

## JASWANT MODERN SR. SEC. SCHOOL, SCIENCE WORKSHEET-1, CLASS VII

**Note: - Do this worksheet in a separate notebook.**

### Q1. Multiple choice questions.

- Chlorophyll- containing structures in a plant cell.  
(a) Stomata (b) guard cells (c) chloroplast (d) none of these
- During photosynthesis, the stomata help in the intake of  
(a) Carbon dioxide (b) oxygen (c) water (d) nitrogen
- The form of energy that flows from a hot object to a cold object is called  
(a) Temperature (b) Thermometer (c) heat (d) light
- The degree of hotness or coldness in a substance is called  
(a) Temperature (b) Thermometer (c) heat (d) light
- The transfer of energy between objects that are in physical contact is by  
(a) conduction (b) convection (c) radiation (d) evaporation

### Fill in the blanks.

- The \_\_\_\_\_ in a thermometer prevents the backflow of mercury into the bulb.
- The boiling point of water in the Celsius scale is \_\_\_\_\_.
- Dark colours are good \_\_\_\_\_ of heat.
- The handles of the cooking utensils are made of materials that are \_\_\_\_\_.
- In liquids and gases, heat is transferred by the process of \_\_\_\_\_.
- Air is a \_\_\_\_\_ conductor of heat whereas copper is a \_\_\_\_\_ conductor of heat.
- In solids, heat is transferred by \_\_\_\_\_.
- In lichens the chlorophyll containing partner is an \_\_\_\_\_.
- The food synthesized by plants is stored as \_\_\_\_\_.
- The food factories of the autotrophic plants are their \_\_\_\_\_.

### Answer the following questions.

- Write the similarities and differences between a clinical thermometer and laboratory thermometer.
- What is the freezing point and boiling point of water in Celsius scale?
- What is conduction? Explain with an example.
- Write an activity to show that heat transfers in a metal. Draw diagram.
- How are Sea breeze and Land breeze formed?
- What is convection? Explain with an example.
- Write an activity to show convection.
- What is the use of kink in a clinical thermometer?
- Give one example each of a complete parasite and a partial parasite.
- Give two examples of plants that have Rhizobium bacteria in their roots.
- Give examples of two insectivorous plants.
- Write the equation for the process of photosynthesis.
- What are autotrophs and heterotrophs? Give examples.
- How would you test the presence of starch in leaves?
- Explain the relationship between algae and fungi to form lichens.
- Write the differences between parasitic relationship and symbiotic relationship.

### Give Reasons for the following

- Outer walls of houses in hill stations are painted in dark colours.
- Bottoms of frying pans are made of copper.
- Exhaust fans are installed high up near the ceiling of the kitchen.
- Mercury is used in thermometers.

**Multiple choice questions**

1. The silvery grey substance inside the thermometer is  
(a) copper (b) mercury (c) gold (d) alcohol
2. The thermometer that is used for measuring temperature of liquids during experiments is called  
(a) clinical thermometer (b) digital thermometer (c) laboratory thermometer  
(d) maximum and minimum thermometer
3. The thermometer use to measure the temperature of the day for weather report  
(a) clinical thermometer (b) digital thermometer (c) laboratory thermometer  
(d) maximum and minimum thermometer
4. Which of these is a insulator of heat?  
(a) Wood (b) iron (c) copper (d) aluminum
5. The transfer of heat in form of rays and waves is done in  
(a) evaporation (b) conduction (c) convection (d) radiation

**Fill in the blanks.**

1. The kink in a thermometer prevents the backflow of \_\_\_\_\_ into the bulb.
2. The boiling point of water in the Fahrenheit scale is \_\_\_\_\_.
3. Light colours are good \_\_\_\_\_ of heat.
4. Solar heaters are designed to use the heat energy from the \_\_\_\_\_ for cooking food.
5. No \_\_\_\_\_ is required for transfer of heat through radiation.
6. The SI unit of heat is \_\_\_\_\_.
7. In fluids, heat is transferred by \_\_\_\_\_.
8. The freezing point of water in Fahrenheit scale is \_\_\_\_\_.

**Answer the following questions**

1. Draw a diagram showing photosynthesis and structure of a stomata.
2. The organ A of a tree have large number of tiny pores called B on their surface. Each pore is surrounded by a pair of cells called C. The opening and closing of pores in A is controlled by C. The gas D present in air enters the organs A through pores B and utilized in food making process E. The gas F produced during process E goes out through the same pores B. What is A, B, C, D, E and F.
3. What name is given to the relationship between an alga and fungus to form lichens?
4. What all things can fungi destroy?
5. Why are the leaves of a plant usually green in colour?
6. Why is frying pan made of metal but the handle is made of plastic or wood?
7. Define temperature? Name the device used to measure temperature.
8. Why does the mercury level do not fall down when a thermometer is taken out from the mouth?

**NOTE- EVERY STUDENT HAS TO MAKE A SCIENCE WORKING MODEL AND DO THE FOLLOWING PROJECT.**

**Roll no. 1-10:**

**WEATHER REPORT-** Refer to a newspaper and collect 10 days weather details like the maximum and minimum temperature, humidity, rainfall and wind speed of the area you live in. Compare it with any other two cities of other states.

**Roll no. 11-20:**

**NATURAL FIBRE- SILK:** Collect information about the history of silk, kind of silk varieties produced in India and find the leading producers of Silk in India. Write the steps involved in processing of silk. Make a well-labelled diagram of 'Life Cycle of Silk Worm'.

**Roll no. 21- Onwards**

**ORAL HYGIENE-** Prepare a report on oral hygiene. Discuss the problems related to teeth, their causes and their cure. Make a list of different products that can be used to keep the teeth and mouth clean. And draw their pictures.