



Student ...... Date .....

## MATERIALS

Two wax candles, two plates, lighter, small jar, big jar

## PROCEDURE

Light the candles and put them on the plates. Cover the candles with the jars and wait.

## **OBSERVATIONS**

Tick the correct answers (more than one is correct):

the flame in the smaller jar goes out after the bigger one.

the flame in the smaller jar goes out before the bigger one.

I observe a few condensation on the internal surface.

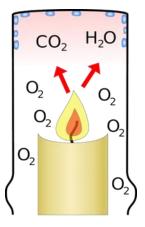
I observe a lot of condensation on the external surface.

I observe no condensation on the internal surface.

## CONCLUSIONS

When a candle burns, the <u>reactants</u> are fuel (the candlewick and wax) and oxygen (in the air). The <u>products</u> are carbon dioxide gas and water vapor.

This is a **combustion reaction**. The general equation for this type of reaction is:



 $FUEL + O_2 \longrightarrow CO_2 + H_2O$ 

Why does the flame go out when we put a jar over the candle?

Tick the correct answer:

the amount of hydrogen in the jar is not enough to allow a combustion.

the water vapor blows out the candle.

the oxygen runs out during the reaction and because of that, the flame goes out.

the flame won't stop to burn.

Draw a picture!