Stomata
- e. Moist skin

Column B

- i. Earthworm
- ii. Plants
- iii. Dog
- iv. Fish
- v. Cockroach

---

6. Fill in the blanks with suitable words.

- a. Larynx is also known as -----.
- b. Frog have lungs and ----- as respiratory organ.
- c. ----- is produced in anaerobic respiration.
- d. Muscle cell produce ----- during sudden activity.
- e. Closing and opening of stomata is controlled by -----.

7. What is stomatal apparatus?

8. What is a diaphragm? What is its function?

9. Write difference between breathing and respiration?

10. Name the following:

- a. An organism that respire by tracheal system.
- b. The air tube of insects.
- c. Small pores on leaves surface for exchange of gases.
- d. Red coloured pigments present in RBC.
- e. Small balloon like structure that makes the lungs.

---

---

### Answer Key

1. a
2. b
3. c
4. a
5. (a) – (iii), (b) – (v), (c) – (iv), (d) – (ii), (e) – (i).
6. (a) Vocal chord (b) skin (c) alcohol (d) lactic acid (e) Guard cell.
7. The stomata along with it are near by guard cell and subsidiary cells form the stomatal apparatus. Stomata help in exchange of gases and transpiration.
8. The muscular structure present between thoracic cavity and abdominal cavity is called diaphragm. It helps in inhalation and exhalation during breathing.
9. Breathing is the mechanism of intake of oxygen and release of carbon dioxide rich air through nostril. Respiration is the oxidation of food to obtain energy. It is a biochemical process.
10. (a) Cockroach (b) Trachea (c) Stomata (d) Haemoglobin (e) Alveoli.

---

CBSE Worksheet-34

Class – VII Science (Respiration in Organisms)

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1. Inspiration is the process of
  - a. Taking in Oxygen rich air
  - b. Releasing of CO<sub>2</sub> rich air
  - c. Taking in CO<sub>2</sub> rich air
  - d. Release of Oxygen rich air
2. Haemoglobin carries oxygen molecules as
  - a. Carboxyhaemoglobin
  - b. Carboxy-pigement.
  - c. Oxyhaemoglobin
  - d. Chloroplast
3. Which of the following organism breathe through skin?
  - a. Cockroach
  - b. Fish
  - c. Earthworm
  - d. Human
4. Muscular floor of the chest cavity is called
  - a. Diaphragm
  - b. Rib cage
  - c. Bronchus
  - d. Trachea

5. Match the following

Column A

- a. Root
- b. Leaves
- c. Frog
- d. Earthworm
- e. Fish

Column B

- i. Gills
- ii. Moist skin
- iii. Root hair
- iv. Stomata
- v. Lung and skin

---

6. Write T for true and F for false statements.

- a. Amoeba respire through gills.
- b. Birds have lung for respiration.
- c. Lactic acid is produced in muscles due to sudden activity.
- d. Plants intake carbon dioxide gas during respiration.
- e. Tiny pores on leaf surface are called guard cells.

7. Why respiration is essential for all living organism?

8. Write difference between aerobic and anaerobic respiration?

9. Why mountaineers carries oxygen cylinder?

10. Select the words related to human respiratory system form square box.

T	A	G	H	B	K	O	P	K
R	I	B	S	D	B	R	T	F
A	D	A	L	V	E	O	L	I
C	B	N	A	N	R	T	R	H
H	O	G	R	D	E	P	S	D
E	I	C	Y	D	E	I	G	R
A	L	U	N	G	D	O	H	A
O	U	U	X		B	N	A	Q

---

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### Answer key

1. a
2. c
3. c
4. a
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (ii), (e) – (i).
6. (a) F (b) T (c) T (d) F (e) F.
7. Respiration is essential for living organism because during respiration energy is released, which is essential for performing various activities inside the body.
8. The respiration which takes place in presence of oxygen to release large amount of energy is called aerobic respiration. On the other hand, respiration in absence of oxygen is called anaerobic respiration with release of alcohols.
9. The concentration of oxygen decreases with increase in altitude. Oxygen is necessary for respiration. Mountaineers carries oxygen cylinder to full fill the oxygen requirement.

10.

T	A	G	H	B	K	O	P	K
R	I	B	S	D	B	R	T	F
A	D	A	L	V	E	O	L	I
C	B	N	A	N	R	T	R	H
H	O	G	R	D	E	P	S	D
E	I	C	Y	D	E	I	G	R
A	L	U	N	G	D	O	H	A
O	U	U	X		B	N	A	Q

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**CBSE Worksheet-35**

**Class – VII Science (Transportation in Animals and Plants)**

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1. The vessels that transport water and minerals are called
  - a. Xylem
  - b. Phloem
  - c. Stomata
  - d. Vacuoles
2. The excess of water absorbed plants by their roots gets evaporated through the process of
  - a. Absorption
  - b. Excretion
  - c. Transpiration
  - d. Elimination
3. Which one of the following transport oxygen to different parts of the body?
  - a. RBC
  - b. WBC
  - c. Platelets
  - d. All of them.
4. The urine from kidneys passes to urinary bladder through
  - a. Ureter
  - b. Urinary tubules
  - c. Urethra
  - d. Fallopian tube

5. Match the following

Column A

- a. Transport oxygenated blood
- b. Transport deoxygenated blood
- c. Heart
- d. Kidney
- e. Xylem

Column B

- i. Pumping of blood
- ii. Nitrogenous waste from blood
- iii. Water and mineral in plants
- iv. Arteries
- v. Veins

---

6. Fill in the blanks.

- a. The liquid part of blood is called -----.
- b. Kidney is made of tiny structures called -----.
- c. ----- carry impure blood from organs to heart.
- d. Main excretory product of human being is -----.
- e. Largest artery is called -----.

7. How many chambered is the human heart? Name them.

8. What is transpiration? Write its function?

9. Write functions of blood?

10. Rearrange the jumbled words to get word related to human circulatory system.

a. EAHTR

b. NVENIS

c. LPSAMA

d. MOHEABINGLO

e. TEARRY

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**Answer key**

1. a
2. c
3. a
4. a
5. (a) – (iv), (b) – (v), (c) – (i), (d) – (ii), (e) – (iii).
6. (a) Plasma (b) nephron (c) veins (d) urea(e) aorta.
7. Human heart is divided into four chambers. The upper two chambers are called auricles and lower two chambers are called ventricle.
8. Loss of water in form of water vapour from the aerial parts of plant is called transpiration. It helps in upward movements of water and minerals from root to leaves.
9. Functions of blood:
  - a. Transport of Oxygen and carbon dioxide.
  - b. Protection against infection.
  - c. Transport of nitrogenous wastes.
  - d. Transport of digested food.
10. (a) HEART  
(b) VEINS  
(c) PLASMA  
(d) HAEMOGLOBIN  
(e) ARTERY.

---

CBSE Worksheet-36

Class – VII Science (Transportation in Animals and Plants)

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1. Which chamber of heart receives oxygenated blood from heart?
  - a. Left atrium
  - b. Left ventricle
  - c. Right atrium
  - d. Right ventricle
2. In plants xylem and phloem comprise the
  - a. Food storing tissue
  - b. Vascular tissue
  - c. Protective tissue
  - d. Reproductive tissue
3. Excretory organ cockroach is
  - a. Kidney
  - b. Lung
  - c. Stomach
  - d. Malpighian tubules
4. Erythrocytes is the another name of
  - a. WBC
  - b. RBC
  - c. Platelets
  - d. Plasma

5. Match the following

Column A

- a. Thrombocytes
- b. Leucocytes
- c. Erythrocytes
- d. Largest artery
- e. Largest vein

Column B

- i. Vena cave
- ii. RBC's
- iii. WBC's
- iv. Aorta
- v. Platelets

---

6. Write T for true and F for false statements.

- a. Throbbing of heart is called Pulse.
- b. Human heart consists of two chambers.
- c. Removal of waste from the body is called excretion.
- d. Dialysis is the process of removing nitrogenous waste from blood using machine.
- e. Transport of water and minerals takes place via phloem.

7. What is double circulation?

8. What is the function of kidney? Name its functional unit.

9. What is blood? Write its composition?

10. Provide the single word for the following.

- a. The system that help to supply food, water, oxygen etc. to various parts of the body.
- b. The evaporation of water in form of water vapour from the aerial parts of the body.
- c. The vessels which carry blood towards the heart.
- d. The network of very small vessels formed by two different kinds of blood vessels.
- e. The vessels which carry blood away from heart.

---

---

### Answer key

1. a
2. b
3. d
4. b
5. (a) – (v), (b) – (iii), (c) – (ii), (d) – (iv), (e) – (i).
6. (a) T (b) F (c) T (d) T (e) F.
7. The process in which same blood flows twice through the heart once in oxygenated form and other in deoxygenated form is called double circulation.
8. Function of kidney:
  - a. Removal of nitrogenous wastes from the blood.
  - b. Osmoregulation, maintaining correct amount of water in the body. Functional unit of kidney is nephron.
9. Blood is fluid connective tissue. It helps in transportation of oxygen, carbon dioxide, hormones and other substance from one part of the body to others. It consists of plasma, RBC, WBC and platelets.
10. (a) Circulatory system.
  - (b) Transpiration
  - (c) Veins
  - (d) Capillaries
  - (e) Arteries.

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CBSE Worksheet-37

Class – VII Science (Transportation in Animals and Plants)

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1. Functional unit of kidney is
  - a. Neuron
  - b. Nephron
  - c. Bowman's capsule
  - d. Glomerulus
2. Blood cells that protect us from infection are called
  - a. Red blood cells
  - b. Erythrocytes
  - c. White blood cells
  - d. Thrombocytes
3. Function of heart is
  - a. Pumping of blood
  - b. Purification of blood
  - c. Removal of nitrogenous wastes
  - d. All of these.
4. Stethoscope measures the
  - a. Blood pressure
  - b. Heart beat
  - c. Pulse
  - d. Blood count

5. Match the following

Column A

- a. Kidney
- b. Xylem
- c. Phloem
- d. Stomata
- e. Lungs

Column B

- i. Purification of blood
- ii. Removal of nitrogenous wastes
- iii. Transport of water and minerals
- iv. Transport of food in plants.
- v. Transpiration

---

6. Fill in the blanks.

- a. Sweat contain water and -----.
- b. Haemoglobin is present in -----.
- c. Thrombocytes is the another name of -----.
- d. Birds and insects excrete -----.
- e. ----- transport water and minerals.

7. What are tissues? Name any two complex tissues present in plants.

8. Why it is necessary to excrete? Name the main excretory product of human being.

9. What is the function of red blood cells? What makes blood red?

10. Name the following

- a. Artery that carries deoxygenated blood.
- b. A vein that carries oxygenated blood.
- c. Chamber of heart that receives oxygenated blood.
- d. Plant tissue that help in transportation.
- e. Blood cells that help in blood clotting.

---

---

### Answer key

1. b
2. c
3. a
4. b
5. (a) – (ii), (b) – (iii), (c) – (iv), (d) – (v), (e) – (i).
6. (a) Salts (b) red blood cells (c) platelets (d) uric acid (e) xylem.
7. Group of cells having common origin and performing similar function are called tissues. The two complex tissues present in plants are xylem and phloem.
8. During metabolic processes harmful nitrogenous wastes are produced that are toxic to living organisms. These wastes are removed by the process of excretion.
9. Red blood cells are responsible for transport of oxygen. The Haemoglobin present in red blood cells carries oxygen. The red colour of blood is due to presence of Haemoglobin in RBC.
10. (a) pulmonary vein  
(b) Pulmonary artery  
(c) Left atrium  
(d) Vascular tissues  
(e) Platelets.

---

**CBSE Worksheet-38**

**Class – VII Science (Transportation in Animals and Plants)**

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1. In plants, food is transported through
  - a. Xylem
  - b. Phloem
  - c. Stomata
  - d. Guard cells
2. Human heart consists of
  - a. Striated muscle
  - b. Smooth muscle
  - c. Voluntary muscle
  - d. Cardiac muscle
3. The pulse rate of a resting person is usually
  - a. 30 to 40 beats per minute
  - b. 50 to 60 beats per minute
  - c. 72 to 80 beats per minute
  - d. 81 to 90 beats per minute
4. Which blood group is called as universal donor?
  - a. AB
  - b. A
  - c. B
  - d. O

5. Match the following

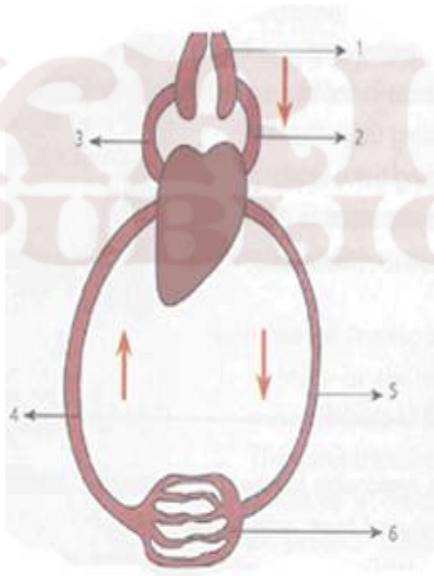
Column A

- a. Amoeba
- b. Hydra
- c. Insects
- d. Birds
- e. Human

Column B

- i. Urea
- ii. Uric acid
- iii. Simple diffusion
- iv. Tentacles
- v. Nephridium

- 
6. Write T for true and F for false statements.
- Human kidney consists of numerous neurons.
  - CO<sub>2</sub> is removed through lungs during breathing.
  - We sweat to maintain body temperature.
  - Phloem transport water and minerals.
  - Transpiration occurs through the stomata.
7. What is diffusion? Name a organism that excretes by diffusion.
8. Distinguish between arteries and vein?
9. Name the organs involved in urinary system in human beings.
10. Name the parts of circulatory system marked from 1 to 6 in figure below.



---

---

### Answer key

1. b
  2. d
  3. c
  4. a
  5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (ii), (e) – (i).
  6. (a) F (b) T (c) T (d) F (e) T.
  7. Diffusion is the movement of particles from a high concentration to a low concentration until the particles are spread out evenly. In amoeba excretion takes place by diffusion.
  8. Arteries transport oxygenated blood from hearts to all other parts of the body. Veins transport deoxygenated blood from different part of the body to hearts.
  9. The urinary system consists of the following:
    - a. A pair of kidneys
    - b. A pair of Ureter
    - c. Urinary bladder
    - d. Urethra
  10. The marked parts are:
    - (1). Lung
    - (2). Pulmonary vein
    - (3). Pulmonary artery
    - (4). Vein
    - (5). Artery
    - (6). Body parts
-

---

CBSE Worksheet-39

Class – VII Science (Reproduction in Plants)

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1. Reproductive parts of a plant is the
  - a. Root
  - b. Flower
  - c. Stem
  - d. Leaf
2. The process of fusion of the female and male gamete is called
  - a. Fertilization
  - b. Seed formation
  - c. Reproduction
  - d. Layering
3. In flowering plants, male gamete is formed inside
  - a. Anther
  - b. Ovary
  - c. Ovule
  - d. Pistil
4. Mature ovary forms the
  - a. Seed
  - b. Pistil
  - c. Fruit
  - d. Stamen

5. Match the following

Column A

- a. Stems
- b. Spores
- c. Bud
- d. Wings
- e. Eyes

Column B

- i. Maple
- ii. yeast
- iii. potato
- iv. Rose
- v. Bread mold

---

6. Fill in the blanks with suitable words.

- a. Binary fission is seen in -----.
- b. The male reproductive part of flower is -----.
- c. Pollen grain falls on ----- of pistil.
- d. ----- is ripened ovary.
- e. Potato is a modified -----.

7. What is pollination? Name two types of pollination.

8. What is vegetative reproduction? Write its advantage.

9. Write difference between asexual and sexual reproduction?

10. Name the type asexual reproduction in following organisms.

a. Yeast

b. Bread mold

c. Rose

d. Banana

e. Bacteria

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### Answer key

1. b
2. a
3. a
4. c
5. (a) – (iv), (b) – (v), (c)- (ii), (d) – (i), (e) – (iii).
6. (a) Bacteria (b) Stamen(c) stigma (d) fruit (e) stem.
7. The process of transferring pollen grains from anther to stigma is called pollination.

Two types of pollination are

- a. Self pollination
  - b. Cross pollination.
8. It is an asexual method of reproduction where new plants are produced from body parts of the parent plant such as root, stem or leaf.
9. The mode of reproduction in which single parent is involved and no gamete formation takes place is called asexual reproduction. Reproduction in which fusion of male and female gametes takes place is called sexual reproduction.
10. Types of reproduction are
- a. Budding
  - b. Spore formation
  - c. Stem cutting
  - d. Underground stem
  - e. Binary fission.

---

**CBSE Worksheet-40**  
**Class – VII Science (Reproduction in Plants)**

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1. Reproduction in Bryophyllum takes place by its
  - a. Root
  - b. Stem
  - c. Leaf
  - d. Flower
2. Female reproductive parts of flower is
  - a. Sepals
  - b. Petals
  - c. Stamen
  - d. Carpel
3. Which of the following organism reproduce by budding
  - a. Bacteria
  - b. Yeast
  - c. Bread mold
  - d. Opuntia
4. Transfer of pollen grain from anther to stigma is called
  - a. Fertilization
  - b. Hybridization
  - c. Pollination
  - d. Syngamy
5. Match the following

Column A	Column B
a. Cutting	i. Hydra
b. Grafting	ii. Orchids
c. Layering	iii. Sugar cane
d. Tissue culture	iv. Grapes
e. Budding	v. Jasmine

---

6. Write T for true and F for false statements.

- a. Bacteria reproduce asexually by binary fission.
- b. Potato used a vegetable is modified root.
- c. Female gametes in plants are produced inside ovary.
- d. Shoot system emerges from radicle.
- e. Bryophyllum reproduce by leaf.

7. Define reproduction? Name the type of reproduction in which two parents are involved.

8. What is fertilization? Where fertilization takes place in plants?

9. Write difference between self and cross pollination?

10. Rearrange the letters to make a word related to reproduction:

- a. LOFEWR
- b. AMGETE
- c. LLIPONTION
- d. DBUDNIG
- e. YAVRO

---

---

### Answer key

1. c
2. d
3. b
4. c
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (ii), (e) – (i).
6. (a) T (b) F (c) T (d) F (e) T.
7. The ability of the individual to produce organisms of its own kind for continuation of species is called reproduction. In sexual reproduction two parents are involved.
8. The process in which male and female gametes fuse together to produce zygote is called fertilization. In flowering plants, fertilization takes place within ovary.
9. The pollination in which pollen grain from same flower is transferred to stigma of same flower is called self pollination. On the other hand, if pollen grain from one flower is transferred to another flower, it is called cross pollination.
10. (a) FLOWER  
(b) GAMETE  
(c) POLLINATION  
(d) BUDDING  
(e) OVARY.

---

CBSE Worksheet-41

Class – VII Science (Reproduction in Plants)

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1. Binary fission do not takes place in
  - a. Amoeba
  - b. Paramecium
  - c. Yeast
  - d. Bacteria
2. Fertilization is
  - a. Fusion of male gametes
  - b. Fusion of female gametes
  - c. Fusion of male and female gametes
  - d. All of above.

3. Which one is a dicotyledonous plant?

- a. Banana
- b. Sugar cane
- c. Gram
- d. Wheat

4. The mode of vegetative reproduction in which scion and stock are tied is called
  - a. Grafting
  - b. Cutting
  - c. Layering
  - d. Tissue culture

5. Match the following

Column A

- a. Plumule
- b. Radicle
- c. Pericarp
- d. Sexual reproduction
- e. Asexual reproduction

Column B

- i. Root system
- ii. Shoot system
- iii. Single parent
- iv. Wall of ovary
- v. Two parents

---

6. Fill in the blanks.

- a. ----- develops into a new plants.
- b. ----- is the outermost part of the fruit.
- c. Yeasts reproduce by -----.
- d. Fusion of two gametes is called -----.
- e. Fruit is generally ripened -----.

7. What is dispersal of seed? Why it is necessary?

8. Write the functions of fruit?

9. Write difference between cutting and grafting?

10. Classify the following as monocotyledons and dicotyledonous plants.

Gram, pea, rice, wheat, banana, guava, rose, maize.

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**Answer key**

1. c
2. c
3. c
4. a
5. (a) – (ii), (b) – (i), (c) – (iv), (d) – (v), (e) – (iii).
6. (a) Embryo (b) Epicarp (c) budding (d) fertilization (e) ovary.
7. The mechanism by which seeds are spread to larger area by some agents like air, wind, water etc. is called dispersal of seeds. It is necessary to reduce the overcrowding of seed for germination.
8. Functions of fruits:
  - a. It protects the seed
  - b. It helps in seed dispersal
  - c. It helps in storage of food.
9. In cutting, stem or roots are cut and used for vegetative propagation. In grafting, two plants stem and root are rejoined to act as single plant.

Monocotyledons

Rice

Wheat

Maize

Banana

Dicotyledons

Gram

Pea

Guava

Rose

---

**CBSE Worksheet-42**  
**Class - VII Science (Motion and Time)**

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1. Change in position with respect to the surroundings is called
  - a. Force
  - b. Motion
  - c. Momentum
  - d. Movement
2. The earliest clocks for measuring time during day were
  - a. Sand clocks
  - b. Pendulum clocks
  - c. Sundials
  - d. Stop watches
3. The speed of the vehicle is recorded by
  - a. Odometer
  - b. Speedometer
  - c. Voltmeter
  - d. Ammeter
4. S.I unit of speed is
  - a. m/s
  - b. km/h
  - c. m/h
  - d. km/s

5. Match the following

Column A

- a. Odometer
- b. Speedometer
- c. One kilometer
- d. One hour
- e. A century

Column B

- i. 100 years
- ii. 1000 m
- iii. Total distance covered
- iv. Speed of vehicle
- v. 3600 sec.

---

6. Fill in the blanks.

- a. Distance traveled by a body in unit time is called -----.
- b. 72 km/h is equal to ----- m/s.
- c. Distance covered = ----- x time.
- d. A mineral used in the crystal form in watch is -----.
- e. A body is said to be in ----- of it covers equal distance in equal interval of time.

7. Define motion? Write its S.I unit of speed?

8. What is odometer? What is its function?

9. Write difference between uniform and non- uniform motion?

10. Give one word for the following explanations:

- a. Meter fitted in vehicle to measure the speed.
- b. Total distance covered by a body in unit interval of time.
- c. Change in position of a body with time.
- d. Time interval of 1000 years.
- e. Watch used to measure exact time taken during the event.

---

---

### Answer key

1. b
2. c
3. b
4. a
5. (a) – (iii), (b) – (iv), (c) – (ii), (d) – (v), (e) – (i).
6. (a) Speed (b) 20 (c) Speed (d) Quartz (e) Uniform motion.
7. The change in position of a body with time is called motion. The S.I unit of speed is meter per second.
8. It is a device that records total distance covered by the vehicle. It is used to calculate the distance traveled in particular journey.
9. When a body covers equal distance in equal interval of time the motion is called uniform motion. When a body covers unequal distance in equal interval of time, the speed is called non- uniform motion.
10. One words are:
  - a. Speedometer
  - b. Odometer
  - c. Speed
  - d. Millennium
  - e. Stop watch.

---

**CBSE Worksheet-43**  
**Class – VII Science (Motion and Time)**

---

1. One hour is equal to
  - a. 600seconds
  - b. 1200seconds
  - c. 1800seconds
  - d. 3600 seconds
2. Which is the most accurate watch?
  - a. Stop watch
  - b. Atomic watch
  - c. Quartz clocks
  - d. Digital clock
3. S.I unit of time is
  - a. Second
  - b. Minute
  - c. Hour
  - d. Day
4. Speed time graph is straight line for
  - a. Non-uniform motion
  - b. Uniform motion
  - c. Accelerated motion
  - d. Constant motion.

5. Match the following

Column A

- a. 200 km in 4 hrs.
- b. 150 m in 5 s
- c. 10 m/s
- d. 72 km/hrs.
- e. 120 m in 1 minute

Column B

- i. 20 m/s
- ii. 36 km/hrs.
- iii. 2 m/s.
- iv. 50 km/hrs.
- v. 30 m/s

---

6. Write T for true and F for false statements.

- a. Speed is a scalar quantity.
- b. Light travel faster than sound.
- c. Speedometer is used to measure speed of vehicle at particular time.
- d. Car always travels with uniform motion.
- e. S.I unit of distance is kilometer.

7. Define speed? What is the speed of a car that covers 120 km in 2 hours?

8. What is uniform motion? Why speed of a vehicle is not always uniform on roads?

9. Write difference between motion and rest?

10. Arrange the following slowest to fastest speed.

- a. Speed of a car.
- b. Speed of aero plane
- c. Speed of bicycle
- d. Speed of walking
- e. Speed of auto-rickshaw

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**Answer key**

1. d
2. b
3. a
4. b
5. (a) – (iv), (b) – (v), (c) – (ii), (d) – (i), (e) – (iii).
6. (a) T (b) T (c) T (d) F (e) F.
7. Speed is the distance covered by a body in particular interval of time. Speed of the car is 60 km/hrs.
8. When a body travels equal distance in equal interval of time, speed of the body is said to be uniform. Speed of vehicle is not always uniform because traffic, red light and other factors influence the speed of vehicle.
9. When a body does not change its position with respect to surrounding, the body is said to be in rest. When the body change its position with time it is called in motion.
10.  $d < c < e < a < b$ .

---

**CBSE Worksheet-44**  
**Class – VII Science (Motion and Time)**

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1. Change in position of a body is called
  - a. Motion
  - b. Speed
  - c. Rest
  - d. Acceleration
2. A car is moving with 72 km/hrs. The speed of car in m/s is
  - a. 20 m/s
  - b. 25 m/s
  - c. 30 m/s
  - d. 40 m/s
3. Stop watch is used to measure
  - a. Correct time
  - b. Total distance traveled
  - c. Exact time during the event.
  - d. All of these
4. Pendulum clock is based on
  - a. Newton's observation
  - b. Galileo's observation
  - c. Archimedes observation
  - d. Chadwick observation

5. Match the following

Column A

- a. Frequency
- b. Vibration
- c. Time-period
- d. Oscillation
- e. Frequency

Column B

- i. Time taken to complete on vibration
- ii. No of vibration per second
- iii. To and fro movement
- iv. Periodic movement
- v. Movement along common axis.

---

6. Fill in the blanks

- a. One microsecond is ----- of a second.
- b. ----- of object helps us to decide which one is moving faster than the other.
- c. All clocks are based on ----- events.
- d. The slope of a distance- time graph represents -----.
- e. ----- is used to measure short interval of time.

7. A truck travels 540 km in 4.5 hrs. Find the speed of truck.

8. When is an object said to be in state of motion?

9. What is difference between speed and velocity?

10. Name the following

- a. A repetitive motion which takes place at equal intervals of time.
- b. Number of vibration per second.
- c. Time taken to complete one oscillation.
- d. S.I unit of time.
- e. Watch that give more accurate time than pendulum clock.

---

---

**Answer key**

1. a
2. a
3. c
4. b
5. (a) – (ii), (b) – (v), (c) – (i), (d) – (iii), (e) – (i).
6. (a) 1/1000 (b) comparison (c) vibration (d) speed (e) stop-watch.
7. Distance traveled = 540 km

Time taken = 4.5 hrs.

Speed = Distance/ time

$$= 540 \text{ km}/4.5 \text{ hrs.}$$

$$= 120 \text{ km}/\text{hrs.}$$

8. An object is said to be in state of rest if it do not changes its position with time and surrounding. An object lying on table is at rest.
9. Speed is the change in position of a body per unit time. On the other hand velocity is the speed with direction. Speed is scalar and velocity is vector quantity.
10. (a) Periodic motion  
(b) Frequency  
(c) Time-period  
(d) Second  
(e) Quartz clock.

---

CBSE Worksheet-45

Class – VII Science (Electric Current and its Effects)

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1. Electric current is the flow of
  - a. Proton
  - b. Electron
  - c. Neutron
  - d. Positron
2. Which of the following materials is a conductor?
  - a. Silver
  - b. Plastic
  - c. Cloth
  - d. Rubber
3. A device which prevents or allow the current to flow through it
  - a. Motor
  - b. Conductor
  - c. Switch
  - d. Terminal
4. When two or more cells are joined together it forms a
  - a. Dynamo
  - b. Transistor
  - c. Battery
  - d. Insulator

5. Match the following:

Column A

- a. Switch
- b. Electric cell
- c. Rubber
- d. Copper
- e. Electric heater

Column B

- i. Heating effect
- ii. Insulator
- iii. Produce electricity
- iv. Close and open the circuit.
- v. Conductor

---

6. Fill in the blanks.

- a. A group of two or more cell is called a -----.
- b. A device that breaks the circuit is called a-----.
- c. In electric circuit the electrons flow from ----- terminal to the ----- terminal.
- d. Metals are ----- conductor.
- e. A device which converts electric energy into light energy is -----.

7. Why do we use nichrome in an electric heater?

8. What is a fuse? Write its function?

9. Write difference between a cell and a battery?

10. Give one word for the following:

- a. Path of electric circuit
- b. A device that create potential difference.
- c. Coming together of live and neutral wire in a circuit.
- d. A safety device that protects appliances from overloading and short circuit.
- e. Magnet produced by electricity.

---

---

### Answer key

1. b
2. a
3. c
4. c
5. (a) – (iv), (b) – (iii), (c) – (ii), (d) – (v), (e) – (i).
6. (a) Battery (b) switch (c) negative, positive (d) good (e) bulb.
7. Nichrome is an alloy having high resistivity. The melting point of nichrome is also very high. So, nichrome is used as coil in electric heater.
8. Fuse is a safety device made up of alloy having low melting point. It is connected in series in the circuit. It protects the circuit and electrical appliances in case of excess of current in the circuit.
9. A cell is a device that creates potential difference in the circuit to flow the current in the circuit. Combination of two or more cell in series is called a battery.
10. (a) Electric circuit  
(b) Battery or cell  
(c) Short circuit  
(d) Fuse  
(e) Electromagnet.

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**CBSE Worksheet-46**

**Class – VII Science (Electric Current and its Effects)**

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1. Electromagnet is based on
  - a. Heating effect of electric current
  - b. Magnetic effect of electric current
  - c. Chemical effect of electric current
  - d. Electro-chemical effect of electric current
2. Filament of electric bulb is made up of
  - a. Nichrome
  - b. Silver
  - c. Copper
  - d. Tungsten
3. MCB in electric circuit stand for
  - a. Minimum current breaker
  - b. Maximum current breaker
  - c. Miniature circuit breaker
  - d. Molar current breaker
4. Electric current is measured by a device
  - a. Voltmeter
  - b. Galvanometer
  - c. Ammeter
  - d. Odometer

5. Match the following

Column A

- a. Current
- b. Potential difference
- c. Resistance
- d. Power
- e. Energy

Column B

- i. Watt
- ii. Joule
- iii. Ampere
- iv. Ohm
- v. Volt

- 
6. Write T for true and F for false statements.
- Electromagnet is used in electric fan.
  - When current flows through the conductor magnetic field is produced.
  - Galvanometer is used to measure voltage.
  - Chemical effect of electric current is used for electroplating.
  - Coil of heating devices are made up of good conductor.
7. What is electromagnetic effect of electric current?
8. What is electric current? How its flows?
9. Write difference between electromagnet and permanent magnet?
10. Rearrange the jumbled letters to form meaningful words related to Electricity.
- RECURNT
  - BYATTRY
  - UFSE
  - CTROLENETMAG
  - ICRITUC

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### Answer key

1. b
2. d
3. c
4. c
5. (a) – (iii), (b) – (v), (c) – (iv), (d) – (i), (e) – (ii).
6. (a) T (b) T (c) F (d) T (e) F.
7. When electric current flows through a conductor, magnetic field is produced around the conductor. This effect of current is called magnetic effect of electric current.
8. The flow of current through a conductor is called electric current. Electron flows through the conductor due to potential difference.
9. Electromagnet lose its magnetic property as soon as current is stopped flowing. Permanent magnet does not require current to show magnetic effect. Strength of electromagnet is more than permanent magnet.
10. Words related to electricity are:
  - a. CURRENT
  - b. BATTERY
  - c. FUSE
  - d. ELECTROMAGNET
  - e. CIRCUIT.

---

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**CBSE Worksheet-47**

**Class – VII Science (Electric Current and its Effects)**

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1. Sundials were based on
  - a. Change in length of shadow with sun position
  - b. Change in colour of shadow
  - c. Change in shape of shadow
  - d. Change in position of moon with sun.
2. Speed of car is 90 km/h. speed in m/s is
  - a. 15 km/h
  - b. 20 km/h
  - c. 25 km/h
  - d. 30 km/h

3. To and fro movement is called

- a. Movement
- b. Vibration
- c. Oscillation
- d. Speed

4. Speed time graph of a uniform motion is

- a. Curved line
- b. Straight line
- c. Parabolic
- d. Hyperbolic

5. Match the following

Column A

- a. Battery
- b. Cell
- c. Switch
- d. Galvanometer
- e. Wire

Column B

- i. Used to join circuit
- ii. Used to detect current
- iii. Combination of cells
- iv. Used to create potential difference
- v. Used to close the circuit.

---

6. Fill in the blanks.

- a. ----- is the best conductor of electricity.
- b. A ----- is used to protect appliances from damage due to excessive current.
- c. A short occurs when a ----- comes in direct contact with neutral wire.
- d. Live wire is covered with ----- coloured insulation.
- e. Connecting many appliances with single circuit may lead to -----.

7. What is short-circuiting? How it occurs?

8. What is electromagnetic induction? Write its application.

9. Write 3 applications of electromagnet.

10. Name the following

- a. Device used to measure the amount of current.
- b. A piece of thin wire of high resistance, used in electric bulb.
- c. A device which offers resistance to an electric current.
- d. A number of cells joined together.
- e. Safety device used to protect us from electric shocks.

---

---

### Answer key

1. a
2. c
3. v
4. b
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (ii), (e) – (i).
6. (a) Silver (b) fuse (c) live wire (d) red (e) earth wire.
7. When live wire and neutral wire come in contact of each other short circuiting occurs.  
During this, heat is developed in circuit and melts the conductor. Connecting many appliances with single socket may also causes short circuiting.
8. The process by which electric current is induced by moving a conductor in magnetic field of a magnet. Electric generator is based on principle of electromagnetic induction to produce electric current.
9. Electromagnet is used:
  - a. Lifting heavy items of iron and steel.
  - b. To separate iron scrap from garbage.
  - c. Used by surgeon to remove tiny iron splinters from wounds.
10. Names are:
  - a. Ammeter
  - b. Fuse
  - c. Resistor
  - d. Battery
  - e. Earth wire.

---

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**CBSE Worksheet-48**

**Class – VII Science (Electric Current and its Effects)**

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1. Fuse wire is made up of alloys of
  - a. High melting point
  - b. Low melting point
  - c. High boiling point
  - d. Low boiling point
2. Coils of heating devices are made up of
  - a. Tungsten
  - b. Copper
  - c. Mercury
  - d. Nichrome
3. Wire carrying current produce
  - a. Magnetic field
  - b. Chemical effect
  - c. Heating effect
  - d. All of these
4. Conductor having very high resistance is
  - a. Good conductor
  - b. Insulator
  - c. Semi conductor
  - d. Resistor
5. Match the following

<u>Column A</u>	<u>Column B</u>
a. Tungsten	i. best conductor
b. Nichrome	ii. insulator
c. Mercury	iii. coils of heater
d. Silver	iv. filament of bulb
e. Rubber	v. poor conductor

---

6. Write T for true and F for false statements.

- a. Electromagnet is used in electric heater.
- b. Fuse works on the principle of heating effect of electricity.
- c. Bulb filament has very high resistance.
- d. Copper is a semiconductor
- e. Earth wire has green insulation.

7. What is electromagnet? Write its two applications.

8. What is electric bell? Name its main components.

9. What is difference between open and closed circuit?

10. Select the words related to electric current from letter box given below:

A	H	B	C	G	H	K	L	F	Y
L	E	M	G	V	B	D	M	M	F
K	A	B	D	O	F	B	K	F	N
J	T	C	D	L	V	M	T	L	B
P	E	A	R	T	H	W	I	R	E
O	R	D	D	M	X	K	P	E	U
R	F	U	S	E	Z	J	R	C	H
L	C	U	N	T	A	H	G	J	F
T	O	B	D	E	D	G	V	H	B
R	V	F	D	R	V	R	C	F	I

---

---

### Answer key

1. b
2. d
3. d
4. b
5. (a) – (iv), (b) – (iii), (c) – (v), (d) – (i), (e) – (ii).
6. (a) F (b) T (c) T (d) F (e) T.
7. When a soft iron piece is placed into the solenoid having current flowing through it. The iron piece behaves like strong magnet. This magnet is called electromagnet. It is used in electric fans and commercial motors.
8. An electric bell is a simple device which uses an electromagnet. Some of the important components of an electric bell are
  - a. An electromagnet
  - b. An armature
  - c. Gong
  - d. Hammer
9. Closed circuit is a circuit in which current is flowing and switch is in closed position. On the other hand, in open circuit current do not flow and switch is in open condition.
- 10.

A	H	B	C	G	H	K	L	F	Y
L	E	M	G	V	B	D	M	M	F
K	A	B	D	O	F	B	K	F	N
J	T	C	D	L	V	M	T	L	B
P	E	A	R	T	H	W	I	R	E
O	R	D	D	M	X	K	P	E	U
R	F	U	S	E	Z	J	R	C	H
L	C	U	N	T	A	H	G	J	F
T	O	B	D	E	D	G	V	H	B
R	V	F	D	R	V	R	C	F	I

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**CBSE Worksheet-49**  
**Class - VII Science (Light)**

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1. Bouncing back of light in same medium is called

- a. Refraction
- b. Reflection
- c. Rarefaction
- d. Retardation

2. When light bounces off a surface, the surface is

- a. Reflector
- b. Opaque
- c. Transparent
- d. Translucent

3. A common magnifying glass is an example of

- a. Concave mirror
- b. Convex mirror
- c. Convex lens
- d. Concave lens

4. Shaving mirror are usually

- a. Concave
- b. Convex
- c. Plane
- d. Biconcave

5. Match the following

Column A

- a. Real image
- b. Virtual
- c. Plane mirror
- d. Concave mirror
- e. Convex mirror

Column B

- i. Image behind the mirror
- ii. Image in front of the mirror
- iii. Image is same size as object
- iv. Inverted image
- v. Erect image

---

6. Fill in the blanks

- a. Bodies which give out their own light are called -----.
- b. Regular reflection takes place from the ----- surfaces.
- c. ----- refers to collection of rays.
- d. ----- mirror is used as rear view mirrors in automobiles.
- e. White light is composed of many -----.

7. How is rainbow formed?

8. What is spectrum?

9. Write the laws of reflection?

10. Write difference between real and virtual image?

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### Answer key

1. b
2. a
3. c
4. c
5. (a) – (iv), (b) – (v), (c) – (iii), (d) – (ii), (e) – (i).
6. (a) luminous bodies (b) smooth (c) Beam (d) Convex (e) colours.
7. Raindrops sometimes act like tiny prisms. They can also scatter sunlight passing through them into various colours. The combined effect of thousands of raindrops makes a rainbow.
8. When white rays of light pass through a prism it splits into seven colours. The beam of light obtained on screen due to scattering is called spectrum.
9. Laws of reflection are
  - a. The angle of incidence is equal to the angle of reflection.
  - b. The incident ray, the reflected ray and the normal at the point of incidence all lie in the same plane.
- 10.

#### Real image

1. A real image can be obtained on screen.
2. It is formed in front of the mirror.
3. The reflected rays actually meet after reflection.

#### Virtual image

1. A virtual image can not be obtained on screen.
2. It is formed behind the mirror.
3. The reflected rays do not meet but appear to come from a point.

---

**CBSE Worksheet-50**  
**Class - VII Science (Light)**

---

1. The perpendicular to the reflecting surface is called
  - a. Normal
  - b. Incident rays
  - c. Reflected rays
  - d. Refracted rays
2. Concave lens is also known as
  - a. Converging lens
  - b. Diverging lens
  - c. Biconcave lens
  - d. Bifocal length
3. The splitting of white light into seven colours is called
  - a. Spectrum
  - b. Splitting
  - c. Dispersion
  - d. Rainbow
4. Regular reflection takes place by
  - a. Plane surface
  - b. Smooth surface
  - c. Rough surface
  - d. Transparent surface
5. Match the following

<u>Column A</u>	<u>Column B</u>
a. Rainbow	i. Form of energy
b. Incident angle	ii. Convex mirror
c. Refracted angle	iii. Angle between incident ray and normal
d. Rear view mirror	iv. Angle between refracted ray and normal
e. Light	v. Spectrum

- 
6. Write T for true and F for false statements.
    - a. Light consists of electromagnetic waves.
    - b. Light require medium for propagation.
    - c. Sun is the ultimate source of light.
    - d. Moon is a luminous body.
    - e. Plane mirror always forms real image.
  7. What is a lens? Write it main types.
  8. Why convex mirror is used as rear view mirror?
  9. Write difference between reflection and refraction of light.
  10. Solve the cross puzzle using clues given below.

Across

1. It is transparent with at least one curved surface.
3. Spherical mirror used as a rear view mirror in vehicles.
4. Bouncing back of light rays.
5. Scientist who showed through a disc that light is made of 7 colours.

Down

2. Band of seven colours
5. Spherical mirror in which reflection takes place at the inner surface.

						5.					
1.			2.			6.					
			3.								
			4.								

**Answer key**

1. a
2. a
3. c
4. a
5. (a) – (v), (b) – (iii), (c) – (iv), (d) – (ii), (e) – (i).
6. (a) T (b) F (c) T (d) F (e) F.
7. A lens is a piece of transparent substance having a least one curved surface. Unlike mirrors, light rays are not reflected from their surface. Two common types of lens are concave lens and convex lens.
8. Convex mirror always form erect and virtual image of smaller size than objects. This helps the driver to see the traffic behind much easily and wider view field.
9. The bouncing back of rays of light through a polished or smooth surface is called reflection. On the other hand, banding of rays of light when passes from rarer to denser medium is called refraction of light.

10.

						5. C						
						O						
1. L	E	N	2. S			6. N	E	W	T	O	N	
			P			C						
			E			A						
			3. C	O	N	V	E	X				
			T			E						
			4. R									
			U									
			M									

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**CBSE Worksheet-51**  
**Class - VII Science (Light)**

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1. Light is a form of
  - a. Heat
  - b. Temperature
  - c. Energy
  - d. Power
2. All the rays of light parallel to principle axis after reflection passes through
  - a. Pole
  - b. Focus
  - c. Radius of curvature
  - d. Mid point of lens.
3. Sky appear red during
  - a. Sunrise and sunset
  - b. During day
  - c. During early noon
  - d. During noon
4. Virtual image is always
  - a. Erect and diminished
  - b. Inverted and diminished
  - c. Erect and magnified
  - d. Erect and magnified/diminished.

5. Match the following

Column A

- a. Concave mirror
- b. Concave lens
- c. Convex mirror
- d. Convex lens
- e. Prism

Column B

- i. Dispersion of light
- ii. Real and inverted image
- iii. Virtual and erect image
- iv. Rear view mirror
- v. Reflector of solar cooker

---

6. Fill in the blanks with suitable words.

- a. Convex mirror is used as ----- mirror in automobiles.
- b. A ----- refers to a collection of rays.
- c. ----- perpendicular to reflecting surface.
- d. Incident angle is always equal to ----- angle.
- e. Shadows are formed when light falls on an ----- object.

7. What is rectilinear propagation of light?

8. What is a mirror? Write its different types?

9. Write difference between regular and irregular reflection of light.

10. Rearrange the letters to form meaning full words related to light.

a. LETCREFION

b. MAIEG

c. CAVECON

d. TPECSTRMU

e. SENCL

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**Answer key**

1. c
2. b
3. a
4. d
5. (a) – (v), (b) – (iii), (c) – (iv), (d) – (ii), (e) – (i).
6. (a) rear view (b) beam (c) normal (d) reflected (e) opaque.
7. Rectilinear propagation of light is the traveling of light rays in a straight line. Light always travel in straight line and reflected after striking a smooth or polished surface.
8. Polished, smooth, even and bright surfaces are called mirrors. Mirror is best reflector of light. Major types of mirror are plane mirror, concave mirror and concave mirror.
9. In regular reflection, reflected beam of light are parallel to each other. On the other hand, in irregular reflection, reflected beam of light gets scattered in all directions and light spread over a wide area.
10. (a) REFLECTION  
(b) IMAGE  
(c) CONCAVE  
(d) LENS

---

**CBSE Worksheet-52**  
**Class - VII Science (Light)**

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1. Concave lens always forms
  - a. Real image
  - b. Virtual image
  - c. Inverted image
  - d. Magnified image
2. Mirror used a shaving mirror is
  - a. Convex mirror
  - b. Bifocal mirror
  - c. Concave mirror
  - d. Plane mirror
3. Which colour of light scattered least
  - a. Red
  - b. Blue
  - c. Green
  - d. Orange
4. White light consist of
  - a. 3 colours
  - b. 5 colours
  - c. 7 colours
  - d. 9 colours

5. Match the following

Column A

- a. Moon
- b. Sun
- c. Brick
- d. Mirror
- e. Glow-worm

Column B

- i. Natural biological luminous
- ii. Non-luminous
- iii. Reflector
- iv. Opaque
- v. Luminous

- 
6. Write T for true and F for false statements.
- Light is a form of energy which can not be seen.
  - Light travels slower than sound.
  - Plane mirror is used in periscope.
  - Bending of rays of light due to change in medium is called refraction.
  - Plane mirror has fixed focal length.
7. What is focal length of a mirror? How it varies with curvature?
8. Why a paper held in sunshine at focus of a convex lens burns?
9. Write difference between concave and convex mirror?
10. Give one word that means
- Bouncing back of rays of light.
  - Band of seven colours obtained on dispersion of white light.
  - Mirror used as rear view mirror in automobiles.
  - Image formed by plane mirror.
  - Sequence of colours of spectrum.

---

---

### Answer key

1. b
2. c
3. a
4. c
5. (a) – (ii), (b) – (v), (c) – (iv), (d) – (iii), (e) – (i).
6. (a) T (b) F (c) T (d) T (e) F.
7. Distance between focus and pole of a mirror is called focal length. Focal length is half of the radius of curvature. All rays of light after reflection pass through focus.
8. All rays of light falling on convex lens converge at one point on principle axis called focus. All the energy present in rays of light meets at focus to develop enough heat to burn the paper.
9. Mirror where reflection takes place at inner surface is called concave mirror. This mirror is also known as converging mirror. The mirror where reflection takes place at outer surface is called convex mirror. This mirror is also called diverging mirror.
10. One word is
  - a. Reflection
  - b. Spectrum
  - c. Convex
  - d. Virtual
  - e. VIBGYOR.

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**CBSE Worksheet-53**

**Class – VII Science (Water: A Precious Resource)**

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1. Water is a
  - a. Mixture
  - b. Compound
  - c. Element
  - d. Solution
2. Water is chlorinated to
  - a. Improve its taste
  - b. Kill germs
  - c. Soften it
  - d. Change colour
3. There is acute water shortage due to
  - a. Overuse and misuse
  - b. Excess evaporation
  - c. Climate change
  - d. Global warming
4. What percent of your body weight is water?
  - a. 50%
  - b. 60%
  - c. 70%
  - d. 80%

5. Match the following

Column A

- a. Watermelon
- b. Human body
- c. Ground water
- d. Chlorination
- e. Rain water harvesting

Column B

- i. Destroy germs
- ii. Increase water-table
- iii. 99%
- iv. 70%
- v. 0.59%

---

6. Fill in the blanks.

- a. The water of oceans is ----- hence can not be used for drinking.
- b. Like air, forest, sun, ----- is also a natural resource.
- c. River gets polluted by ----- in them.
- d. In India ----- sector is the major user of water.
- e. One of major reason for the scarcity of water is -----.

7. What is water pollution? Write its main causes.

8. What is ground water? Why ground water level is decreasing in cities?

9. Why water is called unique solvent?

10. Arrange the various steps of water purification and supply in the correct order.

a. Chlorination

b. Filtration

c. Sedimentation

d. Storage

e. Supply

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### Answer key

1. b
2. b
3. a
4. c
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (i), (e)- (ii).
6. (a) hard (b) water (c) sewage (d) agricultural(e) growing population.
7. Addition of harmful substance in water bodies to change its chemical, physical and biological property is called water pollution. It is mainly caused by addition of industrial wastes and untreated sewage in water bodies.
8. Ground water is that water which percolates down the earth from existing water bodies or during rain from ground surface. Ground water is decreasing rapidly due to excessive consumption of ground water.
9. Water is a unique solvent because it can dissolve almost all substance required by living organism. It exists in all three states in nature. Heat absorbing power is maximum among common solvents.
10. Corrects steps for water purification and supply are
  - a. Sedimentation
  - b. Filtration
  - c. Chlorination
  - d. Storage
  - e. Supply

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**CBSE Worksheet-54**

**Class – VII Science (Water: A Precious Resource)**

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1. Rainwater harvesting is a method of
  - a. Producing water for future use
  - b. Using rain water for daily purpose
  - c. Collecting rainwater and directing into ground
  - d. All of these
2. Which sector is measure user of water in India?
  - a. Agricultural sector
  - b. Textile sector
  - c. Petrochemical sector
  - d. Leather sector
3. There is acute shortage of water due to
  - a. Growing population and overuse
  - b. Melting of ice at poles
  - c. Pollution of rivers
  - d. Lack of technique to purify water
4. In irrigation, which technique reduces the water loss?
  - a. Drip irrigation
  - b. Canal system
  - c. Tube well system
  - d. Planting crops in rainy season

5. Match the following

Column A

- a. Chlorination
- b. Sedimentation
- c. Filtration
- d. Drip irrigation
- e. Rain water harvesting

Column B

- i. Increasing water table
- ii. Reducing water loss in irrigation
- iii. killing germs in drinking water
- iv. Removing soils and heavy particles
- v. Removing insoluble particles

---

6. Write T for true and F for false statements.

- a. Human body contains about 70% water.
- b. Ocean water can be used for washing and cooking.
- c. Deforestation is responsible for decreasing water table.
- d. Recycling of waste water is not possible.
- e. Water is non-renewable natural resource.

7. What is drip irrigation?

8. What are main reasons for decreasing of water table in cities?

9. Write difference between ocean water and rivers water.

10. Give one word for the following:

- a. Passing chlorine gas through water to destroy germs.
- b. A technique by which rainwater is collected and diverted to underground storage.
- c. Surface from which the ground water supply can be obtained.
- d. Judicious and careful use of resources.

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**Answer key**

1. c
2. a
3. a
4. a
5. (a) – (iii), (b) – (iv), (c) – (v), (d) – (ii), (e) – (i).
6. (a) T (b) F (c) T (d) F (e) F.
7. Drip irrigation is a technique in which water is supplied slowly drop by drop near the plant roots through small opening called drippers. It is efficient system because there is no loss of water due to seepage.
8. Main reasons for decreasing in water table are
  - a. Excessive consumption of ground water due to increase in population.
  - b. Deforestation or cutting down of trees.
  - c. Shortage of open land surface.
9. Ocean water is hard or salty which can not be used for drinking or washing cloths. River water is soft and can be used for drinking and other domestic purpose. Main salts in sea water are sodium, calcium and magnesium ions.
10. (a) Chlorination
  - (b) Rainwater harvesting
  - (c) Water table
  - (d) Water management.

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**CBSE Worksheet-55**

**Class – VII Science (Water: A Precious Resource)**

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1. Total water is maintained by
  - a. Rain
  - b. Evaporation
  - c. Water cycle
  - d. Condensation
2. In gaseous form water is present in atmosphere as
  - a. Water vapour
  - b. Hot water
  - c. Ice at poles
  - d. Water bubbles
3. Earth appear blue from sky due to presence of
  - a. Water
  - b. Mountains
  - c. Land
  - d. Desert
4. Amount of water recommended by United Nation per person per day is
  - a. 30 litres
  - b. 40 litres
  - c. 50 litres
  - d. 60 litres

5. Match the following

Column A

- a. World Water Day
- b. International Year of Fresh Water
- c. Infiltration
- d. Aquifer
- e. Water table

Column B

- i. Seeping of water into ground
- ii. Ground water between layers of rocks
- iii. Upper layer of ground water
- iv. 22 March
- v. 2003

---

6. Fill in the blanks

- a. Three forms of water are ice, -----, and water vapour.
- b. Water bearing layer of earth is -----.
- c. Distribution of water on globe is -----.
- d. Rivers and lakes are main source of ----- water.
- e. ----- increase the water table.

7. What is infiltration? How is it useful?

8. What is drip irrigation? What is its importance?

9. What is difference between water level and water table?

10. Rearrange the letters to form words related to water cycle.

a. RUDGON RAWET

b. ATOONIAERVVP

c. ACESTOONNNID

d. DUCLOS

e. TSPRATNIAOINR

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**Answer key**

1. c
2. a
3. a
4. c
5. (a) – (iv), (b) – (v), (c) – (i), (d) – (ii), (e) – (iii).
6. (a) Water (b) water table (c) uneven (d) fresh (e) rainwater harvesting.
7. The process of seeping of water into ground is called infiltration. Ground water get recharged by this process to increase the water level of that place.
8. Drip irrigation is a technique of watering plants by making use of narrow tubing which delivers water directly at the base of the plant.
9. The ground water present inside the earth crust, which can be used for drinking or irrigation is called water level. The upper layer of water level is called water table.
10. Rearranged words are:
  - a. GROUND WATER
  - b. EVAPORATION
  - c. CONDENSATION
  - d. CLOUDS
  - e. TRANSPIRATION

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**CBSE Worksheet-56**

**Class – VII Science (Forests: Our Lifeline)**

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1. Which of the following is not a forest product?
  - a. Kerosene
  - b. Rubber
  - c. Plywood
  - d. Sealing wax
  
2. Microorganisms act upon the dead plants to produce
  - a. Mushroom
  - b. Humus
  - c. Wood
  - d. Sand
  
3. Trees and vegetation act as wind breakers and prevents
  - a. Floods
  - b. Soil erosion
  - c. Dust storm
  - d. All of these
  
4. Quinine is obtained from
  - a. Eucalyptus tree
  - b. Neem tree
  - c. Cinchona tree
  - d. Pine tree

5. Match the following

Column A

- a. Flora
- b. Fauna
- c. Natural Lungs
- d. Quinine
- e. Depletion of forest

Column B

- i. Malaria
- ii. Deforestation
- iii. Plants
- iv. Forest
- v. Animals

---

6. Fill in the blanks.

- a. The process of loss of water from plants is called -----.
- b. ----- prevents soil erosion.
- c. Forest provides ----- like cinchona, eucalyptus etc.
- d. ----- help in maintaining water cycle in nature.
- e. Forest are important ----- resources.

7. Write the ecological significance of forest?

8. What is transpiration? How is it necessary?

9. Write difference between food chain and food web?

10. Give single words for the following description:

- a. Removal of top layer of earth crust.
- b. All the plants found in particular area.
- c. Loss of water in form of water vapour.
- d. Physiological process that balance oxygen level in atmosphere.
- e. Black, dead and decomposed parts of plant present in soil.

---

---

### Answer key

1. a
2. b
3. d
4. c
5. (a) – (iii), (b) – (v), (c) – (iv), (d) – (i), (e) – (ii).
6. (a) transpiration (b) plants (c) medicinal plants (d) forest (e) natural
7. Forest help in balancing oxygen and carbon dioxide level in the atmosphere, regulate earth's temperature and the water cycle.
8. Loss of water in form of water vapour from the aerial parts of the plant is called transpiration. It helps in upward movement of water and maintaining temperature of plant parts.
9. The process of eating and being eaten is called food chain. A number of organisms are interlinked for dependence of food. Food web is the network of a number of food chain connected together.
10. (a) Soil erosion  
(b) Fauna  
(c) Transpiration  
(d) Photosynthesis  
(e) Humus.

---

CBSE Worksheet-57

Class – VII Science (Forests: Our Lifeline)

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1. Which is not a function of forest?
  - a. Water cycle
  - b. Balancing oxygen and carbon dioxide
  - c. Formation of soil
  - d. Wild life habitat
2. Process of eating and being eaten is called
  - a. Food web
  - b. Food chain
  - c. Food habit
  - d. Food nature
3. Which one is obtained from plants?
  - a. Paper
  - b. Furniture
  - c. Medicines
  - d. All of these
4. Plants convert  $\text{CO}_2$  into  $\text{O}_2$  during
  - a. Respiration
  - b. Photosynthesis
  - c. Transpiration
  - d. Translocation
5. Match the following

<u>Column A</u> <ol style="list-style-type: none"><li>a. Over grazing</li><li>b. Transpiration</li><li>c. Humus</li><li>d. Food chain</li><li>e. Quinine</li></ol>	<u>Column B</u> <ol style="list-style-type: none"><li>i. Water holding capacity</li><li>ii. Soil erosion</li><li>iii. Ascent of sap</li><li>iv. Medicine</li><li>v. Interdependence for food</li></ol>
--	--

---

6. Write T for true and F for false statements.

- a. The forest cover is increasing in our country.
- b. Forests help in regulating the water cycle.
- c. Overgrazing is one of the reasons for depletion of forest.
- d. In a forest only one food chain can exist.
- e. Plants do not depend on animals.

7. How is oxygen added in the atmosphere continuously?

8. List five products that we obtain from forests.

9. How is transpiration different from translocation?

10. What would be the effect on the food chain if:

Grass > Grasshopper > Frog > snake > Eagle

- a. Sun is not there
- b. All frogs disappear
- c. There are no plants
- d. Carnivorous disappear

---

---

### Answer key

1. c
  2. b
  3. d
  4. b
  5. (a) – (ii), (b) – (iii), (c) – (i), (d) – (v), (e) – (iv).
  6. (a)F (b) T(c) T (d) F (e) F.
  7. In plants photosynthesis takes place during day time. In this process, carbon dioxide is absorbed and oxygen is released. This process helps in maintaining oxygen level in atmosphere.
  8. Products obtained from forests are:
    - a. Paper
    - b. Medicine
    - c. Furniture
    - d. Clothes
    - e. Resins
  9. Transpiration is the loss of water in form of water vapour from stomata. On the other hand, translocation is the transport of food prepared in leaves to all other parts of the plant.
  10. (a) Sun is the ultimate source of energy. In food chain, energy enters through Autotrophs.
    - (b) If all frogs disappear, number of grasshopper increases and grass become less.
    - (c) Plants are Autotrophs that produce food by trapping solar energy. Without plants life is not possible.
    - (d) Carnivores obtain food from herbivores, the number of herbivores will increase that leads to less grass.
-

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**CBSE Worksheet-58**

**Class – VII Science (Forests: Our Lifeline)**

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1. Branches of tall trees look like roof over the other plants in forest called
  - a. Canopy
  - b. Pines
  - c. Shadow
  - d. Conical
2. Which one is obtained from forest?
  - a. Coal
  - b. Kerosene
  - c. Resins
  - d. Plastics
3. Plants with soft stem are called
  - a. Shrubs
  - b. Herbs
  - c. Tree
  - d. Tendril
4. Microorganism that convert plants and animals dead parts into humus are called
  - a. Decomposer
  - b. Producer
  - c. Herbivores
  - d. Carnivores
5. Match the following

<u>Column A</u>	<u>Column B</u>
a. Crown	i. Carbon dioxide to oxygen
b. Canopy	ii. Embrace tree to protect
c. Deforestation	iii. part of tree above stem
d. Photosynthesis	iv. Roof like structure of branches
e. Chipko movement	v. Cutting of tree

---

6. Fill in the blanks

- a. Deforestation leads to ----- in nature.
- b. Plants are natural air ----- of atmosphere.
- c. Judicious use of forest is called -----.
- d. Saprophytes are also known as -----.
- e. Quinine is obtained from ----- tree.

7. What are decomposers? What are their importances in environment?

8. Why forest is called as dynamic living entity?

9. What is difference between canopy and under storey?

10. Identify the words related to forest from the letter square:

H	V	F	F	T	R	G	V	C	O
G	B	A	O	R	B	N	N	T	U
F	A	U	N	A	V	R	M	S	E
L	J	V	Q	N	A	A	C	S	W
O	K	F	A	S	S	F	A	D	S
R	V	A	B	P	V	V	S	P	Y
A	A	E	C	O	L	O	G	Y	R
D	D	G	R	R	J	L	L	O	U
T	A	S	G	K	I	G	P	E	T
F	F	O	O	D	C	H	A	I	N

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### Answer key

1. a
2. c
3. b
4. a
5. (a) – (iv), (b) – (iii), (c) – (v), (d) – (i), (e) – (ii).
6. (a) imbalance (b) purifier(c) conservation of forest(d) decomposers(e) Cinchona
7. The microorganisms that break down the dead plants and animals into simpler form naturally are called decomposers. They help in recycling of minerals in to the nature.
8. Wide varieties of animals help the forest to regenerate and grow. The decomposers recycle the nutrients and producers produce food for all organisms. Therefore, forests are called dynamic entity.
9. The branches of tall tree look like roof over the other plants in the forest called canopy. The smaller plants growing under the tall plants are called under storey.

10.

H	V	F	F	T	R	G	V	C	O
G	B	A	O	R	B	N	N	T	U
F	A	U	N	A	V	R	M	S	E
L	J	V	Q	N	A	A	C	S	W
O	K	F	A	S	S	F	A	D	S
R	V	A	B	P	V	V	S	P	Y
A	A	E	C	O	L	O	G	Y	R
D	D	G	R	R	J	L	L	O	U
T	A	S	G	T	I	G	P	E	T
F	F	O	O	D	C	H	A	I	N

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**CBSE Worksheet-59**  
**Class – VII Science (Waste-water Story)**

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1. Liquid waste from houses is called
  - a. Sewage
  - b. Sludge
  - c. Smog
  - d. Effluent
2. Biodegradable waste
  - a. Decomposes in nature by microbes
  - b. Does not decompose
  - c. Enters the food chains then causes bio magnification
  - d. Accumulates in environment
3. Polythene and plastics
  - a. Degrade in the environment very easily
  - b. Are harmful
  - c. Do not generate any bad odour
  - d. Are non-biodegradable and very harmful
4. Which of the following is non-biodegradable waste?
  - a. Vegetable and fruit peels.
  - b. Plants and animals excreta
  - c. Plastic
  - d. Cotton cloths

5. Match the following

Column A

- a. Polythene
- b. Fruits peel
- c. Sewer system
- d. Sewage
- e. Disinfection

Column B

- i. Waste water from homes and industries
- ii. Chlorination
- iii. Biodegradable
- iv. Network of drainage pipe to carry sewage
- v. Non-biodegradable

6. Fill in the blanks with suitable words

- a. After treatment the sewage is discharged into a -----.
- b. The ----- system transport the sewage from homes to treatment plant.
- c. Last stage in treatment of sewage is -----.
- d. Open drains cause ----- conditions.
- e. Solid parts of sewage can be used as -----.

7. What is meant by sewage? What does it mainly consists of?

8. Mention some importance of drainage system.

9. Write difference between biodegradable and non-biodegradable wastes.

10. Solve the cross word puzzle.

Across

2. Useless things produced.

4. Chemicals used for killing germs.

Down

1. Waste water from homes and industries.

3. Disease causing microorganisms.

5. Non-biodegradable solid waste

	1.S									
								5.P		
	2.W									
				3.G						
4.C										

**Answer key**

1. a
2. a
3. d
4. c
5. (a) – (v), (b) – (iii), (c) – (iv), (d) – (i), (e) – (iv).
6. (a) Water bodies (b) sewer system (c) chlorination (d) unhygienic (e) fertilizers.
7. Sewage is the waste water from homes and industries. It consists of human excreta, dirt, and food particles etc.
8. Drainage system is an absolute necessity for safe disposal of sewage. In absence of an efficient system of sewage the sanitation of a place may suffer. It may cause water borne disease.
9. Biodegradable wastes are organic wastes which are decomposed by bacteria and other microorganisms into simpler components. Non biodegradable are mostly inorganic and can not be converted into simpler forms.

10.

	<sup>1</sup> .S									
	E							<sup>5</sup> .P		
	<sup>2</sup> .W	A	S	T	E			L		
	A							A		
	G			<sup>3</sup> .G				S		
	E			E				T		
<sup>4</sup> .C	H	L	O	R	I	N	T	I	O	N
				M				C		
				S						

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**CBSE Worksheet-60**  
**Class – VII Science (Waste-water Story)**

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1. Which one is not an organic waste?
  - a. Vegetable peels
  - b. Cotton cloths
  - c. Paper
  - d. DDT
2. The process of waste treatment is called
  - a. Sewage treatment
  - b. Water treatment
  - c. Pollutant separation
  - d. Chlorination
3. Bacteria that decompose organic wastes are called
  - a. Anaerobic bacteria
  - b. Anaerobic bacteria
  - c. Lactobacillus bacteria
  - d. All of these
4. Biodegradable wastes are generally
  - a. Inorganic
  - b. Organic
  - c. Synthetic
  - d. Blended

5. Match the following

Column A

- a. Bar screen
- b. Sludge
- c. Chlorination
- d. Aeration
- e. Sewage

Column B

- i. Killing of germs
- ii. Removing floating wastes
- iii. Removing grit and stone
- iv. Waste containing water
- v. Adding air to water

- 
6. Write T for true and F for false statements.
- Open drainage cause unhygienic condition.
  - Sewage treatment plant removes only solid wastes.
  - Drainage system failure may cause water logging on the streets.
  - Sewer system is useful during rainy season only.
  - DDT is used as pesticide.
7. What is Biomagnification? How it effect our lives?
8. What is sewage treatment?
9. Name the substances that cause chocking of drainage?
10. Classify the following as biodegradable and non-biodegradable wastes.

DDT, Fruit peels, polythene, plastics, cotton, paper, tin cane, tea leaf glass, wood.

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### Answer key

1. d
2. a
3. b
4. b
5. (a) – (ii), (b) – (iii), (c) – (i), (d) – (v), (e) – (ii).
6. (a) T (b) F(c) T (d) F (e) T.
7. Accumulation of harmful non-biodegradable wastes into food chain at each trophic level is called Biomagnification. As human being is the top consumer, it accumulates most in human bodies to cause disease.
8. The process of removing pollutants before it enters a water body or is reused is called water treatment. It is commonly known as sewage treatment. It is essential to maintain the aquatic life in water bodies.
9. The sewage water over flows from gutters and manhole due to chocking of drainage system. Plastic and polythene are main causes that chock the drainage and flood the street with dirty water.

#### Biodegradable wastes

DDT

Polythene

Plastics

Tin can

Glass

#### Non-biodegradable wastes

Fruit peels

Paper

Cotton

Tea leaf

Wood

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**CBSE Worksheet-61**

**Class – VII Science (Waste-water Story)**

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1. 1. A non-biodegradable item
  - a. Can not be recycled
  - b. Can be recycled
  - c. Can be reused
  - d. Can be exhaustible
2. Which of the following is non-biodegradable?
  - a. Cardboard
  - b. Cotton cloth
  - c. Leather shoes
  - d. Glass bottle
3. An example of source reduction of waste is
  - a. Backward composting
  - b. Throwing things that are old
  - c. Making paper aero planes
  - d. Burning
4. Example of municipal solid waste is
  - a. Paper
  - b. Batteries
  - c. Packing materials
  - d. All of these.

5. Match the following

Column A

- a. Biodegradable
- b. Recycle
- c. Vermiform compost
- d. Use of plastics
- e. Waste

Column B

- i. Substance which has no use
- ii. Earthworm
- iii. Paper
- iv. Fruits peels
- v. Minimize

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6. Fill in the blanks.

- a. We should not ----- the garbage.
- b. ----- have become integral parts of life.
- c. ----- removes the floatable solids like oil and grease.
- d. Do not throw tea leaf in -----.
- e. Solid organic wastes can be used as -----.

7. How human excreta are used as source of energy?

8. What is on site sewage?

9. Differentiate between aerobic and anaerobic bacteria.

10. Rearrange the jumble letters to form meaningful words.

a. GESWEA

b. INAGEDARA

c. TWASES

d. WESER

e. LYTHEPONE

KRISHNA  
PUBLIC SCHOOL

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**Answer key**

1. c
2. b
3. d
4. b
5. (a) – (iv), (b) – (v), (c) – (i), (d) – (ii), (e) – (iii).
6. (a) Throw (b) plastic (c) skimmer (d) sink (e) fertilizers.
7. Anaerobic decomposition of human excreta inside a bio gas plant produces biogas.  
This gas can be used as source of energy.
8. To improve sanitation, low cost onsite sewage disposal systems are being used. Septic tanks, chemical toilets, composting pits are example of such sewage.
9. The bacteria that require oxygen for respiration are called aerobic bacteria. On the other hand, the bacteria that can exist without oxygen and are responsible for decomposition of wastes are anaerobic bacteria.
10. (a) SEWAGE  
(b) DRAINAGE  
(c) WASTES  
(d) SEWER  
(e) POLYTHENE.