Name: _____ Date: _____

Combustion and Flame

Q1. Make two paper cups by folding a sheet of paper. Pour about 50 ml of water in one of the cups. Heat both the cups separately with a candle. What do you observe?

a. What happens to the empty paper cup and why?
b. What happens to the paper cup with water and why?
c. Does water in this cup become hot?

Ans. _____

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Q2. Write an experiment to show that air is essential for burning.

Ans. _____

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b. What happens to the paper cup with water and why?
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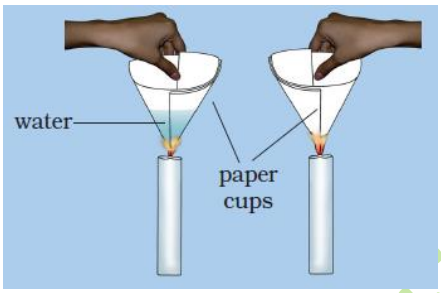
Ans. a. The empty paper cup catches fire easily and starts burning because the ignition temperature of paper reaches quickly.

b. When we heat the paper cup containing water, then the heat supplied to the paper cup is transferred to water inside it by conduction. So, in the presence of water, the ignition temperature of paper cup is not reached, and hence the paper cup does not catch fire.

c. Yes, the water in this paper cup becomes hot gradually.



Q2. Write an experiment to show that air is essential for burning.

Ans. Fix a lighted candle on a table. Put a glass chimney over the candle and rest it on a few wooden blocks in such a way that air can enter the chimney. We will see that candle burns freely in case (a) when air can enter the chimney from below. Now remove the blocks and let the chimney rest on the table. Now, we will observe that in case (b), when air does not enter the chimney from below, the flame flickers and produces smoke. Finally, put a glass plate over the chimney. Here, in case (c), the flame finally goes off because the air is not available.

This observation shows that air is necessary for combustion (or burning) to take place.