



WORKSHEET 1-A



Food

DATE :

A. Tick (✓) the correct answer.

- Green plants are

(a) herbivores	<input type="checkbox"/>	(b) omnivores	<input type="checkbox"/>
(c) carnivores	<input type="checkbox"/>	(d) autotrophs	<input type="checkbox"/>
- The most effective light for photosynthesis is

(a) blue + red	<input type="checkbox"/>	(b) blue + green	<input type="checkbox"/>
(c) green + yellow	<input type="checkbox"/>	(d) orange + red	<input type="checkbox"/>
- Which of the following will give blue colour with iodine solution ?

(a) proteins	<input type="checkbox"/>	(b) fats	<input type="checkbox"/>
(c) starch	<input type="checkbox"/>	(d) roughage	<input type="checkbox"/>

B. Circle the odd-one out giving appropriate reason.

- Green plants, Photosynthesis, Producer, Carnivores, Carbon dioxide

- Starch, Iodine solution, Stomata, Saprophyte

- Water, Chlorophyll, Root hair, Carbon dioxide

- Fungi, Mushroom, Saprophytes, Cuscuta

C. Solve the crossword puzzle with the help of clues given.

ACROSS

- A partially parasitic plant. (9)
- Small pores on the undersurface of a leaf. (7)
- Plant having Rhizobia in its root. (10)

DOWN

- Both plant and meat eaters. (9)
- Plant or grass eaters. (9)
- An insectivorous plant. (6)
- Family of Gram, Peas, Beans and Moong. (6)
- The phenomenon in which two organisms work together to benefit each other. (9)

⁴ O	¹ M					L				E
	⁵ H	² S	⁶			M				⁸ S
										M
	V		D							
						⁷ L				
		V								O
										S
	S									
	³ L			U			N			

Teacher's Signature :



WORKSHEET 1-B

Food

DATE :

A. Write one word for each of the following.

1. The process of taking food and its utilisation by the body.
2. An organism which cannot make its own food and depends on others for its food.
3. The process by which green plants make their food.
4. The small pores on the under-surface of the leaves.
5. The mode of nutrition in the plants that derive their food from the dead and decayed organic matter.

B. Fill in the blanks.

1. Human beings are _____.
2. The rate of photosynthesis depends upon the _____ of light.
3. The small pores on the lower side of a leaf are called _____.
4. _____ are a group of plants having a composite thallus consisting of an alga and a fungus.
5. Mistletoe is a _____ plant.

C. Answer the following questions.

1. How are the soil nutrients replenished ?

2. What is the role of leaves in photosynthesis ?

3. Why can't animals and human make food from carbon dioxide and water in the presence of light ?

4. How is the association between fungi and algae beneficial to each other ?

Teacher's Signature :



Nutrition in Animals and Humans

DATE :

A. Solve the crossword puzzle with the help of clues given.

ACROSS

- Digestive juice secreted by glands in the buccal cavity (6).
- Hollow tube through which the swallowed food moves down (10).
- Partially digested food stored in rumen (3).
- Animal that swallows its prey (5).
- Teeth that help in tearing the food (6).

			8C			9P			
				1S				V	
2O	7E			P			G		
			W			Q			
					3C				10C
6V	4S			K					
				5C			I		
									C
I									

DOWN

- Finger-like projections on the inner wall of the small intestine (5).
- Process by which the undigested food materials are thrown out of the body (8).
- Top part of the tooth outside the gums (5).
- Sticky film consisting of food particles, saliva and bacteria (6).
- A large sac-like structure between the small and large intestine of ruminants (6).

B. Fill in the blanks.

- Saliva is secreted by the _____ in the mouth cavity.
- _____ molar teeth are present in a human adult.
- Finger-like projections in the walls of small intestine are called _____.
- Absorption of water from the undigested food takes place in _____.

C. Circle the odd-one out giving appropriate reason.

- Cow, Horse, Human beings, Amoeba

- Canines, Premolars, Chewing, Grinding

- Pulp cavity, Crown, Buccal cavity, Plaque

- Large intestine, Small intestine, Stomach, Kidney

Teacher's Signature :



WORKSHEET 2-B

DATE :

Nutrition in Animals and Humans

A. Define the following terms.

1. Nutrition : _____

2. Assimilation : _____

B. Answer the following questions.

1. Name the sticky film on teeth consisting of food particles, saliva and bacteria.

2. What is the function of large intestine ?

3. Name the different chambers in the stomach of ruminants.

C. Draw a labelled diagram of alimentary canal.

Teacher's Signature :



WORKSHEET 3-A



Fibre to Fabric : Animal Fibres

DATE :

A. Fill in the blanks.

1. The sticky fluid secreted by larva from its salivary glands is called _____.
2. The four stages in the life of a silk moth are _____, _____, _____ and _____.
3. The thread obtained in the reeling process is called _____.
4. Removal of _____ from the body of sheep is called shearing.
5. Sorters working in wool industry may suffer from _____.

B. Tick (✓) the correct answer.

1. Which of the following is obtained from hair of an animal ?
 (a) silk (b) nylon
 (c) cotton (d) wool
2. The fibre that burns readily with the smell of burning paper is
 (a) polyester (b) cotton
 (c) rayon (d) acrylic
3. Which of the following is not an animal fibre ?
 (a) wool (b) silk
 (c) jute (d) pashmina
4. Which of the following is related to the wool production ?
 (a) sericulture (b) shearing
 (c) reeling (d) larva

C. Circle the odd-one out giving appropriate reason.

1. Wool, Rayon, Silk, Pashmina

2. Caterpillar, Silk, Wool, Mulberry leaves, Cocoon

3. Sheep, Goat, Camel, Deer, Angora rabbit

4. Anthrax bacterium, Sorting, Sheep, Silk moth

Teacher's Signature :



DATE :

Fibre to Fabric : Animal Fibres

A. Write 'T' for True and 'F' for False for each of the following statement.

- All natural fibres can be used for making cloth.
- Wool traps more air in it as compared to cotton.
- The insect in the cocoon is killed before reeling the silk.
- Silk fibres are long, even, straight and fine.

B. Answer the following questions.

- Which of the two - cotton or wool is a proteineous fibre ?

- Which among the nylon and cotton is suitable for summer wear ?

- Why is the sheep after shearing dipped into an antiseptic ?

- Which property of silk makes it so attractive ?

C. Solve the crossword puzzle with the help of clues given.

ACROSS

- Variety of wool obtained from the under fur of Kashmiri goat. (8)
- Straightening curly wool fibres. (7)
- A sticky fluid secreted by the salivary glands when caterpillar enters the pupal stage. (7)
- The fibre obtained by separating silk filaments from the cocoons. (7)
- Larvae that hatched out in 3-5 days.

DOWN

- A ball-like structure of silk thread formed around the body of pupa. (6)
- Removal of fleece alongwith a thin layer of the sheep's skin. (8)
- Leaves of a plant on which female silk moth lays eggs. (8)
- Washing of sheared skin with hair with soap. (8)

	¹ P		⁷ S		M				⁹ S
								⁸ M	
	⁶ C								
									U
	² C		R					B	
		³ F		R			N		
	O								
									G
		⁴ R		W			K	Y	
⁵ C			E				L		

Teacher's Signature :



WORKSHEET 4-A



Heat

DATE :

A. Write 'T' for True and 'F' for False for each of the following statement.

1. A laboratory thermometer can be used to measure the body temperature of humans.
2. Solids are heated mainly by conduction.
3. Two thin blankets are usually warmer than one thick blanket.

B. Circle the odd-one out giving appropriate reason.

1. Heat, Temperature, Convection, Celsius scale

2. Joule, Kilojoule, Kilocalorie, Calorie, Degree

3. Mercury, Glass capillary, Thermometer, Degree, Joule

4. Metals, Plastics, Water, Air, Wood

C. Complete the table of differences between a laboratory thermometer and a clinical thermometer.

Property	Laboratory thermometer	Clinical thermometer
1. Size		
2. Temperature range		
3. Position at the time of reading	Bulb remains in contact with the substance or body	
4. Design of the body		Body is designed to give magnifying effect to mercury column only at certain angle
5. Design of capillary	Straight capillary	

Teacher's Signature :



WORKSHEET 4-B



Heat

DATE :

A. Define the following terms.

1. Heat : _____

2. Land breeze : _____

B. Tick (✓) the correct answer.

1. The temperature scale that has lower fixed point at 0°C and the upper fixed point at 100°C is called
- | | | | |
|--------------------|--------------------------|----------------------|--------------------------|
| (a) Kelvin scale | <input type="checkbox"/> | (b) Celsius scale | <input type="checkbox"/> |
| (c) Absolute scale | <input type="checkbox"/> | (d) Fahrenheit scale | <input type="checkbox"/> |
2. Solids transfer heat by
- | | | | |
|----------------|--------------------------|-------------------|--------------------------|
| (a) conduction | <input type="checkbox"/> | (b) convection | <input type="checkbox"/> |
| (c) radiation | <input type="checkbox"/> | (d) all the three | <input type="checkbox"/> |
3. Ventilation in rooms is due to
- | | | | |
|----------------|--------------------------|-------------------|--------------------------|
| (a) conduction | <input type="checkbox"/> | (b) convection | <input type="checkbox"/> |
| (c) radiation | <input type="checkbox"/> | (d) all the three | <input type="checkbox"/> |

C. Solve the crossword puzzle with the help of given clues.

ACROSS

- Mode of heat transfer from hot end to the colder end of the same body. (10)
- A modification in the capillary tube of the clinical thermometer. (4)
- Commonly used scale for measuring temperature. (7)
- Commonly used thermometric liquid. (7)
- Convection current of air from sea towards land. (9)

¹ C	⁶				U			⁹ I	
		⁸ M			² K			N	
	⁷ W								
V									
								L	
³ C				S					
				⁴ M			C		
	⁵ S					B			

DOWN

- Cyclic movement of a liquid or a gas due to difference in temperature. (10)
- Poor conductor of heat. (5)
- Good conductor of heat. (5)
- Non-conductor of heat and electricity. (9)

Teacher's Signature :



Acids, Bases and Salts

DATE :

A. Complete the blanks in activity to test the acidic or basic nature of the given solutions by using the China rose extract as the indicator.

Materials required : China rose indicator, solutions of different acids and bases.

Procedure :

- Take about 2 mL of the first solution in a test tube.
- Add 5 drops of the China rose indicator to the solution.
- Observe the change in colour and record it in the observation table.
- Repeat the experiment with the other solutions one by one and record the colour change.

Observations : Colour of the china rose indicator : Pink

Solution/sample	Colour change	Solution/sample	Colour change
Lemon juice	Magenta (dark pink)	Common salt solution	No change
Tap water	.....	Soda water	.....
Distilled water	.....	Baking soda solution	.....
Soft drink	.....	Sugar solution	.....
Vinegar	.....	Glucose solution	.....
Soap solution	.....	Dilute sulphuric acid	.....
Amla juice	.....	Limewater	Green
Ammonium hydroxide	.....	Sour milk	.....
		Sodium hydroxide	.....

Results : The solutions of are acidic.

The solutions of are basic.

The solutions of are neutral.

Conclusions :

- Acids or acidic solutions turn pink colour of China rose indicator to magenta.
- Bases or basic solutions turn pink colour of China rose indicator to green.
- Neutral solutions do not have any effect on the original colour of the China rose indicator.

Teacher's Signature :



WORKSHEET 5-B

DATE :

Acids, Bases and Salts

A. Tick (✓) the correct answer.

- The acid present in curd / sour milk is

(a) acetic acid	<input type="checkbox"/>	(b) formic acid	<input type="checkbox"/>
(c) lactic acid	<input type="checkbox"/>	(d) hydrochloric acid	<input type="checkbox"/>
- The substance which turns blue litmus red is

(a) basic	<input type="checkbox"/>	(b) acidic	<input type="checkbox"/>
(c) neutral	<input type="checkbox"/>	(d) alkaline	<input type="checkbox"/>
- A base

(a) has a bitter taste	<input type="checkbox"/>	(b) turns blue litmus to red	<input type="checkbox"/>
(c) turns purple-cabbage juice red	<input type="checkbox"/>	(d) has no effect on turmeric	<input type="checkbox"/>
- Baking soda turns

(a) turmeric to red	<input type="checkbox"/>	(b) purple-cabbage juice to green	<input type="checkbox"/>
(c) red litmus to blue	<input type="checkbox"/>	(d) all of these	<input type="checkbox"/>

B. Fill in the blanks.

- The bases turn _____ litmus to _____.
- The acids turn _____ colour of red-cabbage juice to _____.
- The reaction between an acid and a base to form a salt and water is called _____ reaction.
- An effective antacid contains _____.

C. Answer the following questions.

- Name the two acids which are present in the food items you enjoy.

- Name the indicator which gives green colour in basic solution and magenta colour in acidic solution.

- Write any one characteristic of bases.

- Name two synthetic acid-base indicators.

Teacher's Signature :



WORKSHEET 6-A



DATE :

Physical and Chemical Changes

A. Fill in the blanks.

1. The chemical name of rust is _____ .
2. The crystals of copper sulphate are _____ in colour.
3. Energy is _____ in all chemical changes.
4. Bathroom fittings are electroplated with _____ to prevent rusting.

B. Solve the crossword puzzle with the help of the given clues.

ACROSS

1. Colour of copper sulphate crystals. (4)
2. Chemical reaction that takes place in our body. (9)
3. Iron and copper containers made safe for storing foodstuff. (7)
4. Its presence is required for rusting to take place. (8)
5. Solution left behind after separating the crystals. (12)

DOWN

6. Solids on heating form vapour and the vapour on cooling gives pure solid back. (11)
7. Formation of brown powdery substance on iron surface in the presence of moist air. (7)
8. Metal that protects iron from rusting. (4)
9. A property of the physical change. (10)
10. Metal electroplated on bathroom fittings. (8)
11. A process that produces heat and light. (7)



C. Write 'T' for True and 'F' for False for each of the following statement.

1. Cutting a log of wood into pieces is a chemical change.
2. During burning of fuels, heat energy is liberated.
3. Formation of manure from leaves is a physical change.
4. Burning of a candle is a chemical change.

Teacher's Signature :



WORKSHEET 6-B

DATE :

Physical and Chemical Changes

A. Tick (✓) the correct answer.

- Which of the following is not a physical change ?

(a) melting of wax	<input type="checkbox"/>	(b) tearing a piece of paper	<input type="checkbox"/>
(c) dissolution of salt in water	<input type="checkbox"/>	(d) digestion of food	<input type="checkbox"/>
- Which of the following is a chemical change ?

(a) breaking of a brick	<input type="checkbox"/>	(b) evaporation of a liquid	<input type="checkbox"/>
(c) burning of a candle	<input type="checkbox"/>	(d) moving of a wheel	<input type="checkbox"/>
- During the dissolution of urea, heat

(a) is absorbed	<input type="checkbox"/>	(b) is evolved	<input type="checkbox"/>
(c) does not change	<input type="checkbox"/>	(d) none of these	<input type="checkbox"/>

B. Circle the odd-one out giving appropriate reason.

- Burning of wood, Ageing of living beings, Stretching of rubber band, Rusting of iron

- Change in colour, Change in temperature, Physical change, Breaking of a stick, Curding of milk

- Sublimation, Ammonium chloride, Sublimate, Evaporation, Melting of a solid

- Magnesium ribbon, Dazzling light, Chemical change, Exothermic reaction, Crystallisation

C. Distinguish between physical and chemical changes.

Physical change	Chemical change

Teacher's Signature :



WORKSHEET 7-A



Weather, Climate and Adaptations of Animals to Climate

DATE :

A. Match the columns.

Column A

1. Meteorologist
2. El Nino effect
3. Siberian Cranes
4. Bearded Ape
5. Arboreal

Column B

- A. Sultanpur Bird Sanctuary
- B. Western Ghats
- C. Monsoon
- D. Red-eyed frog
- E. Weather

B. Fill in the blanks.

1. The study of weather is called _____ and the people who study the weather pattern are called _____.
2. Predicting the weather is called _____.
3. The elements of weather are _____, _____ and _____.
4. The streamlined body, webbed feet and flattened flipper-like wings help _____ for swimming.

C. Tick (✓) the correct answer.

1. The short term variation which occurs in the atmosphere is called

(a) climate	<input type="checkbox"/>	(b) relative humidity	<input type="checkbox"/>
(c) climate chart	<input type="checkbox"/>	(d) weather	<input type="checkbox"/>
2. The period of long sleep of the polar bear during winter is called

(a) deep sleep	<input type="checkbox"/>	(b) hibernation	<input type="checkbox"/>
(c) burrow sleep	<input type="checkbox"/>	(d) camouflaging	<input type="checkbox"/>
3. A carnivore with stripes on its body moves very fast while catching its prey. It is likely to be found in

(a) polar region	<input type="checkbox"/>	(b) deserts	<input type="checkbox"/>
(c) oceans	<input type="checkbox"/>	(d) tropical rainforests	<input type="checkbox"/>
4. Animals living in cold regions have

(a) legs to run fast	<input type="checkbox"/>	(b) fat for additional insulation	<input type="checkbox"/>
(c) long neck	<input type="checkbox"/>	(d) long eye-lashes	<input type="checkbox"/>

Teacher's Signature :



WORKSHEET 7-B

Weather, Climate and Adaptations of Animals to Climate

DATE :

A. Write 'T' for True and 'F' for False for each of the following statement.

1. Polar bear has no sense of smell.
2. The permanent adaptation has genetic basis.
3. Red-eyed frog has sticky pads on the tips of their fingers and toes.

B. Circle the odd-one out giving appropriate reason.

1. Weather, Temperature, Rainfall, Humidity, Average monthly temperature
2. Weather balloons, Satellite photographs of clouds, Weather forecast, Climate
3. Rajasthan, Hot and dry, Climate, Coastal area
4. Moderate climate, Coastal areas, Polar region, Tropical climate

C. Describe the adaptations of a chameleon that help it to survive in tropical rainforests.

Teacher's Signature :



DATE :

Winds, Storms and Cyclones

A. Fill in the blanks.

- _____ wind accompany _____ pressure.
- Low pressure is associated with _____ sky and _____ weather.
- _____ are generated due to _____ heating of the earth.
- During thunderstorm, do not take shelter under _____.

B. Circle the odd-one out giving appropriate reason.

- Troposphere, Stratosphere, Ozone layer, Flying zone of supersonic aircraft

- Reduced atmospheric pressure, High speed winds, Cloudy sky, Rain, Sunny sky

- Cyclone alert, 48 hours, 24 hours, Cyclone watch

- Tornadoes, Twisting funnel, Depressions, Waterspout

C. Tick (✓) the correct answer.

- In which layer, most of the atmospheric air is present ?

(a) troposphere	<input type="checkbox"/>	(b) stratosphere	<input type="checkbox"/>
(c) mesosphere	<input type="checkbox"/>	(d) thermosphere	<input type="checkbox"/>
- Low pressure is associated with

(a) clear and sunny day	<input type="checkbox"/>	(b) clear and rainy day	<input type="checkbox"/>
(c) cloudy and rainy day	<input type="checkbox"/>	(d) all of these	<input type="checkbox"/>
- Tropical cyclones that originate in the China sea are

(a) hurricanes	<input type="checkbox"/>	(b) typhoons	<input type="checkbox"/>
(c) tornadoes	<input type="checkbox"/>	(d) cyclones	<input type="checkbox"/>
- Which of the following places is likely to get affected by a cyclone ?

(a) Delhi	<input type="checkbox"/>	(b) Jaipur	<input type="checkbox"/>
(c) Amritsar	<input type="checkbox"/>	(d) Puri	<input type="checkbox"/>

Teacher's Signature :



Winds, Storms and Cyclones

DATE :

A. Define the following terms.

1. Troposphere : _____

2. Atmospheric pressure : _____

3. Thunderstorm : _____

4. Cyclones : _____

B. Match the columns.

Column A

1. Stratosphere
2. High pressure
3. Thunderstorm
4. Cyclones
5. Depressions

Column B

- A. Clear and Sunny
- B. Convection
- C. Variable winds
- D. Mild cyclones
- E. Ozone layer

C. Answer the following questions.

1. What does air contain ?

2. In which part of the atmosphere do we live ?

3. What is the calm area at the centre of a cyclone called ?

4. How does a tornado look like ?

Teacher's Signature :



WORKSHEET 9-A

Soil

DATE :

A. Circle the odd-one out giving appropriate reason.

1. Rocks, Water, Weathering, Soil, Soil profile

2. A-horizon, B-horizon, Bedrock, C-horizon

3. Overgrazing, Deforestation, Grass cover, Forest fires, Soil erosion

4. Humus, Clay, Silt, Sand, Loamy soil, Sandy soil

B. Fill in the blanks.

1. The dark colour of the top soil is due to the presence of _____ in it.

2. Plantation of trees on large scale is called _____.

3. Breaking down of rocks into smaller pieces by natural forces is called _____.

4. The removal of the top soil by strong wind or by flowing water is called _____.

C. Complete the table of comparison of sandy, clayey and loamy soil in context of mentioned properties.

Property	Sandy soil	Clayey soil	Loamy soil
1. Main component			
2. Average particle size			
3. Empty space (or gaps between the particles)			
4. Air spaces (trapped air)			
5. Water-holding capacity			

Teacher's Signature :



WORKSHEET 9-B



Soil

DATE :

A. Tick (✓) the correct answer.

1. Weathering of rocks occurs due to
- | | | | |
|----------------------------------|--------------------------|-------------------|--------------------------|
| (a) strong winds | <input type="checkbox"/> | (b) flowing water | <input type="checkbox"/> |
| (c) heating and cooling of rocks | <input type="checkbox"/> | (d) all of these | <input type="checkbox"/> |
2. The darkest layer of soil is
- | | | | |
|---------------|--------------------------|--------------|--------------------------|
| (a) top soil | <input type="checkbox"/> | (b) bed rock | <input type="checkbox"/> |
| (c) C-horizon | <input type="checkbox"/> | (d) sub soil | <input type="checkbox"/> |
3. Which of the following can hold maximum amount of water ?
- | | | | |
|------------|--------------------------|----------|--------------------------|
| (a) gravel | <input type="checkbox"/> | (b) sand | <input type="checkbox"/> |
| (c) clay | <input type="checkbox"/> | (d) silt | <input type="checkbox"/> |

B. Match the columns.

Column A

1. Weathering
2. B-horizon
3. Clayey soil
4. Percolation
5. Pulses

Column B

- A. Sub soil
- B. Very small air space
- C. Porosity
- D. Slow process
- E. Loamy soil

C. Draw a labelled diagram of soil profile.

Teacher's Signature :



WORKSHEET 10-A



DATE :

Respiration in Organisms

A. Fill in the blanks.

- All living organisms _____ to perform life processes.
- The nutrient which acts as a fuel for the working of a cell is _____.
- Anaerobic respiration is carried out by _____.
- The air trapped in the soil diffuses into the roots through _____.

B. Solve the crossword puzzle with the help of given clues.

ACROSS

- Taking in oxygen and producing energy and removing the waste products. (11)
- Product of anaerobic respiration. (10)
- Small air sacs at the other end of bronchioles. (7)
- Air enters our body from here. (8)
- Its expansion / contraction controls the opening and closing of stoma. (10)

DOWN

- Site of anaerobic respiration in animals and humans. (7)
- Respiratory organ of fish. (5)
- The opening through which woody stems take in air. (9)

		⁶ M								⁸ L
¹ R			P			T				
² L		C				A			D	
	³ A			E	O					I
					⁷ G					C
⁴ N			T		I					
⁵ G			R		C					

C. Circle the odd-one out giving appropriate reason.

- External respiration, Oxygen, Carbon dioxide, Cellular respiration

- Anaerobic respiration, Glucose, Lactic acid, Ethyl alcohol, Muscles

- Inhalation, Exhalation, Oxygen intake, Chest expansion

- Exhalation, Carbon dioxide, Contraction of lungs, Expansion of chest

Teacher's Signature :



Respiration in Organisms

DATE :

A. Write 'T' for True and 'F' for False for each of the following statement.

- All cells use oxygen to produce energy.
- In aerobic respiration glucose is oxidised to ethanol.
- Oxygen and carbon dioxide diffuse through the walls of alveoli.
- Frogs breathe through their skin as well as their lungs.
- Plants carry out photosynthesis only during the day and respiration only at night.

B. Answer the following questions.

1. Name the respiratory organs of frog.

2. Where does respiration occur in plants ?

3. What is meant by fermentation ?

4. How do fish respire ?

C. Differentiate between respiration and breathing.

Respiration	Breathing

Teacher's Signature :



DATE :

Transportation in Animals and Plants

A. Fill in the blanks.

- _____ tissue carries food in plants.
- The oxygenated blood is found in the _____ side of the heart.
- The clear, liquid part of the blood is called _____.
- Light yellow liquid in our body which contains lymphocytes is _____.
- _____ carry blood from the heart to all parts of the body.

B. Match the columns.

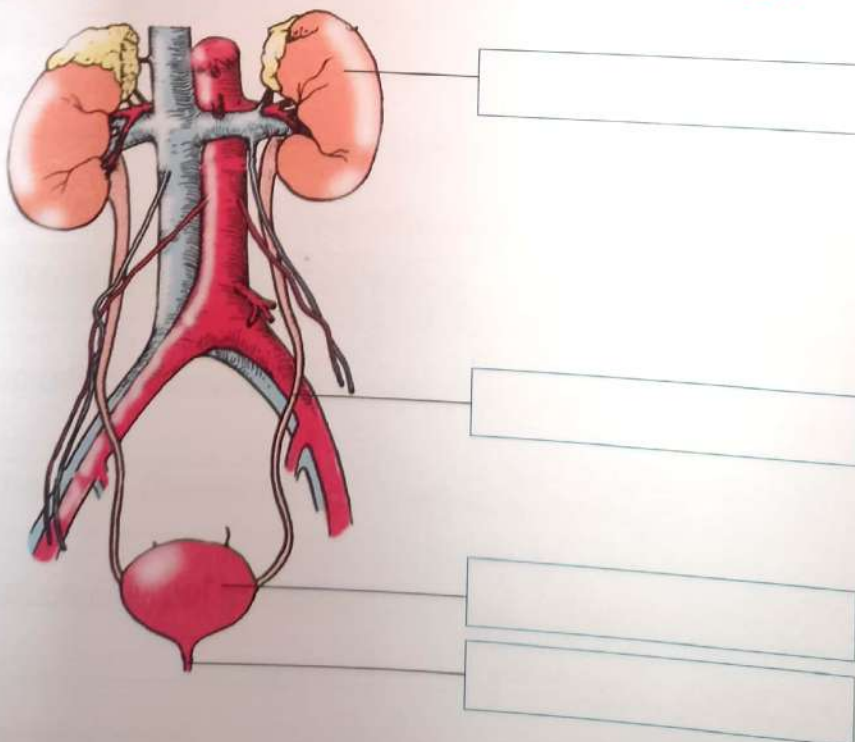
Column A

- Red blood cells
- Universal donor
- Heart
- Glomerulus
- Root tissue

Column B

- Group O
- Systole
- Nephron
- Xylem
- Haemoglobin

C. Label the following picture of excretory system in human beings.



Teacher's Signature :



Transportation in Animals and Plants

DATE :

A. Tick (✓) the correct answer.

- The component of the vascular system which transports water in plants is

(a) xylem	<input type="checkbox"/>	(b) phloem	<input type="checkbox"/>
(c) leaves	<input type="checkbox"/>	(d) none of these	<input type="checkbox"/>
- The loss of water from the leaves of plants is called,

(a) translocation	<input type="checkbox"/>	(b) transpiration	<input type="checkbox"/>
(c) transfusion	<input type="checkbox"/>	(d) none of these	<input type="checkbox"/>
- Blood plasma is

(a) whitish	<input type="checkbox"/>	(b) yellowish	<input type="checkbox"/>
(c) greenish	<input type="checkbox"/>	(d) reddish	<input type="checkbox"/>

B. Circle the odd-one out giving appropriate reason.

- Blood, Haemoglobin, White blood cells, Oxygen transport in the body

- Veins, Carbon dioxide-rich blood, Oxygen-rich blood, Right auricle

- Oxygenated blood, Right auricle, Pulmonary vein, Left ventricle, Aorta

- Gaseous waste, Digestive system, Respiratory system, Lungs, Blood

C. Answer the following questions.

- Name the two types of cells (called vessels) present in the vascular system.

- Which process allows plants to lose water through their leaves ?

- Name the various components of blood.

- Name the organs used by the human body for the removal of (a) solid waste, (b) liquid waste and (c) gaseous waste.

Teacher's Signature :



WORKSHEET 12-A



DATE :

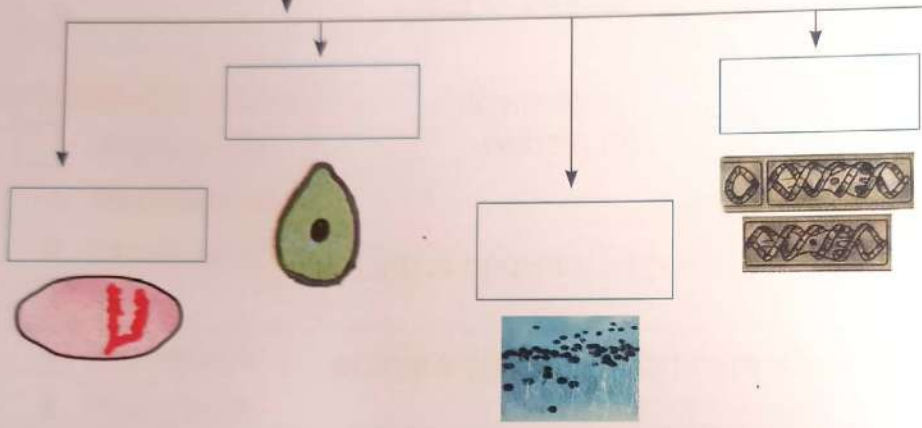
Reproduction in Plants

A. Complete the flow chart.

MODES OF REPRODUCTION IN PLANTS

Asexual Reproduction

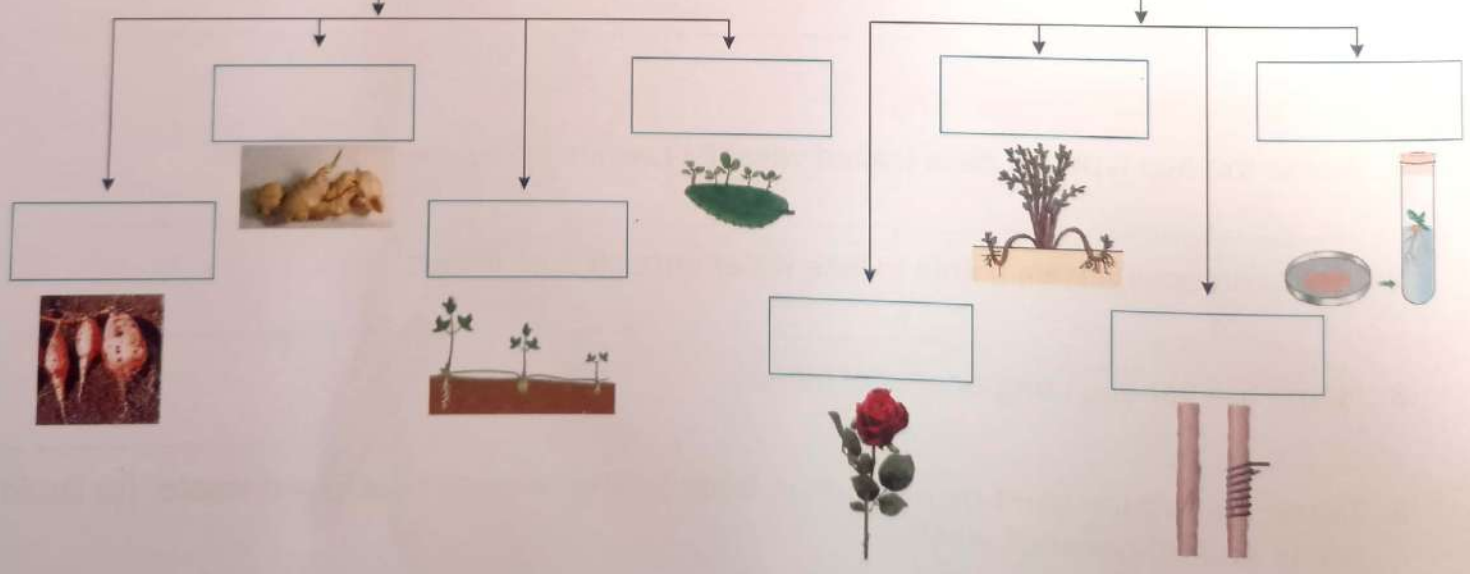
Sexual Reproduction



Vegetative propagation

Natural methods

Artificial methods



Teacher's Signature :



WORKSHEET 12-B

Reproduction in Plants

DATE :

A. Fill in the blanks.

1. Bacterial cells mainly reproduce by _____ .
2. Growth of new plants from roots, leaves, and stems is called _____ reproduction.
3. The cells involved in the sexual reproduction are called _____ .
4. Dandelion seeds are dispersed by _____ .

B. Circle the odd-one out giving appropriate reason.

1. Fission, Budding, Pollination, Vegetative propagation

2. Grass, Mint, Bryophyllum, Strawberry, Oxalis

3. Layering, Grafting, Tissue culture, Vegetative propagation by modified roots

C. Describe the fertilisation in flowering plants with the help of a diagram.

Teacher's Signature :



WORKSHEET 13-A



Motion and Time

DATE :

A. Match the columns.

Column A

1. Periodic motion
2. Simple pendulum
3. Speedometer
4. Uniform motion
5. Line graph

Column B

- A. Motion under gravity
- B. Constant speed
- C. Cartesian axes
- D. Speed of the vehicle
- E. Clock

B. Answer the following questions.

1. What is the device containing a metallic bob suspended with the help of a string called ?

2. What is the maximum displacement of the bob from its mean position called ?

3. What is SI unit of speed ?

4. Which physical quantity is measured by odometer ?

C. Tick (✓) the correct answer.

1. Rapid and small oscillations are called

(a) periodic motion	<input type="checkbox"/>	(b) vibrations	<input type="checkbox"/>
(c) rotatory motion	<input type="checkbox"/>	(d) rolling motion	<input type="checkbox"/>
2. The basic unit of speed is

(a) km/h	<input type="checkbox"/>	(b) m/s	<input type="checkbox"/>
(c) m/min	<input type="checkbox"/>	(d) km/min	<input type="checkbox"/>
3. When a particle covers equal distances in equal intervals of time along straightline path in a particular direction, it is said to be

(a) moving with uniform speed	<input type="checkbox"/>	(b) moving with uniform velocity	<input type="checkbox"/>
(c) moving with uniform acceleration	<input type="checkbox"/>	(d) at rest	<input type="checkbox"/>
4. The device which is used for measuring time intervals in sports activities is called

(a) wrist watch	<input type="checkbox"/>	(b) stop watch	<input type="checkbox"/>
(c) stop clock	<input type="checkbox"/>	(d) quartz watch	<input type="checkbox"/>

Teacher's Signature :



WORKSHEET 13-B



Motion and Time

DATE :

A. Fill in the blanks.

1. An athlete running a 100 m race along a straight track is said to have _____ motion.
2. A plucked string of a sitar executes _____ motion.
3. The amplitude of an oscillation is the _____ distance between _____ and _____ positions of the bob.
4. The SI unit of speed is _____.
5. The time period of a pendulum is expressed in _____ units.

B. Write one word for each of the following.

1. The motion of a body moving along a curved road. _____
2. The quantity measured in terms of distance and time. _____
3. A device used for measuring short time intervals. _____
4. The motion of a body travelling equal distances in equal intervals of time. _____
5. The geometrical relationship between distance and time for a moving body. _____

C. Circle the odd-one out giving appropriate reason.

1. Periodic motion, Oscillatory motion, Vibratory motion, Random motion

2. Sundial, Water clock, Stopwatch, Table clock

3. Simple pendulum, Bob, Mean position of the bob, Balance wheel

4. Speed, Metre per second, Speedometer, Odometer

Teacher's Signature :



DATE :

Electric Current and Its Effects

A. Tick (✓) the correct answer.

- Which of the following is the correct symbol of a cell ?

(a)	<input type="checkbox"/>	(b)	<input type="checkbox"/>
(c)	<input type="checkbox"/>	(d)	<input type="checkbox"/>
- In an electric circuit, current starts from the

(a) positive terminal	<input type="checkbox"/>	(b) negative terminal	<input type="checkbox"/>
(c) either of the two terminals	<input type="checkbox"/>	(d) depends upon the circuit	<input type="checkbox"/>
- Heat produced in a resistor when current is passed through it depends upon

(a) current only	<input type="checkbox"/>	(b) current and time	<input type="checkbox"/>
(c) time only	<input type="checkbox"/>	(d) none of these	<input type="checkbox"/>
- The effect of current on which the use of a fuse is based is

(a) magnetic effect	<input type="checkbox"/>	(b) chemical effect	<input type="checkbox"/>
(c) heating effect	<input type="checkbox"/>	(d) induction effect	<input type="checkbox"/>

B. Match the columns.

Column A

- Open circuit
- Copper
- Nichrome wire
- Electromagnet
-

Column B

- Electric fuse
- No flow of current
- Heavy loads
- Heating coil
- Good conductor

C. Fill in the blanks.

- A diagram of an electric circuit described by using symbols of the components used in it is called a _____ diagram.
- Heating coil in an electric heater is made from _____.
- A combination of _____ is called a battery.
- The fuse is made from the material that has _____ melting point.
- The core of an electromagnet is made from _____.

Teacher's Signature :



WORKSHEET 15



Light

DATE :

A. Write 'T' for True and 'F' for False for each of the following statement.

1. If a surface does not reflect any light at all, it looks black.
2. The beam of light from a nearby large source is a divergent beam of light.
3. A convex lens always forms a real, inverted image of the object placed in front of it.
4. The red colour light travels slower than the violet colour light.

B. Write three difference between concave lens and convex lens.

Concave lens	Convex lens

C. Draw a colourful diagram for the dispersion of light from glass prism and also write 3-4 lines on it.

Teacher's Signature :



DATE :

Water : A Precious Resource

A. Define the following terms.

- 1. Infiltration : _____
- 2. Aquifer : _____
- 3. Water table : _____

B. Answer the following questions.

- 1. Is water on the earth a renewable or non-renewable resource ?

- 2. What is the depth of water surface in a well from the surface of the earth called ?

- 3. What are the huge reservoirs of water inside the earth called ?

- 4. What are the areas which get heavy rainfall called ?

C. Tick (✓) the correct answer.

- 1. How much of the Earth's surface is covered with water ?
 - (a) about two-third
 - (b) about three-fourth
 - (c) about one-fourth
 - (d) about one-third
- 2. The minimum depth in the soil where all the pore spaces are filled with water is called
 - (a) saturation level
 - (b) groundwater
 - (c) groundwater table
 - (d) water table
- 3. Which of the following increases the rate of percolation of rain water into the soil ?
 - (a) construction of high rise buildings
 - (b) vegetation and trees
 - (c) overgrazing
 - (d) construction of roads
- 4. Under or non-availability of usable water is called
 - (a) purification of water
 - (b) pollution of water
 - (c) rationing of water
 - (d) scarcity of water

Teacher's Signature :



Forests : Our Lifeline

DATE :

A. Fill in the blanks.

1. Forests are _____ natural resources.
2. Spiders, beetles live on the forest _____.
3. Animals provide _____ to the plants
4. The topmost layer of crown of tall trees is called _____.
5. Deforestation would lead to _____.

B. Write 'T' for True and 'F' for False for each of the following statement.

1. Forests increase air pollution.
2. Understoreys lie above the forest canopy.
3. The organisms which derive their food from dead and decaying animal / plants are called saprotrophs.
4. All medicinal compounds are the products of trees and plants.
5. Large scale cutting of forest trees leads to fall in water table.

C. Solve the crossword puzzle with the help of clues given.

ACROSS

1. Dead and decaying dark coloured organic matter (5).
2. The sequence of who eats whom (9)
3. The branchy part of a tree above the stem (5).
4. White coloured fluffy fibre (6).

DOWN

5. A solid form of plant excretion obtained from pines and other trees (5).
6. Shorter trees forming different layers under the Canopy (11).
7. Plant having life span of two years (9).
8. The organisms which make their own food from CO₂ and H₂O in the presence of light and chlorophyll (9).

		¹ H	⁶ U					⁸ P
	⁵ R					⁷ B		
² F			D					
	S							
						N		U
			G					
	³ C			W				
			W			L		
	⁴ C					N		

Teacher's Signature :



DATE :

Wastewater Story

A. Answer the following questions.

1. What are the diseases caused by pollutants in water called ?

2. What are the setups used for purifying wastewater called ?

3. Name four diseases that can be caused by an improper drainage system.

4. How should the waste oil/ghee be disposed off ?

B. Tick (✓) the correct answer.

1. Pure water is

(a) colourless and opaque	<input type="checkbox"/>	(b) colourless and transparent	<input type="checkbox"/>
(c) coloured and transparent	<input type="checkbox"/>	(d) colourless, odourless and transparent	<input type="checkbox"/>
2. Which of the following is not a water pollutant ?

(a) metal nitrates	<input type="checkbox"/>	(b) sewage	<input type="checkbox"/>
(c) oxygen	<input type="checkbox"/>	(d) human excreta	<input type="checkbox"/>
3. The aerobic bacteria can be grown in clarified water by

(a) filtration	<input type="checkbox"/>	(b) chlorination	<input type="checkbox"/>
(c) aeration	<input type="checkbox"/>	(d) sedimentation	<input type="checkbox"/>
4. The fuel obtained by decomposing sludge is

(a) kerosene	<input type="checkbox"/>	(b) petrol	<input type="checkbox"/>
(c) biogas	<input type="checkbox"/>	(d) diesel	<input type="checkbox"/>

C. Match the columns.

Column A

1. Water pollutant
2. Bacteria
3. Drinking water
4. Sewerage
5. Sludge

Column B

- A. Typhoid, Cholera
- B. Network of pipes
- C. Sewage
- D. Biogas
- E. Odourless and colourless

Teacher's Signature :