

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

Combustion and Flame

Q1. Why does cooking oil catch fire if a frying pan is kept on the burning stove for a long time?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q2. What chemicals can put out a fire?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q3. Why do you have to use paper or kerosene oil to start fire in wood or coal?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q4. Explain why we are advised not to sleep in a closed room with a coal fire burning.

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q5. Paper by itself catches fire easily whereas a piece of paper wrapped around an aluminium pipe does not. Give reason.

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Combustion and Flame

Q1. Why does cooking oil catch fire if a frying pan is kept on the burning stove for a long time?

Ans. Cooking oil catch fire if a frying pan is kept on the burning stove for a long time because the cooking oil gets heated to its ignition temperature when kept over a burning stove for a long time.

Q2. What chemicals can put out a fire?

Ans. Carbon dioxide ( $\text{CO}_2$ ) is the best extinguisher. Another way to get  $\text{CO}_2$  is to release a lot of dry powder of chemicals like sodium bicarbonate (baking soda) or potassium bicarbonate. Near the fire, these chemicals give off  $\text{CO}_2$ .

Q3. Why do you have to use paper or kerosene oil to start fire in wood or coal?

Ans. Wood or coal has a high ignition temperature, so a wood or coal fire cannot be started by using a lighted matchstick directly. Thus, we use paper or kerosene oil to start fire in wood or coal.

Q4. Explain why we are advised not to sleep in a closed room with a coal fire burning.

Ans. Incomplete combustion of fuels gives carbon monoxide gas. It is a very poisonous gas. It is dangerous to burn coal in a closed room. The carbon monoxide gas produced can kill persons sleeping in that room.

Q5. Paper by itself catches fire easily whereas a piece of paper wrapped around an aluminium pipe does not. Give reason.

Ans. The heat supplied to the paper is transferred to aluminium pipe by conduction. So, in the presence of aluminium pipe, the ignition temperature of paper is not reached. Hence, it does not burn.