

Name: _____ Date: _____

Physical and Chemical Change

Q1. Explain why burning of wood and cutting it into small pieces are considered as two different types of changes.

Ans.

Q2. What happens when an iron nail is dipped in copper sulphate solution?

Ans.

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Q1. Explain why burning of wood and cutting it into small pieces are considered as two different types of changes.

Ans. Burning of wood

Burning is a non-reversible chemical change because when we burn wood new substances are formed as the carbon in the wood reacts with oxygen in the air to create ash and smoke, and energy in the form of light and heat.

Cutting of wood it into small pieces

Cutting of wood into small pieces are physical change as no new substance is formed. Only shape and size changes when wood is cut into small pieces.

Q2. What happens when an iron nail is dipped in copper sulphate solution?

Ans. When an iron nail is dipped in the copper sulphate solution (CuSO_4) then iron displaces copper from the copper sulphate because iron is more reactive than copper. The change of colour of the solution from blue to green is due to the formation of iron sulphate (FeSO_4), a new substance. The brown deposit on the iron nail is copper, another new substance.

We can write the reaction as:

Copper sulphate solution (blue) + Iron \rightarrow Iron sulphate solution (green)
+ Copper (brown deposit)