

**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 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 (H₂O) \longrightarrow _____.
- 3) _____ + Iron \longrightarrow Iron sulphate solution + Copper.
- 4) Vinegar + Baking soda \longrightarrow _____ + other substances.
- 5) Carbon dioxide (CO₂) + Lime water [Ca(OH)₂] \longrightarrow _____ + water
- 6) Iron (Fe) + _____ + Water (H₂O) \longrightarrow rust (Iron oxide Fe₂O₃).

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.

INTERNATIONAL INDIAN SCHOOL DAMMAM

Class VII General Science (2017- 18)

Ch: 8 **Winds, Storms and Cyclones**

- Moving air is called wind.
- Air around us exerts pressure.
- Difference of temperature between two regions sets convection in air.
- A cyclone is called a hurricane in the American continent and typhoon in Japan and Philippines.
- Winds carrying water vapour bring rain.
- A cyclone warning is issued 24 hours in advance.
- High speed winds and air pressure difference can cause cyclones.

Fill in the blanks:

1. Increased wind speed is accompanied by **reduced** air pressure.
2. Air moves from a region of **high** pressure to a region of **low** pressure.
3. Air **expands** on heating and **contracts** on cooling.
4. The warm air is **lighter** than the cold air.
5. Uneven heating on the earth is the main cause of **wind movement**.
6. The monsoon winds carry **water** and it rains.
7. The calm area in the centre of a cyclone is called **eye** of the storm.
8. In **winter** the direction of the wind is from the land to the ocean.
9. Near the earth's surface **warm** air rises up whereas **cooler** air comes down.
10. A cyclone watch is issued **48** hours in advance of any expected storm.

Name the following

1. A dark funnel shaped cloud that reaches from the sky to the ground.
Tornadoes
2. The instrument that measures the wind speed
Anemometer
3. Two modern technologies that help us to monitor cyclones.
Cyclone alert or cyclone watch and Cyclone warning
4. The coastline of India that is more vulnerable to cyclones.
East coast

Answer the following.

1. What is Thunderstorm?

Swift movement of the falling water droplets along with rising air create lightning and sound and is known as thunderstorm.

2. Why ventilators are made near the ceiling?

Ventilators are made near the ceiling for the escape of hot air from the room as warm air is lighter than colder air.

3. What causes the wind blow? Explain.

Uneven heating of earth surface at two places develops high and low pressure that causes air to move from high pressure to low pressure.

INTERNATIONAL INDIAN SCHOOL-DAMMAM
G.SCIENCE 2017-18
Class VII- WORKSHEET
Chapter 10 — RESPIRATION IN ORGANISMS

Q1 .Name the following:

1. Muscular floor of chest cavity-
2. Process of breaking down of food in the cells.
3. Small opening on sides of the body of an insect-
4. An anaerobic organism-
5. Tiny pores on surface of leaf-
6. Organism with tracheal system

Q2.Fill in the blanks:

1. During heavy exercise we get cramps due to accumulation of _____ in muscle cell.
2. Yeast respire _____ and yields _____
3. Skeletal structure that surrounds the chest cavity is called _____
4. In anaerobic respiration glucose breaks down into _____ and _____ with the release of _____
5. Taking in of air rich in oxygen is called-----.

Q3. State whether true or false, if false correct the statement :-

1. In earthworm air enters the body through spiracles.
2. Frogs breathe through their skin as well as their lungs.
3. Size of chest cavity decreases during inhalation.

Q4. Multiple Choice Questions:

1. Normal rate of breathing per minute in an adult at rest is-
a. 9-12 b. 21-24 c. 15-18 d. 30-33
2. Fishes breathe with the help of _____.
a. lungs b. gills c. skin d. spiracles
3. During exhalation the diaphragm
a. moves outwards b. moves downwards c. moves upwards d. does not move at all

Q5. Match the following:

Column I

1. Cockroach
2. Diaphragm
3. Fish
4. Earthworm
5. Frog

Column II

- Skin
- Lungs and skin
- Spiracles
- Chest cavity
- Gills

Q6. Define :-

1. Cellular respiration.
2. Breathing rate
3. Breathing

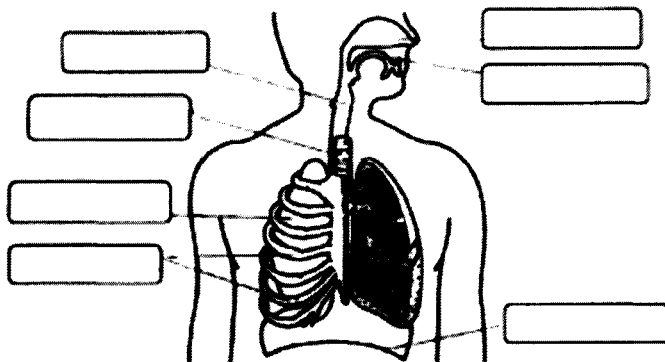
Q7. Distinguish between :-

1. Aerobic and anaerobic respiration
2. Inhalation and exhalation

Q8. Explain in detail

1. We get muscle cramps after heavy exercise, why?
2. Anaerobic respiration takes place in muscle cells, when and why?
3. During heavy exercise the breathing rate of a person increases, why?
4. Explain the respiratory mechanism in humans.
5. Explain the respiratory mechanism in a) cockroach b) earthworm

Q9. Label the following parts in diagram



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 ofin 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

EYE
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 GENERAL SCIENCE WORKSHEET (2017-18)
CHAPTER 13- MOTION AND TIME

I. FILL IN THE BLANKS

1. Clocks having an electric circuit with one or more cells are called **quartz clocks**.
2. Motion of a simple pendulum is an example of **periodic motion**.
3. The basic unit of speed is **meter/second (m/s)**.
4. The time period of a given pendulum is **constant**.
5. The ages of stars and planets are often expressed in **billions of years**.
6. **Sand clock** and **water clock** are examples of ancient time measuring devices.
7. If the object is moving with a constant speed, then the distance time graph is a **straight line**.
8. One microsecond is **one millionth** of a second and a nanosecond is **one billionth** of a second.

II. NAME THE FOLLOWING

1. The scientist who discovered that the time period of a given pendulum is constant.
Galileo Galilei
2. The time taken by the pendulum to complete one oscillation. **Time Period**
3. The metallic ball of a simple pendulum. **Bob**
4. Specify the type of motion-
 - a) Soldiers in a March past- **rectilinear motion (straight line motion.)**
 - b) Motion of a swing – **periodic motion**

III. ANSWER THE FOLLOWING

1) Define speed.

The distance moved by an object in unit time is called its speed.

2) Differentiate between uniform motion and non-uniform motion.

When an object moves along a straight line with a constant speed, it is said to be in **uniform motion**.

If the speed of an object moving along a straight line keeps changing, its motion is said to be **non-uniform motion**.

3) What is the difference between speedometer and odometer?

A speedometer measures the speed at which the vehicle is moving. It records the speed in km/h.

An odometer measures the distance travelled by the vehicle.

4) The distance between two stations is 320Km. a train takes 4h to cover the distance. Calculate the speed of the train.

A) Distance between the two stations = 320 Km

Time taken = 4h

Speed = distance/time

= 320/4 = **80Km/h**

MATCH THE FOLLOWING:

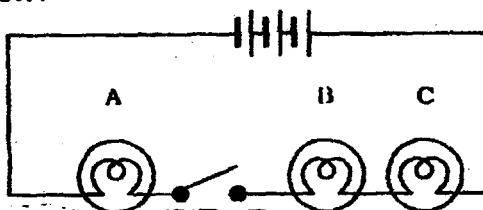
- | | |
|----------------|--|
| 1. Battery | - Heating effect of electric current |
| 2. Element | - Thin wire in the bulb |
| 3. MCB's | - Magnetic effect of electric current |
| 4. CFL | - Combination of cells |
| 5. Crane | - Turns OFF, if current exceeds safe limit |
| 6. Fuse | - Coll of wire which 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]

INTERNATIONAL INDIAN SCHOOL DAMMAM

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

Electric current and its effects

MULTIPLE CHOICE QUESTIONS:

- 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.
- 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.
- Which one of the following is based on the heating effect of current?
[a] Geyser [b] Electric bell [c] Loud speaker [d] Crane
- The thin wire in an electric bulb which glows, when electricity passes through it:
[a] Component [b] Element [c] Circuit [d] Filament
- The amount of heat produced in a wire depends on:
[a] Material [b] Length [c] Thickness [d] All of these
- What is the full form of MCB's:
[a] Maximum current breakers. [b] Minimum current breakers
[c] Miniature circuit breakers [d] Miniature current breakers
- 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
- Who discovered magnetic effect of current:
[a] H.C Oersted [b] Fleming [c] Michael Faraday [d] Ohm
- In an electric bell, which effect of current is used?
[a] Heating effect [b] Magnetic effect [c] Chemical effect [d] None of these
- 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:

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

Q1. FILL UP THE FOLLOWING :

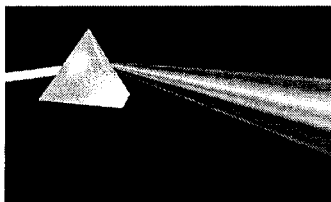
- (a) Any polished or shining surface acts as a-----
- (b) An Image that cannot be obtained on a screen is called a ----- image .
- (c) An image that can be obtained on a screen is called a ----- image .
- (d) The Image formed by a ----- mirror is always virtual and smaller in size .
- (e) The Image formed by a ----- mirror is always the same size as that of the object .
- (f) An image formed by a concave ----- cannot be obtained on a screen. (g) A ----
----- is composed of seven colours .
- (h) The image formed by a convex mirror is always ----- and ----- in size .

Q2. CHOOSE THE CORRECT ANSWER:

(a) In the Image formed in a plane mirror the 'right; appears as 'left' and the 'left' appears as 'right' due to

- (i) Reflection (ii) Refraction (iii) Dispersion (iv) Lateral inversion

(b) Identify the phenomenon



- (i) Lateral Inversion (ii) Reflection (iii) Refraction (iv) Dispersion

Q3. DIFFERENTIATE BETWEEN :

- (a) Object and Image (b) Real and Virtual Image (c) Erect and Inverted Image
(d) Concave and Convex mirrors (e) Concave and convex lens

Q4. ANSWER THE FOLLOWING:

(a) Define (i) Light (ii) Rectilinear Propagation of Light (iii) Reflection of Light (iv) Prism

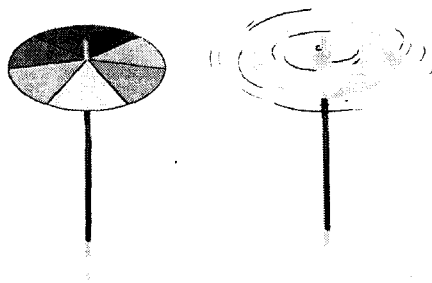
(v) Dispersion (vi) Spectrum (vii) Newton's Disc

(b)(i) Explain the phenomenon seen here.



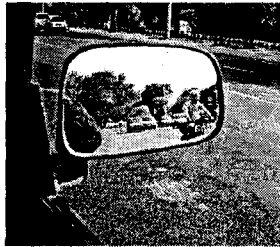
(ii) Why is the word 'AMBULANCE' written in reverse order on the vehicle ?

© What does this activity show ?

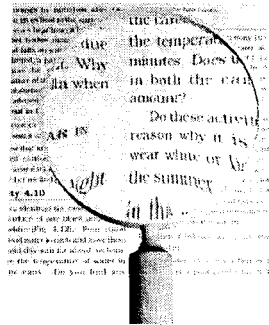


Q5.GIVE REASON

(a) Which mirror is used here ? Why ?



(b) Identify the Lens used here . What are its uses ?



© A rainbow is seen after the rain when the sun is low in the sky .