



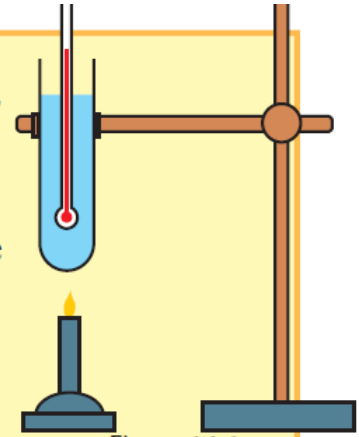
Unit 14 – Heat and Temperature(2)

Activity 14.4

You will need :- A boiling tube, a thermometer, some water, a burner, a laboratory stand

Method :-

- Take some water into a boiling tube, and prepare the set-up as shown in Figure 14.6.
- Heat the water for few minutes till it boils.
- Record the reading of the thermometer.



Absorbing heat

Water (liquid)  Steam (gas)

The constant temperature at which a liquid substance changes to its gaseous state is known as the of that substance.

➤ How to use a thermometer correctly.

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➤ What are the Special features of a clinical thermometer?

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➤ **Heat transfer**

Travelling of heat from one place to another place is called
There are three methods of heat transfer.

Heat transfer

1.....

2.....

3.....

Activity 14.8

You will need :- A metal (iron) rod of about 20 cm long, few pins, a candle

Method :-

- Take the metal rod and fix pins on it, in 2 cm intervals, using candle wax, as shown in Figure 14.19
- Heat one end of the rod using the candle
- Record your observations after sometime.

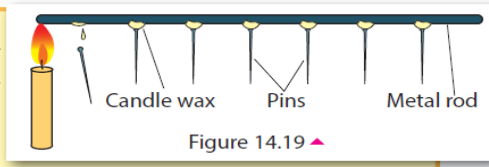


Figure 14.19 ▲

○ What is the conduction

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○ Convection

○

Activity 14.9

You will need :- A tall beaker, a piece of cardboard, a candle, some joss sticks

Method :-

- Cut the piece of cardboard to the shape as shown in the figure.
- Place the piece of cardboard, at the middle of the beaker to divide the inside of it into two chambers.
- Then, place the lighted candle in the side B of the beaker as shown in the figure.
- Light some joss sticks and hold them at the mouth of the beaker on the other side (side A) of the piece of cardboard.
- Observe what happens.
- Now blow out the candle and hold the joss sticks in the side A.
- Observe what happens again.

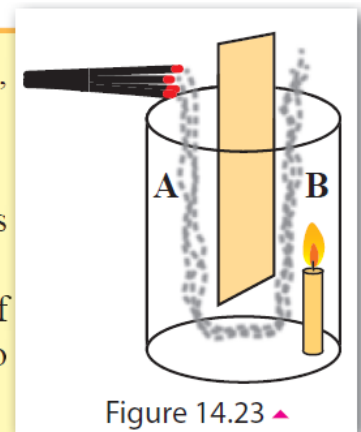


Figure 14.23 ▲

Activity 14.10

You will need :- A few condis crystals, a candle, a burner, a round-bottomed flask, a laboratory stand

Method :-

- Place some condis crystals at the bottom of the flask and cover them with wax.
- Pour water into the flask and heat it.
- Observe what happens.

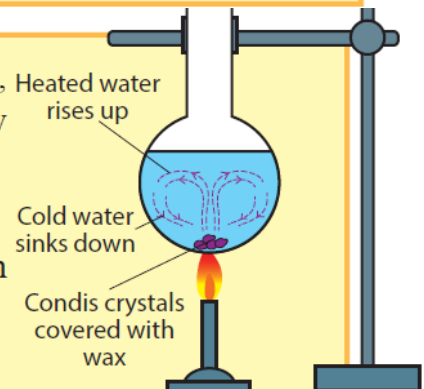


Figure 14.24 ▲