Brilliant Public School, Sitamarhi



Class-VII

Science Worksheets

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Chapter 1: Nutrition in Plants

Fill in the blanks: 1. The components of food which are necessary for our body are called _____ 2. Green plants synthesise their own food themselves by the process of is the mode of taking food by an organism and its utilization by the body. 4. Complex chemical substances such as ______ are the products of photosynthesis. gas is produced during photosynthesis. 6. Organisms that are dependent on others for their nutrition are called are the tiny pores present on the surface of the leaves and are surrounded by guard cells. _____is the ultimate source of energy for all living organisms. 9. Organisms which derive their nutrition from dead decaying matter are called ___ 10. Some organisms live together and share shelter and nutrients, this is called 11. Carbohydrates are made up of ______, and _____. Name the following: 1. A bacterium that can take atmospheric nitrogen and convert it into a soluble form. 2. An insectivorous plant. 3. The mode of nutrition in mushrooms. 4. The indicator used to test the presence of starch in leaves. **II) Write True or False:** 1. Some fungi are used in medicines. 2. Most of the pulses are obtained from leguminous plants. 1 3. Cuscuta (Amarbel) is a host.] 4. Lichens, an alga and a fungus show symbiotic relationship. [] 5. In desert plants, green stems carry out photosynthesis. III) Define the following 1. Autotrophs 2. Saprotrophs

- 3. Heterotrophs
- 4. Nutrition

IV) Diagrams:

- 1. Cell
- 2. Photosynthesis in plants.

Chapter 2: Nutrition in Animals

Fill in the blanks:

1. The mode of taking food into the body is called
2. In the process of food is broken down in to simpler substances.
3. The canal start with mouth and ends in anus.
4glands are present in mouth.
5. Saliva helps in the digestion of in food.
6 are the sensory cells present in mouth.
7. The digestive juices of the stomach digest the in the food.
8. Thereleased by the bacteria in the mouth causes tooth decay.
9. Liver secretes and helps in the digestion of in the food.
10. During the process of digestion, the carbohydrates break down to, the proteins into
and the fats into
11. Faecal matter is removed from the body by the process of
12 of amoeba helps to capture food.
13. The patient suffering diarrhea should be treated with
14. We get hiccups or cough, if by chance food particles enters the
15. Partially digested food in the rumen of herbivores is called
16. The process of utilizing absorbed food particles(nutrients) into the living cells is called
·
II) Name the following:
1. 4 types of teeth.
2. Digestive glands in human body.
3. Acid produced in stomach.
4. Scientist who discovered the working of stomach.
5. The sac like structure present between the small intestine & large intestine in ruminants.
True or False :
1. Canines are meant for tearing flesh.[]
2. Oesophagus is also known as food pipe.[
3. Mouth cavity contains teeth and salivary glands only.[
4. Deer is a ruminant.[
5. Large intestine is longer than small intestine. [
Define:
1. Digestion. 2. Rumination
Distinguish between: Milk teeth and permanent teeth
Draw and label: The human digestive system 2) The feeding and digestion in Amoeba

Chapter 3: Fibre to Fabric

chapter 5.1 lbre to rabile				
1. Wool is obtained from the of the sheep or yak.				
2 is the name of the breed of sheep from which we get Kashmiri shawls.				
3. By the process of we get off springs with special characters.				
4. Washing of sheared skin is known as				
5. In the hairs of different textures are separated.				
6. Silk fibre is made up of a				
7. The silk fibre is obtained from the covering of pupa known as				
8. The larva of silk worm are called				
9. Inside cocoon, the pupa develops into				
Name the following:				
1. Two wool giving animals.				
2. Two Indian breeds of sheep.				
3. Two types of silk.				
4. Name the most common silk.				
5. Bacterium which causes sorter's disease.				
6. The country from where silk industry started.				
7. Process of taking out silk – threads from cocoon.				
Write true or false:				
1. Soft silk yarn is strong as comparable thread of steel.				
2. Shearing hurts the sheep.				
3. Small fluffy fibres are called burrs.				

Define:

- Shearing
- Seri culture.
- Selective breeding
- Rearing

Chapter 4: Heat

Fill	in	the	bl	an	KS	:

1.	is a device used for measuring temperature.
2.	The materials which allow heat to pass through them easily are of heat.
3.	Clinical thermometer is used to measure our
4.	Wool is poor of heat and it has air trapped in between the fibres.
5.	In generally the heat is transferred by conduction.
6.	metal is used in the bulb of the thermometer.
7.	The normal temperature of the human body is

True or False:

- 1. The materials which do not allow heat to pass them easily are called insulators.
- 2. In liquids and gases the heat is transferred by conduction.
- 3. A kink near the bulb of a clinical thermometer prevents mercury level from falling of its own.
- 4. We get heat from the sun by radiation.
- 5. Digital thermometers contain mercury.

Define:

- 1. Temperature 3. Conduction
- 2. Radiation 4.Convection

Name the following:

- 1. The movement of cool air from land towards sea.
- 2. Two conductors of heat
- 3. Two insulators of heat

Distinguish between

- Conductors and insulators.
- Clinical and laboratory thermometer

Diagram

❖ Clinical Thermometer Laboratory Thermometer.

Chapter 5: Acids, Bases and Salts

Fill in the blanks:

1.	Spinach contains acid while tamarind contains _	acid.
2.	The gas which escapes out from many aerated soft drink is	
3.	Carbon burns in air to form	
4.	The chemical name of lime water is	
5.	is the reaction between an acid and base.	
6.	An aqueous solution of sodium oxide changes	litmus to blue.
7.	Phenolphthalein indicator turns acidic solutions to	and basic solutions to
	·	
8.	The chemical name of moist baking soda is	
9.	Calamine solution contains(a base).	
10	Litmus is obtained from the	
11	.Curd contains while vinegar contains	-
	Complete the following word equations:	
1.	. Zinc + hydrochloric acid+	
2.	. Sodium hydroxide + Hydrochloric acid+	-
3.	. Calcium hydroxide + sulphuric acid+	
	ow Folgo	

True or False:

- 1. All acids turn blue litmus red. True / False
- 2. Neutral solution can change the colour of litmus. True / False
- 3. Orange juice turns blue litmus red. True / False
- 4. Substances which are neither acidic nor basic are called neutral. True/ False
- 5. An acid and a base neutralize each other and from a salt. True / False.
- 6. China rose indicator turns acidic solution to green. True / False

Name the following:

- 1. Two natural indicators.
- 2. One artificial indicator
- 3. Two pollutants in the air which causes acid rain.
- 4. Two substances which can neutralize an ant's bite.
- 5. Two acids found in citrus fruits.

Define

- 1. Indicators
- 2. Neutral solution

Chapter 6: Physical and Chemical Change

Fill in the blanks:

1.	Changes that lead to the formation of new substances are called
2.	Melting of candle wax is a change but its burning is a
	change.
3.	Growth of a plant is a change while formation of clouds is a
	change.
4.	A brown layer formed when an iron article is left exposed in air in an open area is called
5.	Large crystals of pure substance are obtained by
6.	The brown layer deposited on an iron nail dipped in copper sulphate solution is due to

Name the following

- 1. Write the chemical formula of lime water.
- 2. Write the chemical name of Mg(OH)₂
- 3. Write the chemical name and formula of rust.
- 4. Write the chemical name of blue vitriol.

Complete the following chemical reactions:

- 1. Magnesium oxide (MgO) + water (H₂O)
- 2. Iron (Fe) +oxygen (O_2) + water (H_2O)
- 3. Carbondioxide (CO₂) + Lime water [Ca(OH)₂] +
- 4. Copper sulphate + Iron _____ + ____

Define

- 1. Crystallization
- 2. Galvanization

Distinguish between

1. Physical change and chemical change

Chapter 7: Weather, Climate and Adaptations of animals to climate

Fill in the	e blanks:
1.	is the measure of moisture in air.
2.	The weather reports are prepared by the department of the government.
3.	The day today condition of the atmosphere is a place is called at that place.
4.	The maximum temperature of the day occurs in the while minimum temperature
	occurs in the
5.	Polar regions are situated near and tropical region is situated around the
6.	Special features of an animal to live in its surrounding is called
7.	Penguins are good swimmer because their bodies are and their feet have
8.	All the changes in the weather are driven by the
9.	One of the important feature of tropical region is
10.	The regions are very cold throughout the year.
11.	The temperature, humidity, rainfall and other factors are called of
	the weather.
12.	The typical desert climate is and
13.	The climate of the north-east of India is
14.	is a means which is adapted by some birds to escape the harsh, cold
	conditions.
Name t	he following
1.	An instrument used to measure rainfall.
2.	The thermometer used to record maximum and minimum temperature.
3.	Two animals living in polar regions.
4.	Two animals living in tropical regions.
5.	Two animals with ability to camouflage with the surroundings.
Choose	the correct answer :
1.	Long tailed macaque is also known as (Beard ape / Monkey)
2.	(Weather / Climate) changes frequently.
3.	Tusks of elephants are modified (teeth/bones)
Write tru	ue or false :
1. N	Iammals, many types of fish and insects are also known to migrate seasonally.
2. P	olar regions doesn't see the sun for six months.
3. D	ays are longer than nights in winter.
Define th	e following :
$\triangleright V$	Veather
≽ C	limate
> A	daptation.

Chapter 8: Winds, Storms and Cyclones

Fill in the blanks:

1	around us exerts pressure.		
2. I	Difference of temperature between two regions sets	_ in air.	
3. I	Increased wind speed is accompanied by air pressur	e.	
4. <i>A</i>	Air moves from the region where the air pressure is	to the region where the pressu	ıre
	is		
5. <i>A</i>	Airon heating andon cooling.		
6. 7	The warm air is than the cold air.		
7. t	Uneven heating on the earth is the main cause of	_	
8. V	Winds carrying bring rain.		
9. 7	The word monsoon is derived from the Arabic word	which means season.	
10.	. The monsoon winds carry and it rains.		
11.	. Falling water droplets along with rising air create lightning	and sound and is known	as
12.	. High speed winds and air pressure difference can cause		
13.	. The calm area in the centre of a cyclone is called		
14.	. A cyclone is called a in the American	continent and	in
	Japan and Philippines.		

Name the following

- 1. A dark funnel shaped cloud that reaches from the sky to the ground.
- 2. The instrument that measures the wind speed
- 3. Two modern technologies that help us to monitor cyclones.
- 4. The coastline of India that is more vulnerable to cyclones.

Define the following:

- 1. Cyclone
- 2. Tornado
- 3. Thunderstorm

Choose the correct answer:

- 1. In India, monsoon wind blows in south west direction in (summer/winter).
- 2. In winter, the direction of wind is from (land to ocean/ocean to land).
- 3. A cyclone watch is issued (24/48) hours in advance of any expected storm.
- 4. (Thunderstorms/tornadoes) are frequent in India.

9: SOIL

I.	Fill in the blanks:
1.	The rotting dead matter in the soil is called
2.	A vertical section through different layers of the soil is called
3.	The mixture of and humus is called the soil.
4.	Percolation rate of water is the highest in the soil and least in
	thesoil.
5.	The best top soil for growing plants is
6.	The removal of land surface by water, wind or ice is known as
II.	Write True or False :
1.	If the amount of large and fine particles is about the same, then the soil is called loamy soil.
2.	The layer which is hard and difficult to dig with spade is called top soil.
3.	Sandy soil is used to make pots, toys and statues.
4.	Soil is affected by climatic factors.
5.	The soil which is light, well aerated and rather dry is clayey soil.
6.	In deserts, soil erosion occurs through wind.
7.	Cotton is grown in sandy loam soil.
8.	Soil erosion takes place in areas of heavy vegetation.
III	Name the following:
1.	Two agents of weathering.
2.	The uppermost layer of soil.
3.	The type of soil that can hold more water.
4.	The soil which is a mixture of sand, clay and silt.
5.	Three agents of soil erosion.
IV	Define the following:
1.	Soil
2.	Weathering

Soil Profile

3.

10: RESPIRATION IN ORGANISMS.

I.	Fill in the blanks:
1.	Breathing is a part of
2.	Breathing involves the movement of the and
3.	The food has which is released during respiration.
4.	The accumulation of causes muscle cramps.
5.	Yeast can survive in absence of oxygen, they are called
6.	The taking in of air rich in oxygen into the body is called
7.	is the food which is broken down in respiration to release energy.
II.	Write true or false:
1.	Cellular respiration takes place in all the cells of living organisms.
2.	All living organisms respire to get energy from food.
3.	Our muscle cells do anaerobic respiration only when there is temporary deficiency of
	oxygen.
4.	Breathing involves the movement of the diaphragm and the rib cage.
5.	Whales and dolphins have gills for breathing.
6.	Gills are projections of the skin.
7.	The percentage of carbon dioxide is higher in inhaled air in comparision to exhaled air.

- 8. We often feel hungry after a physical exercise.
- 9. Increased physical activity reduces the rate of breathing.
- 10. Elephants, snakes and birds have lungs for breathing.

III. Define the following:

- 1. Breathing.
- 2. Cellular respiration.

IV. Name the following:

- 1. Tiny pores on the surface of leaves for exchange of gases.
- 2. An organism with tracheal system.
- 3. Skeletal structures surrounding the chest cavity.
- 4. An aerobic organism.
- 5. The breathing organ of earthworm.
- 6. The openings through which we inhale.
- 7. The anaerobic organism used in production of beer and wine.

V. Answer the following:

- 1. Why do all animals respire? -2marks.
- 2. Describe the mechanism of breathing in humans. -5marks.
- 3. Describe the process of respiration in cockroach. -5marks.

VI. Draw and label:

1. The human respiratory system.

11 TRANSPORTATION IN ANIMALS AND PLANTS

FILL IN THE BLANKS

1.	The fluid part of blood is called
2.	Blood is red in colour due to the presence of a pigment called
3.	The cells in our body fight against germs.
4.	help in clotting of blood.
5.	The number of heart beats per minute is called
6.	The waste dissolved in water is removed as
7.	The filtering of blood through an artificial kidney is called
8.	Salts and urea is removed along with water as
9.	carry blood from the heart to all parts of the body.
10.	carry blood from all parts of the body to the heart.
11.	is the instrument to amplify the sound of the heart.
NAN	THE FOLLOWING:
1.	The organ which pumps blood.
2.	The chambers of heart.
3.	The scientist who discovered blood circulation.
4.	The parts of excretory system.
5.	A group of cells that perform a particular function.
6.	The vein which carries oxygen rich blood to the heart.
7.	The artery which carries carbon dioxide rich blood away from the heart.
8.	The vascular tissues in plants.

CHOOSE THE CORRECT ANSWER:

- 1. Pulmonary (vein / artery) carry pure blood.
- 2. (Ammonia / urea) is the excretory waste in fishes.
- 3. Phloem helps in the transport of (food / water)in plants.
- 4. Birds excrete (urea / uric acid).
- 5. (Right / Left)side of the heart carries oxygen rich blood.
- 6. Blood is a (solid/liquid) tissue.
- 7. (William Harvey / William Beaumont) discovered the circulation of blood in humans.
- 8. (Photosynthesis /Transpiration) is the process responsible for suction pull in plants.

WRITE TRUE OR FALSE:

- 1. WBC transports oxygen.
- 2. Pulse rate indicate the rate of heart beat.
- 3. Pure blood is circulated through the left part of heart.
- 4. Xylem helps in the transport of food in plants.
- 5. Hydra and sponges posses blood circulatory system.
- 6. Human urine consists of 95% water, 2.5% urea and 2.5% other waste products.

DEFINE: 1. Excretion

DISTINGUISH: 1. Arteries and veins 2. Xylem and Phloem

DIAGRAMS:

- 1. Schematic human blood circulatory system
- 2. Human excretory system

12 : REPRODUCTION IN PLANTS

I.	Fill in the blanks:
1.	Male reproductive part of a plant is
2.	Plants produce seeds as a result of reproduction.
3.	Asexual reproduction in spirogyra is
4.	Mustard and Rose have flowers.
5.	The seeds develop from the
6.	Production of new individuals from vegetative parts of a plant is called
II	Write True or False:
1.	Yeast is a single celled organism.
2.	The zygote develops into an embryo.
3.	The production of new individuals from their parents is known as respiration.
4.	Pistil is the female reproductive part of a plant.
5.	Corn and Papaya produce bisexual flowers.
6.	Plants produce seeds as a result of asexual reproduction.
7.	The fruit is a ripened ovary.
8.	In asexual reproduction, only one parent is involved.
III	Name the following:
1.	Two types of pollination seen in flowers.
2.	Two seeds dispersed by animals.
3.	Asexual reproduction in yeast.
4.	Two spore producing plants.
5.	Two winged seeds
IV	Define:
1.	Pollination
2.	Fertilisation
3.	Reproduction
V	Distinguish:

Unisexual and bisexual flowers.

13: MOTION AND TIME

Fill in the blanks:
The distance moved by an object in a unit time is called its
Basic unit of measuring speed is
events are used for the measurement of time.
A consists of a small metallic ball or a piece of stone suspended from
a rigid stand by a thread.
The metallic ball is called the of the pendulum.
The to and fro motion of a simple pendulum is an example of a or an
motion.
Meter that measures the distance moved by the vehicle is known as
Motion of objects can be presented in pictorial from by their
Rockets, launching satellites into earth's orbit often attain speeds up to
Km/s.
The basic unit of time is
Write true or false :
A year was fixed as the time taken by the earth to complete one revolution of the sun.
A nanosecond is one billionth of a second.
The motion of a pendulum is an example of non-periodic motion.
In ancient time people used to measure time with help of clock or wristwatch.
The time taken by the pendulum to complete one oscillation is called its time period.
The graph for non-uniform motion is a curve line.
Name the following:
Name any two ancient – time measuring devices.
Name the scientist who discovered pendulum.
Name the meter in vehicles which records the speed directly in Km/h.
Name the ancient clock located at Jantar Mantar, Delhi.
Define the following:
Motion
Speed
Oscillation
Distinguish between:
Uniform motion and Non-uniform motion.

14 : ELECTRIC CURRENT AND ITS EFFECTS

I Fill in the blanks:

1.	A thin wire in the bulb that glows when an electric current passes through
	is called the
2.	When the bulb gets, its filament is broken.
3.	The coil of wire in an electric heater is known as
4.	The amount of heat produced in a wire depends on its,,
	and
5.	When an electric current flows through a wire, it behaves like a
	·
6.	Theof an electric bell acts as an electromagnet in its working
	~

II State whether the following statements are True or False:

- 1. When the electric current is switched off, the coil generally loses its magnetism.
- 2. The wires used for making electric circuits do not normally become hot.
- 3. The filament of an electric bulb never gets heated.
- 4. In a battery, the electric cells are always placed one after the other.
- 5. Connecting many devices in a single socket does not affect the flow of current in a circuit.
- 6. Wear and tear of insulated wires can cause short circuits.
- 7. CFLs consume more electricity than ordinary bulbs.

III Name the following:

- 1. The name of the scientist who first noticed the magnetic effect of current.
- 2. The switches being used in place of fuses.
- 3. A diagram made using symbols of electric components.
- 4. The mark of safety necessary on electrical appliances.

IV Define:

- 1. Battery
- 2. Electromagnet
- 3. Fuse

15 : LIGHT

I.	Fill in the blanks:
1.	The change in the direction of light by a mirror is called
2.	The image formed by a lens is always virtual, erect and
	smaller in size.
3.	White light is composed of colours.
4.	The image of an object formed by a cannot be obtained on a
	screen.
5.	are used by dentists to see an enlarged image of the teeth.
II	Name the following:
1.	An image that can be obtained on the screen -
2.	The lens which feel thinner in the middle than at the edges -
3.	The lens known as magnifying glass -
4.	The lens known as diverging lens -
5.	The mirror which can form both real as well as virtual images.
6.	The large arc of seven colours VIBGYOR in the sky.
III	State whether True or False:
1.	The image formed by a plane mirror is inverted -
2.	A convex lens is thicker in the middle than at the edges -
3.	A concave mirror always forms real image -
4.	Any polished or shining surface can act as mirror -
IV	Define:
	Reflection of light
\mathbf{V}	Distinguish:
	Real image & Virtual image

16: WATER: A PRECIOUS RESOURSE

I	Fill in the blanks:
1.	The in the soil indicates the presence of underground water.
2.	Water in the aquifers can be usually pumped out with help of or
3.	was the traditional way of collecting water.
4.	Shortage of has become a matter of concern.
II	Write True or False:
1.	Celebration of water day is to attract the attention of everybody towards the importance of conserving water.
2.	76% of the earth's surface is covered with water.
3.	Glaciers are the solid form of water.
4.	Excessive rains cause droughts whereas the absence of rains results in floods.
III	Define:
1.	Drip irrigation.
IV	Diagram:
	Ground water and Water table

17 - FOREST: OUR LIFE LINE

Fill in the blanks:
Decomposers convert dead plants and animals into
Tall trees which look like roof over other plants in the forest is called
·
The various components of the forests are on another.
Forests are the for the forest dwelling communities.
help forest to grow and regenerate.
forms the uppermost layer in the forest.
State whether True or False:
The different horizontal layers in the forest are known as under storeys.
Forest help in causing floods.
Forest are called green lungs.
The type of animals remain same from forest to forest.
Deforestation will endanger our life and environment.
Forest is a dynamic living entity.
Name the following:
The branchy part of a tree above the stem.
Two forest products.
The lowest layer of vegetation in a forest.
Define:
Forest.
Deforestation.
Canopy.
Crown

18: WASTE WATER STORY

I.	Fill in the blanks:
1.	Waste water is treated in a
2.	The sludge is decomposed by bacteria.
3.	and contaminated drinking water is the cause of a large
	number of diseases.
4.	The process of waste water treatment is known as
5.	Sewage is a waste.
6.	The activated sludge is about % water.
7.	The suspended impurities dissolved in swage are called
II	Name the following:
1.	The nutrient present in sewage.
2.	By products of waste water treatment.
3.	A plant which can absorb waste water rapidly and release pure water
	vapour to the atmosphere.
4.	Solid waste extracted in sewage treatment.
5.	Any two water borne disease.
6.	Expand WWTP.
III	State whether True or False:
1.	Urea is an inorganic impurity present in sewage.
2.	Sewerage is a transport system that carries sewage to the treatment plant.
3.	Chemical toilet is a low cost onsite sewage disposal system.
4.	Sewage is solid waste which causes water and soil pollution.
5.	Untreated human excreta is a health hazard.
