

DISTRICT PUBLIC SCHOOL & COLLEGE, KASUR



NOTES/HOME TASK/WORK SHEET FOR

CLASS: 6th

SUBJECT: G. SCIENCE

1st TERM SYLLABUS: UNIT (1-2-4)

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Learning to be a scientist

Answers to Exercises in Unit 1:

1. (a) What is science?

Ans. Science is the study of things and events that take place around us.

(b) What does a scientist do?

Ans. A scientist is a person who studies science.

(c) How does a scientist find answers to questions?

Ans. A scientist uses scientific methods to solve problems.

(d) What is a laboratory?

Ans. A special kind of room where a scientist works is called a laboratory.

Unit # 2

Living organisms

Answers to Exercises in Unit 2:

1. (a) Define the following: cell, tissue, organ, organ system.

Ans. Cells: They are the building blocks of all living things.

Tissue: They are a group of similar cells which are specialized to perform a particular function. Organ: Different types of tissues group together to form an organ. Organ systems: Systems are made up of many organs which work together.

(b) Describe how the transport of materials takes place in plants.

Ans. In multi-cellular plants, materials are circulated in a system of tubes called the vascular system. The vascular system of plants is composed of specialized tissues called xylem and phloem. Xylem is made up of long, dead cells called vessels. Vessels have thick walls. They carry water from the roots, through the stem to the veins in the leaves. Phloem is made up of long thin walled tubes called sieve tubes. Sieve tubes are made of living cells whose horizontal walls have tiny holes. Food flows from the leaves to other parts of the plant through the sieve tubes.

(c) What is transpiration? Why is transpiration important for a plant?

Ans. Plants lose water vapour into the atmosphere by evaporation. The water passes through tiny holes called stomata which are found mainly on the lower side of leaves. This process is called transpiration. It is important because it helps in the transportation of water in plants and it also helps plants to keep cool in summer.

(d) What is respiration? Name the parts of the human respiratory system.

Ans. Respiration is the process by which food is oxidized in the body cells to produce energy. The parts of the respiratory system of a mammal are nose, windpipe, bronchi, bronchioles, and air sacs.

(e) Describe the structure of the human heart.

Ans. The heart is a muscular organ found in the centre of the chest. It has four chambers. The upper two chambers or atria are thin walled and the lower two chambers or ventricles are thick walled.

(f) What is digestion? Where does digestion of food take place in humans?

Ans. The process by which insoluble food is broken down by the action of enzymes into soluble substances, is called digestion. Food is completely digested in the small intestine.

(g) Name the parts of the nervous system.

Ans. brain, spinal cord, and nerves

(h) What is a reflex action?

Ans. **A reflex action is an involuntary response to a stimulus such as sneezing.**

(i) Identify which of the following are voluntary actions. Writing, reading, coughing, sneezing, sweating, shivering, speaking.

Ans. writing, reading, speaking

Unit # 4

Photosynthesis and respiration in plants

Answers to Exercises in Unit 4:

1. a) What is photosynthesis?

Ans. The process by which green plants make their food in the presence of sunlight and chlorophyll is called photosynthesis.

b) Where does photosynthesis occur?

Ans. Photosynthesis occurs in the green leaves of plants.

c) What substances does a green plant use to make food by photosynthesis?

Ans. A green plant needs four things for photosynthesis to take place. These are: carbon dioxide, water, sunlight, and chlorophyll.

d) What food does the plant make by photosynthesis?

Ans. The plant makes glucose by the process of photosynthesis. This glucose is converted into starch and stored in the leaves.

e) What are stomata and where are they found on a plant?

Ans. Stomata are small holes found on the under surface of leaves.

f) Which gas enters and which gas passes out of the stomata during photosynthesis?

Ans. Carbon dioxide, a raw material for photosynthesis, enters the stomata. Oxygen, which is a by-product of photosynthesis, passes out of the stomata.

g) What happens to the food that is made by the plant during photosynthesis?

Ans. Glucose that is made during photosynthesis is used by the plant for producing energy and for growth. It is also changed into starch or oil and stored in the stems, roots, fruits, and seeds. Some of it is used in making cellulose for new cell walls. Some of it is combined with minerals and used to make proteins and other things which plants need for growth.

h) What is respiration?

Ans. Respiration is the process leading to the chemical breakdown (oxidation) of food materials to provide energy for living things.

i) Where does respiration in a plant take place?

Ans. Respiration occurs inside the living cells of plants and animals.

j) What are the products of respiration?

Ans. Oxygen from the air enters the stomata and diffuses into the tissues and cells of plants after getting dissolved in the film of water present around the cells. Inside the cells this oxygen oxidizes the carbohydrates and other organic compounds into carbon dioxide and water to produce energy.

Class 6th

G. Science

Unit # 1

MCQs

(a) The study of things and events that take place around us is called .
science news environment

[*science*]

(b) A person who studies science is called .

an artist a scientist a scholar

[*a*

scientist]

(c) A scientist works in a special kind of classroom called a .

library study room laboratory

[*laboratory*]

(d) have been invented to help scientists in making accurate measurements and calculations for the experiments they perform.

Instruments Tools Models

[*Instruments*]

(e) A balance is an instrument used for measuring the of a body.

temperature weight height

[*weight*]

(f) Volume is measured in .

metres kilograms litres

[*litres*]

(g) The instrument used to measure the temperature of a body is .

Thermometer altimeter ammeter

[*thermometer*]

(h) A laboratory must be equipped with a fire extinguisher to .

put out fires keep the laboratory cool heat the laboratory

[*put*

out fires]

(i) Chemicals in a laboratory are kept in .

plastic bottles reagent bottles thermos flasks [*reagent*

bottles]

(j) A first aid box contains .

Tools medicines and bandages machines [*medicines and*

bandages]

Unit # 2

MCQs

(a) All plants, animals, and other living things are made up of .

cells water air [*cells*]

(b) A group of similar cells which are specialized to perform a particular function are called

cells tissues organs [*tissues*]

(c) Different types of tissues are grouped together to form .

cells tissues organs [*organs*]

(d) systems are made up of many organs which work together.

Cell Tissue Organ [*Organ*]

(e) They system in plants is composed of specialized tissue called xylem and phloem.

vascular digestive respiratory [*vascular*]

(f) Loss of water from the leaves through the stomata is called .

Respiration circulation transpiration
[transpiration]

(g) is a process by which food is oxidized in the body cells to produce energy.

Respiration Transpiration Digestion
[Respiration]

(h) The muscular organ found in the centre of the chest is .

liver heart kidney **[heart]**

(i) The process by which insoluble food is broken down by the action of enzymes into simple soluble substances is called .

digestion respiration excretion **[digestion]**

(j) Nerves are bundles of which are covered by a tough sheath.

Tendons neurons nephrons **[neurons]**

Unit # 4

MCQs

(a) Sugar and starch are .

proteins fats carbohydrates

[carbohydrates]

(b) The three elements needed by plants to make glucose are .

carbon, hydrogen, oxygen carbon, oxygen, nitrogen carbon,hydrogen,
 nitrogen

[carbon, hydrogen, oxygen]

(c) Plant roots take in water by their .

root caps root hairs root systems **[root hairs]**

(d) Water is transported in plants by .

xylem phloem xylem and phloem **[xylem]**

(e) Food is transported in plants by .

xylem phloem xylem and phloem **[phloem]**

(f) Stomata are usually present on the surface of leaves.

Upper lower both **[lower]**

(g) which is made in the leaves is used for producing energy and for growth.

Glucose Proteins Fats **[Glucose]**

(h) The process of the oxidation of food materials to provide energy for living things is called

digestion excretion respiration

[respiration]

(i) The green material found in leaves is called .

Chlorophyll xanthophylls mesophyll

[chlorophyll]

(j) Photosynthesis takes place during the .

day time at night all the time **[day time]**