

Pon vidyashram

Class VII- Science Worksheet(1)

PHYSICS--ELECTRIC CURRENT & ITS EFFECTS

I)Answer the following:

- Q.1. Name the device which helps in breaking or completing a circuit?
- 2) Name the heating element used in electric heater.
- 3)Name the material used for making filament of electric bulb.
- 4, who observed the magnetic effect of current for the first time?
- 5,. Name the alloy used for making fuse wire.
6. When the bulb is said to be fused?
- 7: Explain the function of cell in a circuit.**

II Answer the following:

8. Draw a circuit diagram showing a bulb, a closed switch & a battery of four cells. Also show the direction of current flowing through the circuit.
- .9. What do you understand by the 'heating effect of current' explain with an example.
10. On what factor does the amount of heat produced by the current depend upon?
11. What is an electric fuse? How it is connected in a circuit?
12. What do you understand by magnetic effect of current?
- 13 What is an electromagnet? State the various uses of an electromagnet.
- 14) Give reason:
 - a) An electric bulb gives out light when connected in a circuit & switched on.
 - b) Air is not filled inside electric bulb.
 - c) Can fuse wire be replaced with copper wire .

15. Arun made an electric circuit & placed a magnetic compass near it.

(a) On switching on, the needle of the magnetic compass showed a deflection Why?

(b) On switching off, the needle came back to its normal north-south direction. Why?

16) Differentiate between open and closed circuit with a neat diagram.

17, Write short notes on:

a)short circuit

b)Overloading

18) How the strength of a solenoid can be increased?

Long Answer Question

19. Explain the construction & working of an electric bell with a neat diagram.

20: Explain an activity to show the magnetic effect of electric current?

BIOLOGY -- Nutrition in Animals

I)Answer the following:

- 1) How does starfish feed?
- 2) What does inner line of stomach secrete?
- 3) Which breakdown the proteins into simpler substance?
- 4) What should be given to the diarrhea patient instantly before consulting a doctor?
- 5) What is meant by assimilation?
- 6) What is meant by rumen?
- 7) Why do we get instant energy from glucose?
- 8) What are ruminants?
- 9) How does amoeba ingest its food and where it is digested?

II Fill in the blanks.

- 1) The main steps of digestion in humans are _____, _____, _____, _____ and _____.
- 2) The largest gland in the human body is _____.
- 3) The stomach releases hydrochloric acid and _____ juices which act on food.

- 4) The inner wall of the small intestine has many fingers like outgrowths called _____.
- 5) Amoeba digests its food in the _____.

II)) Answer the following

- 1) Name the type of carbohydrate than can be digested by ruminants but not by humans. Give the reason also.
- 2) Why do we feel hiccup or choking sensation while eating food?
- 3) Can we survive only on raw, leafy vegetable/grass?
- 4) Draw the labeled diagram of human digestive system
- 5) Does digestion of food in all organisms occur inside the body? Justify your answers.
- 6) How does the mechanical and chemical digestion of food take place in buccal cavity?
- 7) Why is the small intestine so long?
- 8) The basic process of digestion and release of energy is same in almost all animals. Justify.
- 9) Cows and buffaloes are usually seen chewing continuously even when they are not grazing. Explain
- 10) Draw a diagram to show the different steps involved in the process of nutrition in amoeba.

Chemistry: Waste water management:

I Answer the following:

- 1) What removes the floatable solid like oil and grease?
- 2) Which disposal systems are encouraged to improve sanitation nowadays?
- 3) What type of toilet is used in aero plane?
- 4) What is meant by vermin composting toilet?
- 5) Define the term contamination?
- 6) Why should we plant eucalyptus trees all along sewage ponds?
- 7) Why are manholes located in sewage?
- 8) Define algal bloom?
- 9) Waste water released from kitchen is called sullage water- why?
- 10) Name 2 chemicals used to disinfect water.

II

Answer the following:

- 1) Why should oil and fats not be poured into drains?
- 2) Write about Ganga action plan?
- 3) How is biogas prepared?
- 4) What happens when clarified water is passed through aeration tank?
- 5) Outline your role as an active citizen in relation to sanitation?
- 6) Contamination of drinking water can occur if closed pipes are used for drainage of sewage. Is this always true?

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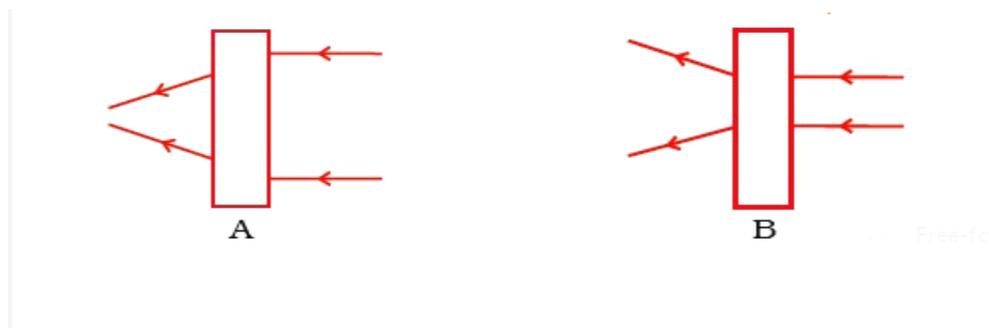
Class VII- Science Worksheet(2)

PHYSICS--LIGHT

II Answer the following:

1. State the principle used in creating a mirror image.
2. What happens when light rays are incident on a concave lens?
3. Name 3 primary colors.
4. Mention two uses of concave mirror and convex lens.
5. What do you understand by the spectrum of white light?
6. What happens when parallel rays of light fall on a curved reflecting surface?
7. Differentiate between real and virtual image.
8. Difference between concave and convex lens.
- 9) Difference between concave and convex mirror.
10. Characteristics of image formed by plane mirror.
11. What is refraction? Explain with example.
12. Out of convex mirror and concave mirror, for which mirror focus is situated behind the mirror?
- 13) How rainbow is formed in the sky?
- 14) The distance between the object and plane mirror is 5 m calculate the distance between the object and image?
- 15) How does light enable us to see objects around us?
- 16) The distance between an object and plane mirror is 25 cm what is the distance between image and mirror?

17) What is the nature of lens in rectangular box A and B



C. Give reasons for the following:

1. Image formed by a pinhole camera is inverted.
2. Newton's disc appears white when it is rotated.
3. Convex mirrors are used as rear-view mirrors.
4. Concave mirrors are used as makeup mirrors.
5. Convex mirrors are used in street light.
6. Concave mirrors are used in headlight of cars/Torches.
7. Convex lens are used in microscope.

F. Define the following:

1. Focus of a concave mirror
2. Principal axis of a spherical mirror
3. Pole of a concave mirror
4. Reflection.
6. Refraction.
7. Dispersion of light.
8. Spherical mirrors.

CHEMISTRY—ACID ,BASES AND SALT

I Answer the following:

1) Write any one source of following Acid:

A, citric acid b)Acetic acid c)Lactic acid d)tartaric acid e)Maleic acid f)oxalic acid

2) What is the chemical name for the following

a)Caustic soda b)Washing soda c)Milk of magnesia d) Slaked lime

e) Baking soda

3) Give examples of two natural and artificial indicators.

4) What is meant by effervescence?

5) How does acid rain becomes acidic?

6) Why does turmeric stain on a cloth turns red when it is washed with soap?

7) Write the effects of blue litmus paper in the following solution and also state the nature of solution

a) Detergent solution b) Sugar solution, c) milk of magnesia

d) Aerated Drink e) vinegar

II Answer the following:

1) Why plants do not grow well when the soil is too acidic or too basic?

2) What steps do you take to get rid of indigestion?

3) Why is acid not stored in metal container?

4) All alkalis are bases but all bases are not alkalis. Justify your answer.

5) What is neutralization reaction? Give 2 examples.

6) Why does milkman usually add a very small amount of baking soda to fresh milk during summer?

7) Baking soda is used to treat bee sting while vinegar is used to treat wasp sting, based on this information what is the difference in chemical nature of wasp sting and bee sting?

BIOLOGY --Animal Fibers – Wool & Silk

I. Answer the following:

1. Why it hurts when someone pulls the hair, but not when one goes for a haircut?
2. Write the two types of fibers obtained from sheep.
3. How is sorter's disease caused?
4. Write three types of silk.
5. Which material forms the base of vegetable fibers?
6. Name the bacterium that causes anthrax. Which organisms are affected by this disease?
7. Name the two proteins which contribute maximum to the composition of silk fiber.
8. Which glands of the silkworm secrete protein across silk fiber?

II . Answer the following:

1. Why a cotton garment cannot keep us warm in winter as a woolen sweater can?
2. What is a bioclip? How is it different from shearing?
3. How is shearing helpful to sheep?
4. Why is it necessary to kill the pupae by boiling cocoon in water at the right time?
5. Why do wool yielding animals have a thick coat of hair?
6. Why is the silk considered as the strongest natural fiber?

BIOLOGY-- RESPIRATION IN PLANTS AND ANIMALS

I. Answer in one sentence:

1. How can yeast survive in the absence of air?
2. Where does cellular respiration take place?
3. Name the end product of anaerobic respiration in yeast.
4. Why does an athlete breathe faster and deeper than usual after finishing the race?
5. Name the skeletal structures surrounding chest cavity.
6. Name the tiny openings on the side of the body of an insects.
7. Name an organism with tracheal system.
8. Why we should not pour more water in potted plants.
9. write the chemical reaction for aerobic respiration
10. Write the chemical reaction for anaerobic respiration.

II. Answer the following:

1. Why we should inhale only through nose and not through mouth?
2. Why do all living organisms need to respire?
3. How do we get relief from cramps after a hot water bath or massage?
4. What is the utility of diaphragm in respiration in human beings?
5. Draw a well labeled diagram of human respiratory system.
