

**INTERNATIONAL INDIAN SCHOOL DAMMAM**  
**GENERAL SCIENCE CLASS- VII (2017-18)**  
**L-5 : ACIDS, BASES AND SALTS WORKSHEET**

**I. NAME THE FOLLOWING**

1. Substances which are bitter in taste and feel soapy on touching.
2. Any 3 naturally occurring indicators.
3. Name the acid present in vinegar.
4. Acid present in ant's sting.
5. Acid present in the curd.
6. An antacid.
7. Chemical name of lime water.
8. The base present in the soap.
9. The solution which is neither basic nor acidic.
10. Chemical name of slaked lime.
11. Any 2 acids present in acid rain.
12. A colourless indicator used in lab.
13. Chemical name of milk of magnesia.
14. The base which is added when the soil is too acidic.
15. The acid present in the cell which controls every feature of the body.

**II. FILL IN THE BLANKS**

1. \_\_\_\_\_ acid is present in Tamarind and Grapes.
2. Litmus paper turns \_\_\_\_\_ colour in acidic solution while \_\_\_\_\_ colour in basic.
3. Vitamin C is also known as \_\_\_\_\_.
4. China rose indicator turns acidic solution to \_\_\_\_\_ colour.
5. Litmus is extracted from \_\_\_\_\_.
6. Phenolphthalein turns \_\_\_\_\_ colour in basic solution. It remains \_\_\_\_\_ in acidic solution.
7. Proteins are made of \_\_\_\_\_.
8. Complete the equation Acid + Base  $\longrightarrow$  \_\_\_\_\_ + water
9. Sodium hydrogen carbonate is commonly known as \_\_\_\_\_.

### **III. CORRECT THE STATEMENT**

1. When the soil is basic it is treated with quick lime.
2. In acidic solution phenolphthalein gives pink colour.
3. China rose indicator turns basic solutions to magenta colour.
4. Spinach contains citric acid.

### **IV. DEFINE THE FOLLOWING**

1. Indicators
2. Neutral Solution
3. Neutralisation
4. Acid Rain

### **V. MATCH THE FOLLOWING**

- |                      |                      |
|----------------------|----------------------|
| 1. Acid Rain         | -Calcium oxide       |
| 2. Slaked Lime       | -Sulphur dioxide     |
| 3. Sodium Chloride   | -Calcium hydroxide   |
| 4. Quick Lime        | -Magnesium hydroxide |
| 5. Milk of Magnesia  | -Zinc carbonate      |
| 6. Calamine solution | -Salt                |

### **VI. CHOOSE THE CORRECT ANSWER**

1. Which one of the following does not cause acid rain?  
a) Carbon dioxide b) Calcium oxide c) Nitrogen dioxide d) Sulphur dioxide
2. Which one of the following is acidic in nature?  
a) Vinegar b) Lime Water c) milk of magnesia d) Soap
3. Which one of the following is basic in nature?  
a) Curd b) Vinegar c) Tamarind d) Soap
4. Calcium hydroxide is called as \_\_\_\_\_  
a) lime water b) quick lime c) slaked lime d) none of these

**INTERNATIONAL INDIAN SCHOOL, DAMMAM**  
**SUBJECT: GENERAL SCIENCE CLASS VII (2017-18)**  
**PHYSICAL AND CHEMICAL CHANGES –WORKSHEET L- 6**

**FILL IN THE BLANKS:**

1. \_\_\_\_\_ and \_\_\_\_\_ are the two kinds of general changes that take place in our surroundings.
2. On burning magnesium ribbon the ash formed is \_\_\_\_\_.
3. The nature of magnesium hydroxide is \_\_\_\_\_.
4. The turning of lime water milky is the standard test of \_\_\_\_\_.
5. When magnesium oxide is dissolved in water \_\_\_\_\_ is formed.
6. The reaction of copper sulphate with iron produces \_\_\_\_\_ & \_\_\_\_\_.
7. \_\_\_\_\_ absorbs ultra violet radiation and breaks down to oxygen.

**NAME THE FOLLOWING:**

1. The gas produced when baking soda is added to vinegar.
2. The natural protective shield to human beings against radiation.
3. The mixture of chromium nickel, manganese carbon and iron.
4. Give another name for chemical change
5. Common name of Sodium hydrogen carbonate
6. A change in which one or more new substances formed.
7. A brownish film acquired on iron when kept in open.

**MULTIPLE CHOICE QUESTIONS:**

1. The process of depositing a layer of zinc on iron is called \_\_\_\_\_.  
(Galvanisation, Rusting, Crystallisation)
2. All the new substances are formed as a result of \_\_\_\_\_.  
(Physical change, Chemical change, Physical reaction)
3. \_\_\_\_\_ is always accompanied by the production of heat.  
(Rusting, physical change, burning)
4. When  $\text{CO}_2$  is passed through lime water \_\_\_\_\_ is formed.  
(Calcium hydroxide, Calcium Carbonate, Sodium carbonate)
5. The properties such as shape, size, colour and state of a substance are its \_\_\_\_\_.  
properties. ( Physical, Chemical, None of these)
6. \_\_\_\_\_ Change is irreversible and permanent.  
(Physical, Chemical, Both)
7. \_\_\_\_\_ affects iron articles and slowly destroys them.  
(Galvanization, Rusting, Burning)
8. The process of forming large crystals of pure substances from solution.  
( Galvanisation, Rusting , Crystallisation)

**WRITE TRUE OR FALSE. IF FALSE CORRECT THE STATEMENT**

- 1) Rust is iron.
- 2) Magnesium hydroxide changes blue litmus red.
- 3) Iron sulphate solution is blue in colour.
- 4) Explosion of a firework is a physical change.
- 5) Crystallization is a chemical change.

**GIVE THE CHEMICAL NAME OF**

- 1) Baking soda
- 2) Rust
- 3) Vinegar
- 4) Lime water

**GIVE THE CHEMICAL FORMULA OF**

- 1) Calcium carbonate.
- 2) Magnesium hydroxide
- 3) Iron oxide.

**COMPLETE THE EQUATIONS**

- 1) Magnesium (Mg) + \_\_\_\_\_  $\longrightarrow$  Magnesium oxide.
- 2) Magnesium oxide (MgO) + Water (H<sub>2</sub>O)  $\longrightarrow$  \_\_\_\_\_.
- 3) \_\_\_\_\_ + Iron  $\longrightarrow$  Iron sulphate solution + Copper.
- 4) Vinegar + Baking soda  $\longrightarrow$  \_\_\_\_\_ + other substances.
- 5) Carbon dioxide (CO<sub>2</sub>) + Lime water [Ca(OH)<sub>2</sub>]  $\longrightarrow$  \_\_\_\_\_ + water
- 6) Iron (Fe) + \_\_\_\_\_ + Water (H<sub>2</sub>O)  $\longrightarrow$  rust (Iron oxide Fe<sub>2</sub>O<sub>3</sub>).

**CLASSIFY AS PHYSICAL AND CHEMICAL CHANGE**

- 1) Burning of candle
- 2) Folding of a cloth
- 3) Curdling of milk
- 4) Photo synthesis
- 5) Digestion of food
- 6) Stretching of rubber band
- 7) Rusting of iron
- 8) Rolling of Chappati
- 9) Moving of furniture
- 10) Writing on the black board

**INTERNATIONAL INDIAN SCHOOL DAMMAM**  
**CLASS VII GENERAL SCIENCE WORKSHEET (2017-18)**  
**CHAPTER 7-WEATHER, CLIMATE AND ADAPTATIONS OF ANIMALS TO CLIMATE**

**I. FILL IN THE BLANKS**

1. Rainfall is measured by an instrument called rain gauge.
2. All the changes in the weather are driven by the sun.
3. Migration is a means to escape from the harsh and cold conditions.
4. Tropical animals have thick skin and skin colour to camouflage with their surroundings.
5. Siberian crane migrates from Siberia to Rajasthan when winter sets in.
6. The lion tailed macaque is also called as beard ape.
7. The tropical and the polar regions experience severe climatic conditions.
8. The maximum temperature of the day generally occurs in the afternoon.

**II. QUESTION AND ANSWERS**

1. Define weather

A] The day-to-day condition of the atmosphere at a place with respect to the temperature, humidity, rainfall, windspeed etc., is called the weather at that place.

2. Name the elements that determine the weather at any place?

A] Temperature, humidity, rainfall, speed and direction of wind.

3. Explain why the tropical rainforests have a large population of animals?

A] The climatic conditions in rainforests are highly suitable for supporting an enormous number and variety of animals.

4. How is the climate of a place defined?

A] The average weather pattern taken over a long period of time is called the climate of the place.

**III. MENTION THE ADAPTATIONS OF THE FOLLOWING :**

**Polar Bear** – Two thick layers of fur, wide paws, strong sense of smell and a layer of fat under the skin.

**Penguin** – Webbed feet, white colour, streamlined body and thick skin with fat under the skin.

**Red Eyed Frog** – Sticky pads on its feet.

**Toucan** – Long, large beak.

**Elephant** – Long trunk, tusks and large ears to hear very soft sounds and keep them cool.

**FACTS**

- **Soil** - soil is one of the important natural resources. The mixture of rock particles and humus is called soil. The rotting dead matter in the soil is called humus.

Soil is formed by the breaking down of rocks by the action of wind, water, and climate. This process is called **weathering**.

- **Soil Profile** - A vertical section through different layers of the soil is called the soil profile.
- **Horizons** - The soil profiles show three distinct layers. These layers are called horizons. Each layer of soil profile differs in feel (texture), colour, depth and chemical composition.

The uppermost layer of the soil is called the *A-Horizon* or *topsoil*. It is generally dark in colour as it is rich in humus and minerals. This layer is generally soft, porous and can retain more water.

The second layer is called *B-horizon* or *the middle layer* is more compact and harder than the topsoil. It has lesser amount of humus but more of minerals.

The third layer is the *C-Horizon*, which is made up of small lumps of rocks with cracks and crevices. Below the C-horizon is the *bed rock* which is hard and difficult to dig with a spade.

- **Types of soil:** The soil is classified on the basis of proportion of particles of various sizes.
- **Sandy soil** - the soil with about greater proportion of big particles in it is called sandy soil. Sandy soils tend to be light, well aerated and rather dry.
  - **Clayey soil** - the soil with large amount of clay particles in it is called clayey soil. Its water holding capacity is the highest among all soils.
  - **Loamy soil** - the soil with a mixture of humus, sand and clay is called *loam* or *loamy soil*. The best top soil for growing plants is loamy soil.
- **Percolation rate:** The amount of water absorbed by soil in unit time is called percolation rate. It is highest in the sandy soil and least in the clayey soil.

Different types of soils are used to cultivate different types of crops. Clay and loam are suitable for growing wheat, gram and paddy. Cotton is grown in sandy loamy soil.

**Worksheet(lesson - soil)**

**FILL IN THE BLANKS:**

1. A vertical section through different layers of soil is called \_\_\_\_\_.
2. The best top soil for growing plants is \_\_\_\_\_.
3. The uppermost layer of the soil is called \_\_\_\_\_.
4. The water holding capacity is highest in \_\_\_\_\_ soil.
5. Different layers of the soil are called \_\_\_\_\_.
6. \_\_\_\_\_ type of soil is suitable for growing cotton.
7. Percolation rate is highest in the \_\_\_\_\_ soil and least in \_\_\_\_\_ soil.
8. \_\_\_\_\_ layer of the soil has lesser amount of humus but more of minerals.
9. The mixture of rock particles and humus is called \_\_\_\_\_.
10. The rotting dead matter in the soil is called \_\_\_\_\_.

**ANSWER THE FOLLOWING:**

1. What is weathering?
2. What is humus?
3. Classify the soil on the basis of the size of the particles of the soil.
4. Explain soil profile.

**INTERNATIONAL INDIAN SCHOOL, DAMMAM**  
**CLASS VII SCIENCE -WORKSHEET (2017-18)**

**L-11 TRANSPORTATION IN ANIMALS AND PLANTS**

**Q1. NAME THE FOLLOWING**

1. The rhythmic contraction and relaxation of heart muscles. ....
2. Removal of waste products from the body is called .....
3. The major excretory product in humans .....
4. The device used by doctors to amplify the sound of the heart.....
5. The vascular tissue for transport of water and nutrients in plants .....
6. The two upper chambers of the heart-.....

**Q2. FILL IN THE BLANKS**

1. ....carry blood from all parts of the body to the heart.
2. Circulatory system consists of.....and.....
3. From the kidneys, the urine goes into the urinary bladder through .....
4. The walls of the chambers of the heart are made up of .....
5. Aquatic animals like fishes excrete waste substances as.....
6. Blood is red due to the presence of the pigment called.....

**Q3. WRITE TRUE OR FALSE, IF FALSE REWRITE THE CORRECT STATEMENT**

1. Arteries are the two lower chambers of the heart.
2. Birds and lizards excrete Uric acid in liquid form.
3. The red blood cells in the blood fight against the germs that may enter our body.
4. Water and mineral nutrients are absorbed by stems from the so...

**Q4. CHOOSE THE CORRECT ANSWER :**

1. The fluid part of the blood ( platelets, hemoglobin, plasma)
2. The vascular tissue for the transport of food to various parts of the plant.  
(Xylem, phloem, stomata)
3. Carbon dioxide is removed from the body through (Lungs, heart, kidneys)
4. The clot is formed because of the presence of .....in the blood.  
(RBC, platelets, WBC)
5. .... carry blood from the heart to all parts of the body. (Arteries, veins, xylem)
6. A lot of water is lost by plants through stomata during  
(Inhalation, exhalation, transpiration)

**Q5. ANSWER THE FOLLOWING QUESTIONS :**

1. The water kept in an earthen pot is cooler. Why?
2. What is the function of root hair?
3. Animals such as sponges and hydra do not possess circulatory system. Why?
4. Why is it necessary to remove the waste products from the body?

**INTERNATIONAL INDIAN SCHOOL-DAMMAM**  
**SUBJECT: GENERAL SCIENCE CLASS VII ( 2017-18)**  
**L-12 REPRODUCTION IN PLANTS WORKSHEET**

**FILL IN THE BLANKS**

1. Production of new individuals from the vegetative part of parent is called \_\_\_\_\_
2. The fusion of male and female gametes is known as \_\_\_\_\_.
3. Transfer of pollen grains from the anther to the stigma of the same or of another flower of the same kind is known as \_\_\_\_\_.
4. Seed dispersal takes place by means of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.
5. A flower that contains only the male reproductive parts is known as \_\_\_\_\_.
6. The small bulb like projection that comes out from the yeast cell is called \_\_\_\_\_.
7. The fertilized egg is called \_\_\_\_\_ and develops into an \_\_\_\_\_.
8. Ovary develops into \_\_\_\_\_ and ovules develop into \_\_\_\_\_.
9. \_\_\_\_\_ and \_\_\_\_\_ are examples of seeds dispersed by animals

**NAME THE FOLLOWING**

1. Transfer of pollen grains from anther to stigma of a flower.
2. Flowers which contain both stamens and pistil.
3. Production of new individuals from their parents.
4. Bulb like projections of yeast cell.
5. Plants that reproduce by means of spores.
6. Male reproductive part of a flower.
7. Female reproductive part of a flower.

**MULTIPLE CHOICE QUESTIONS**

1. The reproductive part of a plant is the \_\_\_\_\_  
a) leaf b) stem c) root d) flower
2. Ovule develops into \_\_\_\_\_  
a) seed b) fruit c) flower d) plant
3. Algae grows and multiplies rapidly by means of \_\_\_\_\_  
a) fragmentation b) spore formation c) budding d) fertilization
4. The process of fusion of the male and female gametes is called \_\_\_\_\_  
a) fertilization b) pollination c) reproduction d) seed formation
5. Bryophyllum can reproduce by its \_\_\_\_\_  
a) Stem b) leaves c) roots d) flowers

**MATCH THE FOLLOWING**

**COLUMN I**

ES  
WINGS  
ROSE  
BUD  
SPORES  
FRAGMENTATION

**COLUMN II**

MAPLE  
POTATO  
YEAST  
BREAD MOULD  
SPIROGYRA  
STEM CUTTING



**DIFFERENTIATE BETWEEN**

1. Self pollination and cross pollination
2. Sexual reproduction and asexual reproduction

**ANSWER THE FOLLOWING**

1. How does fertilisation take place in flowers?
2. Explain sexual reproduction.
3. Mention the vegetative and reproductive parts of a plant.
4. Mention the male and female reproductive parts of a flower.
5. State the differences between self pollination and cross pollination.
6. Explain the reproductive parts of a flower with schematic diagram.
7. Explain zygote formation with a diagram.

INTERNATIONAL INDIAN SCHOOL DAMMAM

CLASS: VII SUB: GENERAL SCIENCE WORKSHEET: (2017-18)

Electric current and its effects

**MULTIPLE CHOICE QUESTIONS:**

1. In constructing a battery:  
[a] Positive terminal of one cell is connected to the negative cell of the next cell.  
[b] Positive terminal of one cell is connected to the positive terminal of the next cell.  
[c] Negative terminal of one cell is connected to the negative cell of the next cell.  
[d] None of the above.
2. Position of a key or switch in a circuit is:  
[a] Left side of the battery [b] Right side of the battery  
[c] Can be placed anywhere in the circuit [d] Near the positive terminal of the bulb.
3. Which one of the following is based on the heating effect of current?  
[a] Geyser [b] Electric bell [c] Loud speaker [d] Crane
4. The thin wire in an electric bulb which glows, when electricity passes through it:  
[a] Component [b] Element [c] Circuit [d] Filament
5. The amount of heat produced in a wire depends on:  
[a] Material [b] Length [c] Thickness [d] All of these
6. What is the full form of MCB's:  
[a] Maximum current breakers. [b] Minimum current breakers  
[c] Miniature circuit breakers [d] Miniature current breakers
7. Which device is used to prevent damages to electrical circuits and possible fires:  
[a] Fuse [b] MCB's [c] Both [a] and [b] [d] None of these
8. Who discovered magnetic effect of current:  
[a] H.C Oersted [b] Fleming [c] Michael Faraday [d] Ohm
9. In an electric bell, which effect of current is used?  
[a] Heating effect [b] Magnetic effect [c] Chemical effect [d] None of these
10. A Filament of low melting point or alloy is used in:  
[a] Electric blub [b] Electric iron [c] Fuse [c] Room heater

**FILL IN THE BLANKS:**

1. A combination of two or more cells is \_\_\_\_\_
2. In a battery negative terminal of one cell is connected to the \_\_\_\_\_ terminal of the next cell.
3. In an electric circuit the bulb will not glow, when the switch is in the \_\_\_\_\_ position.
4. In the electric bulb, there is a thin wire called \_\_\_\_\_ which glows, when a electric current is passed.
5. The coil of a wire in an electric heater is called an \_\_\_\_\_
6. A \_\_\_\_\_ is a safety device which prevents damages to electrical circuits and possible fires.
7. The wire gets \_\_\_\_\_ when an electric current passes through it.
8. When electric current passes through a wire it, behaves like a magnet. It is the \_\_\_\_\_ effect of current.
9. Crane has a strong \_\_\_\_\_ attached to it.

**MATCH THE FOLLOWING:**

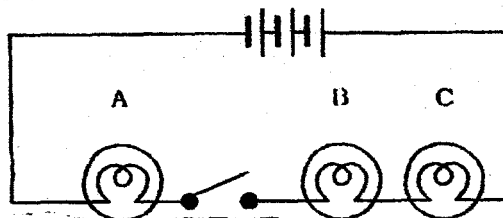
- |                |  |
|----------------|--|
| 1. Battery     | - Heating effect of electric current                       |
| 2. Element     | - Thin wire in the bulb                                    |
| 3. MCB's       | - Magnetic effect of electric current                      |
| 4. CFL         | - Combination of cells                                     |
| 5. Crane       | - Turns OFF, if current exceeds safe limit                 |
| 6. Fuse        | - Coil of wire which heats up when electricity is supplied |
| 7. Room Heater | - Consume less energy than a bulb                          |
| 8. Filament    | - Blow off if current exceeds safe limit                   |

**STATE TRUE OR FALSE. IF FALSE CORRECT THE STATEMENT:**

1. It is convenient to represent electric components by symbols.
2. A connecting wire is symbolized by a zig-zag line in the circuit diagram.
3. When the electric current, through the fuse exceeds a certain limit, the fuse wire melts and breaks.
4. A key or a switch can be placed anywhere in the circuit.
5. CFL's consume more electricity than ordinary bulbs.
6. A fuse is used to save energy in electrical circuits.
7. MCB's are the switches which automatically turn off, when current in a circuit exceeds the safe limit.
8. An electro magnet does not attract a piece of iron.

**ANSWER THE FOLLOWING:**

1. On which effect of electric current does Electric Iron work?
2. What is the use of MCB's?
3. Name any two devices based on the magnetic effect of electric current?
4. Who discovered magnetic effect of electric current?
5. How does the electric room heater works?
6. Why fluorescent tube lights and CFL's are preferred than ordinary electric bulbs?
7. What are the reasons of excessive current in our houses?
8. What are electric fuses and what is its importance?
9. How will you show that a wire carrying current produces magnetism?
10. In the circuit shown in the following figure, the bulb does not glow, how can you make the bulb glow?



- [a] Would any of the bulb glow, when the switch is in the OFF position?
- [b] What will be the order in which the bulb A, B, C will glow, when the switch is moved to ON position?

[Refer TB Exercise for fig]