# Holiday homework for Class 7 Science

 **Questions**

1. State similarities and differences between the laboratory thermometer and the clinical thermometer.
2. Give two examples each of conductors and insulators of heat.
3. Fill in the blanks:
	1. The hotness of an object is determined by its --.
	2. Temperature of boiling water cannot be measured by a ---------------

thermometer.

* 1. Temperature is measured in degree --.
	2. No medium is required for transfer of heat by the process of --.
	3. A cold steel spoon is dipped in a cup of hot milk. It transfers heat to its other end by the process of --.
	4. Clothes of colours absorb heat better than clothes of light colours.
1. Match the following:
2. Land breeze blows during (a) summer
3. Sea breeze blows during (b) winter
4. Dark coloured clothes are

Preferred during (c) day

1. Light coloured clothes are

Preferred during (d) night

1. Discuss why wearing more layers of clothing during winter keeps us warmer than wearing just one thick piece of clothing?
2. In places of hot climate, it is advised that the outer walls of houses be painted white. Explain.
3. One litre of water at 300C is mixed with one litres of water at 500C . The temperature of the mixture will be
	1. 800C
	2. More than 500C
	3. 200C
	4. Between 300C and 500C
4. An iron ball at 400C is dropped in a mug containing water at 400C the heat will
	1. Flow from iron ball to water.
	2. Not flow from iron ball to water or from water to iron ball.
	3. Flow from water to iron ball.
	4. Increase the temperature of both.
5. A wooden spoon is dipped in a cup of ice cream. Its other end
	1. becomes cold by the process of conduction.
	2. becomes cold by the process of convection.
	3. becomes cold by the process of radiation.
	4. does not become cold.
6. Stainless steel pans are usually provided with copper bottoms. The reason for this could be that
	1. Copper bottom makes the pan more durable.
	2. Such pans appear colourful.
	3. Copper is a better conductor of heat than the stainless steel.
	4. copper is a better conductor of heat than the stainless steel.
7. Draw in your notebook the symbols to represent the following components of

electrical circuits. Connecting wires, switch in the OFF position, bulb, cell, switch in ON

position and battery.

1. Draw the circuit diagram to represent the circuit shown in Fig. 14.3.



1. Fig. 14.22. Shows four cells fixed on a board. Draw lines to indicate how you will connect their terminals with wires to make a battery of four cells.



1. The bulb in the circuit shown in Fig. 14.23 does not glow. Can you indicate the problem? Make necessary changes in the circuit to make the bulb glow.





1. Fill in the blanks
	1. Longer line in the symbol represents its terminal.
	2. The combination of two or more cells is called --.
	3. When a current is switched ON in a room heater, it --.
	4. The safety device based on the heating effect of electric current is called --.
2. Mark ‘T” if the statement is true and ‘F’ if it is false:
	1. To make a battery of two cells, the negative terminal of one cell is connected to the negative terminal of another cell. (T/F)
	2. When the current through the fuse exceeds a certain limit, the fuse wire melts and breaks. (T/F)
	3. An electromagnet does not attract a piece of iron. (T/F)
	4. An electric bell has an electromagnet. (T/F)
3. Do you think an electromagnet can be used for separating plastic bags from a garbage heap? Explain.
4. An electrician is carrying out some repairs in your house. He wants to replace a fuse by a piece of wire. Would you agree? Give reasons for your response.
5. In the circuit shown in Fig. 14.25



1. Would any of the bulbs glow when the switch is in the ‘OF’ position?
2. What will be the order in which bulb A, B, C will glow when switch is moved to the ‘ON’ position?