

INTERNATIONAL INDIAN SCHOOL BURAIDAH

WORKSHEET FOR THE ACADEMIC YEAR 2023-24

Class-7th

Subject- Science

DATE-10/09/2023

Lesson #4 Heat

Lesson # 5 Acids, Bases and Salts

Q-1 Fill in the blanks-

- a. A reliable measure of the hotness of an object is its _____.
- b. The range of a clinical thermometer in Celsius scale is _____ & in Fahrenheit is _____.
- c. The range of laboratory thermometer is _____.
- d. _____ thermometer does not use mercury.
- e. Heat is transferred in liquids by _____.
- f. We receive heat from sun by _____.
- g. Heat travels through solids _____.
- h. The maximum and minimum temperatures of the previous day, reported in weather reports, are measured by thermometer called the _____ thermometer.
- i. The form of energy that flows from hot object to a cold object is called _____.

Q-2 Choose the correct answer –

1. A marble tile would feel cold as compared to a wooden tile on a winter morning, because the marble tile

- (a) is a better conductor of heat than the wooden tile.
- (b) is polished while wooden tile is not polished.
- (c) reflects more heat than wooden tile.
- (d) is a poor conductor of heat than the wooden tile.

2. X and Y measured their body temperature. X found it to be 98.6°F and Y recorded 37°C . Which of the following statement is true?

- (a) X has a higher body temperature than Y.
- (b) X has a lower body temperature than Y.
- (c) Both have normal body temperature.
- (d) Both are suffering from fever.

3. One litre of water at 30°C is mixed with one litre of water at 50°C . The temperature of the mixture will be

- (a) 80°C
- (b) more than 50°C but less than 80°C
- (c) 20°C
- (d) between 30°C and 50°C

4. An iron ball at 40°C is dropped in a mug containing water at 40°C . The heat will

- (a) flow from iron ball to water.
- (b) not flow from iron ball to water or from water to iron ball.
- (c) flow from water to iron ball.
- (d) increase the temperature of both.

5. A wooden spoon is dipped in a cup of ice cream. Its other end.

- (a) becomes cold by the process of conduction.
- (b) becomes cold by the process of convection.
- (c) becomes cold by the process of radiation.
- (d) does not become cold.

6. Stainless steel pans are usually provided with copper bottoms. The reason for this could be that

- (a) copper bottom makes the pan more durable.
- (b) such pans appear colourful.
- (c) copper is a better conductor of heat than the stainless steel.
- (d) copper is easier to clean than the stainless steel.

Q-3 Answer the following Question -

1. Identify which one are good conductor and poor conductors of heat (a) Water

(b) Copper (c) Air (d) Plastic (e) wood (f) Iron (g) Aluminium

2. What is the normal temperature of human body?

3. Why is mercury used in thermometers?

4. What precautions should be observed while reading a clinical thermometer?

5. What precautions should be observed measuring temperature with a laboratory thermometer?

6. Give reason why :-

(a) Rooms are provided with ventilators & exhaust fans near top of side walls.

(b) It is advisable to place room heaters at the ground level for effective heating.

Lesson # 5 Acids , Bases and Salts

Q-1 Fill in the blanks -

- (a) The most commonly used natural indicator is _____ and is extracted from _____.
- (b) Aqueous solution of baking soda is bitter in taste and feels soapy on touching because it contains _____.
- (c) _____ are used to test whether a substance is acidic or basic in nature.
- (d) _____ change their colour when added to a solution containing an acidic or basic substance.
- (e) Lemon juice, orange juice taste sour because they contain _____.
- (f) The solutions which do not change the colour of either blue or red litmus are called _____ solutions.
- (g) Turmeric and litmus are _____ acid-base indicators..
- (h) In neutralization reaction heat is always _____.
- (i) Salts may be _____ or _____ in nature.
- (j) Chemically milk of magnesia is _____ and baking soda is _____.
- (k) China rose indicator turns _____ solution to dark pink and _____ solution to green
- (l) The correct way of making a solution of acid in water is to _____.

Q-2 Choose the correct answer

1. Sodium bicarbonate is commonly called

- (a) Lime water
- (b) Slaked lime
- (c) Washing soda
- (d) Baking soda

2. Which of the following statements is correct?

- (a) Indicator is a substance that shows different colors in acidic and basic solution.
- (b) Turmeric stain on a white shirt turns to red when it is washed with soap.
- (c) Lime water is a solution of calcium hydroxide. (d) All the above are correct.

3. Neutralization reaction is a

- (a) physical and reversible change.
- (b) physical change that cannot be reversed.
- (c) chemical and reversible change.
- (d) chemical change that cannot be reversed.

4. Which of the following is an acid-base indicator?

- (a) Vinegar
- (b) Lime water
- (c) Turmeric
- (d) Baking soda

5. Litmus, a natural dye is an extract of which of the following?

- (a) China rose
- (b) Beetroot
- (c) Lichen
- (d) Blue berries

6. Which medicines are used for treating indigestion?

- (a) Antibiotic
- (b) Analgesic
- (c) Antacids
- (d) Antiseptic

Q-4 Answer the following question –

1. Give a reason why

- (a) Great care should be taken while handling laboratory acids and bases.
- (b) Solid powder of baking soda does not turn dry litmus paper to blue in color.

2. Define acid rain and how it is produced? What are its harmful effects?

3. Define neutralization reaction with an example.

4. You are provided with four test tubes containing sugar solution, baking soda solution, tamarind solution, salt solution. Write down an activity to find the nature (acidic/basic/neutral) of each solution.

5. Provide the chemical Name of below acid or base

(a) Vinegar (b) Fruits (orange)(c) Curd(d) Lime water(e) Window cleaner(f) Soap