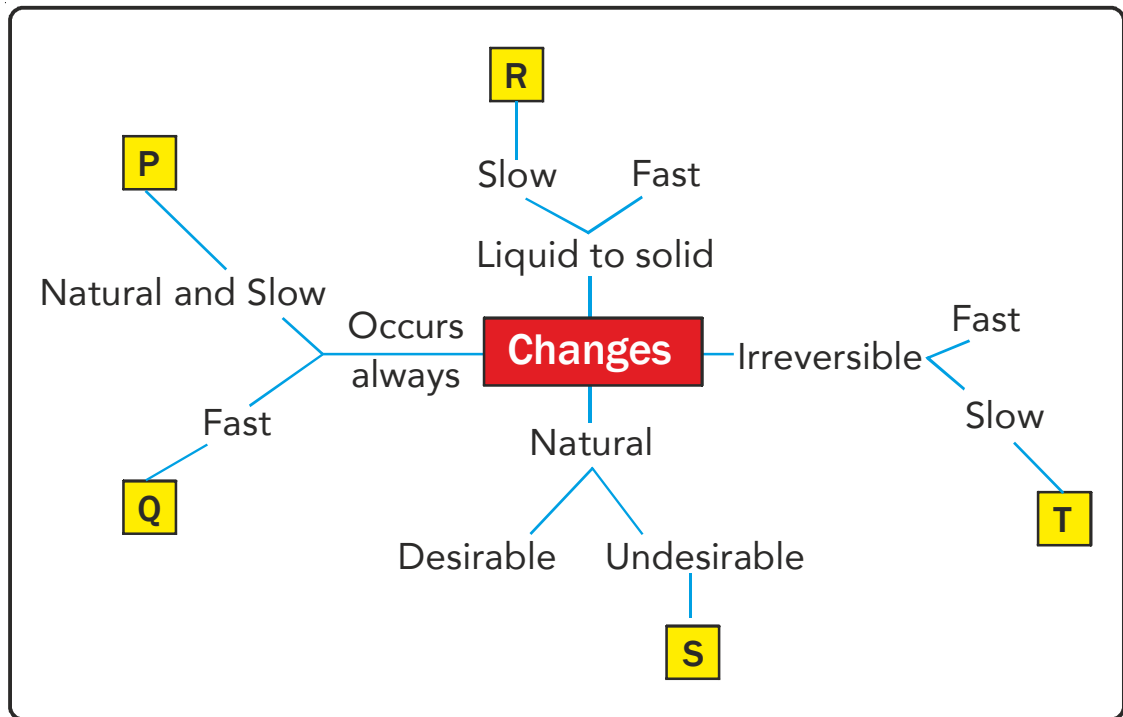


**01**

Read the flow chart given below.



- (i) Which process is natural and slow that occurs always in the presence and absence of sunlight?
- (ii) Which hands always move fast irrespective of any events ?
- (iii) Which slow process involves change of a liquid to solid ?
- (iv) Which natural change(s) is irreversible and undesirable by humans ?
- (v) Which process on a metal is slow and requires some components of atmospheric air ?

Your solution here:

**02**

A boy took a long bamboo stick (P) and cut it into 6 pieces and marked all as (Q). He then burnt a piece of bamboo stick from (Q) and named it (R) with the help of a candle and collected its ash.

- (i) What type of change is undergone by a bamboo stick (P), when it is cut into 6 pieces ?
- (ii) Can we join all the 6 pieces to get an original bamboo stick to make this change reversible ?
- (iii) Weigh the mass of a piece of bamboo stick (R) and note its mass. Later on burn it. Again note its mass. Why there is a difference in mass of a piece of bamboo stick (R) before and after burning it ? Indicate the type of change ?

Your solution here:

**03**

A metal ring has to be fixed on a wooden wheel of a cart. The blacksmith heats the metal ring and puts it on the wheel. The wheel fits perfectly after some time.

- (a) What was the size of the metal ring that was fixed on the wheel of a cart ?
- (b) What type of change is undergone by the metal ring ?
- (c) What is the cause for the change in the size of a metal ring ?

Your solution here:

**04**

When water boils in a kettle, hot steam comes out of the spout due to evaporation. If a cold plate is held over the steam, it turns back into water droplets which can be seen on the plate. This change is called condensation, which is a reverse of evaporation. Both the processes occur frequently in the nature.

The above activity of evaporation also occurs naturally in water bodies. Even condensation also occurs naturally in the clouds to form rain.

- (a) What makes the water to evaporate from ponds, puddles and water bodies ?
- (b) Which process is reverse of evaporation ?
- (c) What types of changes are evaporation and condensation ?

Your solution here:

**05**

The production of electricity using coal in a thermal power plant is quite useful for us and desirable. The emission of smoke and other harmful gases due to the burning of coal into the environment becomes undesirable.

- (a) What is used to obtain electricity in a thermal power plant ? Indicate the type of change.
- (b) Why production of electricity from a thermal power plant undesirable ?
- (c) What happens if the above harmful and toxic gases are inhaled by humans ? Is this change desirable or undesirable ?

Your solution here: