

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Combustion and Flame

Q1. Place a piece of burning wood or charcoal on an iron plate or Tawa. Cover it with a glass jar or a tumbler, or a transparent plastic jar. Observe what happens. Does charcoal stop burning after sometime? Can you think of the reason why it stops burning?

Ans. \_\_\_\_\_  
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Q2. Explain how the use of CNG in automobiles has reduced pollution in our cities.

Ans. \_\_\_\_\_  
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Q3. Arrange the following fuels in the increasing order of their calorific value. cow dung cake, petrol, wood, LPG, hydrogen

Ans. \_\_\_\_\_  
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## Combustion and Flame

Q1. Place a piece of burning wood or charcoal on an iron plate or Tawa. Cover it with a glass jar or a tumbler, or a transparent plastic jar. Observe what happens. Does charcoal stop burning after sometime? Can you think of the reason why it stops burning?

Ans. When a burning wood or charcoal is covered with a glass jar or a tumbler, it stops burning after sometime, that is, the charcoal fire gets extinguished after some time. This is so, because when we cover the burning wood or charcoal, the supply of supporter of combustion (i.e. air) to the burning wood or charcoal is cut off and hence the charcoal fire stops.

Q2. Explain how the use of CNG in automobiles has reduced pollution in our cities.

Ans. Burning of fuel like petroleum releases unburnt carbon particles and gases like carbon monoxide, carbon dioxide, sulphur dioxide and nitrogen oxides into the air. These pollutants can cause many respiratory diseases and environmental hazards. CNG produces the harmful products in very small amounts. CNG is a cleaner fuel. Thus, the use of CNG in automobiles has reduced pollution in our cities.

Q3. Arrange the following fuels in the increasing order of their calorific value. cow dung cake, petrol, wood, LPG, hydrogen

Ans.

| Fuel          | Calorific Value (kJ/kg) |
|---------------|-------------------------|
| Cow dung cake | 6000-8000               |
| Wood          | 17000-22000             |
| Petrol        | 45000                   |
| LPG           | 55000                   |
| Hydrogen      | 150000                  |