

37. Tea kettles are provided with wooden or ebonite handles. The wood or the ebonite being the insulators of heat, does not pass heat from the utensils to our hand. Thus, we can hold the hot utensils or pans comfortably by their handles.

38. In summer, ice is kept wrapped in a gunny bag or it is covered with sawdust. The air filled in the fine pores of the gunny bag or sawdust, is insulator of heat. The air does not allow heat from outside to pass through it to the ice. Thus, ice is prevented from melting rapidly.



40. Quilts are filled with fluffy cotton. Air is trapped in the fine pores of cotton. Cotton and air are insulators of heat. They prevent heat from our body to escape and thus keep us warm.

41. By the process of convection, heat is always transferred vertically upwards. The reason is that the medium particles near the source of heat absorb heat from the source and they start moving faster. As a result, the medium at this place becomes less dense so it rises up and the medium from above being denser, moves down to take its place.