

Chapter 03

KINDS OF CLOTHES WE WEAR IN SUMMER AND WINTER

You know that in summer, we prefer light-colored clothes and in winter, we usually wear dark-colored clothes. Why is it so? Let us understand with an experiment.

ACTIVITY:

Take two identical tin cans. Paint the outer surface of one black and of the other white. Pour equal amounts of water in each and leave them in the mid-day sun for about an hour. Measure the temperature of water in both the cans.



Containers with black and white surface.

In which can is the water warmer? You can feel the difference even by touching water in the two cans.

ACTIVITY:

- Fill the two cans used before with the same amount of hot water at the same temperature (say, at 60C).
- Leave the cans in a room or in a shade.
- Note the temperature of water after 10–15minutes. Does the temperature of water in both the cans fall by the same amount?
- These activities suggest why we prefer to wear certain kind of clothes in summer and winter.
- Dark surfaces absorb more heat and, therefore, we feel comfortable with dark-colored clothes in the winter. Light colored clothes reflect most of the heat that falls on them and, therefore, we feel more comfortable wearing them in the summer. Cotton clothes also absorb sweat and allow air circulation.
- In the winter, we use woolen clothes. Wool is a poor conductor of heat. Moreover, there is air trapped in between the wool fibers. This air prevents the flow of heat from our body to the cold surroundings. So, we feel warm.

- Suppose you are given the choice in winter of using either one thick blanket or two thin blankets joined together.
- What would you choose and why? Remember that there would be a layer of air in between the blankets. This will keep us warm and comfortable. Hence, we would choose two blankets instead of one thin blanket.

