



ÉCOLE GLOBALE

INTERNATIONAL GIRLS' SCHOOL

Dehradun

HOLIDAY HOMEWORK - CLASS VII

PHYSICS

Choose the correct answer:-

1. In liquids, heat transfer takes place by

- (a) radiation
- (b) conduction
- (c) convection
- (d) none of these

2. Some stainless steel frying pans are provided with copper bottoms. The reason for this could be that:

- (a) copper bottom makes the pan more durable
- (b) such pan appears colorful
- (c) copper is a better conductor of heat than stainless steel
- (d) none of these

3. Transfer of heat by conduction process takes place in

- (a) liquids only
- (b) solids only
- (c) gases only
- (d) all of these.

4. Heat energy from the sun reaches us by the process

- (a) conduction
- (b) convection
- (c) radiation
- (d) both a and b.

5. The woolen clothes keep us warm during winter because

- A) wool is an insulator
- B) wool is a conductor
- C) wool traps air
- D) wool has a vacuum.

- (a) A and B
- (b) B and C
- (c) C and D
- (d) A and C

6. The transfer of heat by convection takes place in:

- (a) Solids and liquids
- (b) Solids and vacuum
- (c) Gases and liquids
- (d) Vacuum and gases

7. The process which can transfer heat through the vacuum, as well as air, is:

- (a) conduction
- (b) convection
- (c) irradiation
- (d) radiation

Fill in the blanks:

8. ——— flows from a region of higher temperature to a region of lower temperature.
9. ———— thermometer is used to measure our body temperature.
10. Air is a ———— conductor of heat.
11. Shining and smooth surfaces are better ———— of heat.
12. No medium is required for the transfer of heat by the process of ————.

13. Read the experiment and answer the questions-

Two metal cans, 1 painted black on the outside and the other white, were filled with equal amounts of water. A thermometer was put into each of them and the setup was kept out in bright sunshine for 2 hours.

- A. In which metal 'can' will the water be hotter? Give the reason for your answer.
 - B. How can the result of this experiment help you to choose the colour of clothes to wear in the summer? Explain.
 - C. If in the above experiment, metal can 2 is replaced with a white colored plastic can, in which will the water be hotter? Give a reason for your answer.
14. What is a thermometer? How does it work?
 15. Can a laboratory thermometer be used to measure body temperature? Why or Why not?
 16. How are heat and temperature different?
 17. Convert -90°F into $^{\circ}\text{C}$ and 40°C into $^{\circ}\text{F}$.
 18. How do you think houses should be constructed in the warm desert regions so that the outside heat does not make them too warm from inside?
 19. Why is minimizing the transfer of heat necessary? How does it help?
 20. In which areas of our daily life do we use conductors and insulators? Why do we need both?
 21. How are conduction and convection similar? How are the two different?
 22. Why is minimizing the transfer of heat necessary? How does it help?
 23. State the unit in which temperature is commonly measured.
 24. What is the usual temperature range of a laboratory thermometer?

25. What are the three methods of transfer of heat?
26. When one end of an Iron rod is heated its other end also becomes hot soon. Name the process by which heat flows in the rod?
27. How is heat loss due to conduction, convection and radiation prevented in a thermos flask?
28. Why does a metal spoon kept in hot tea become hot?
29. Name different types of electric cells and write their important features.
30. How does the use of primary cells effect our environment?
31. Why it is better to use MCB in place of an electric fuse?
32. Why do we need symbols for electrical components? Draw the different symbols used in circuit diagram.