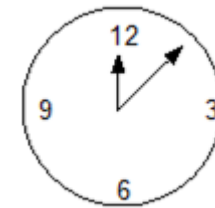
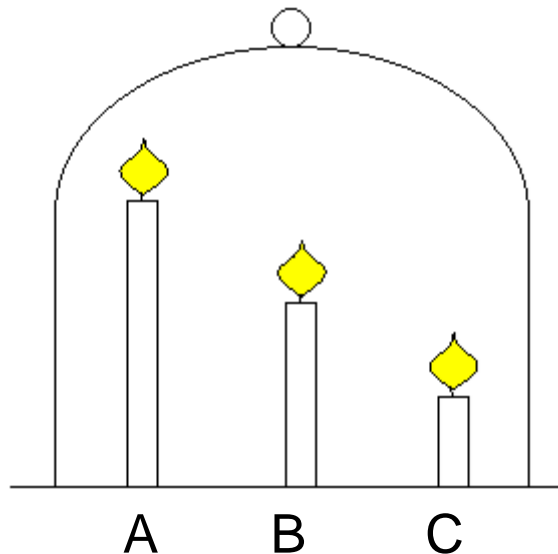




# Task: Make a prediction

- Which candle(s) will go out first?



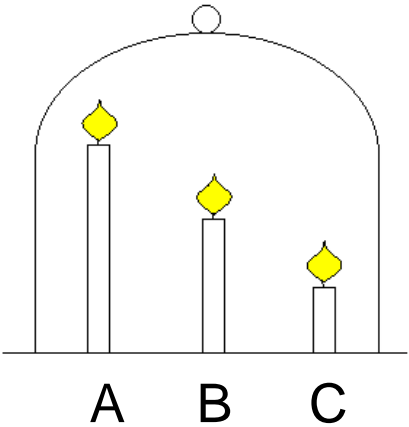
- A. Candle A
- B. Candle B
- C. Candle C
- D. The three candles go out at the same time



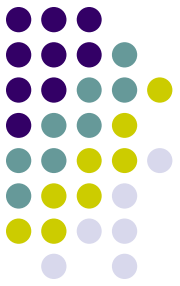
# Task: Make a prediction

- Which candle(s) will go out first?
- Evidence that supports:

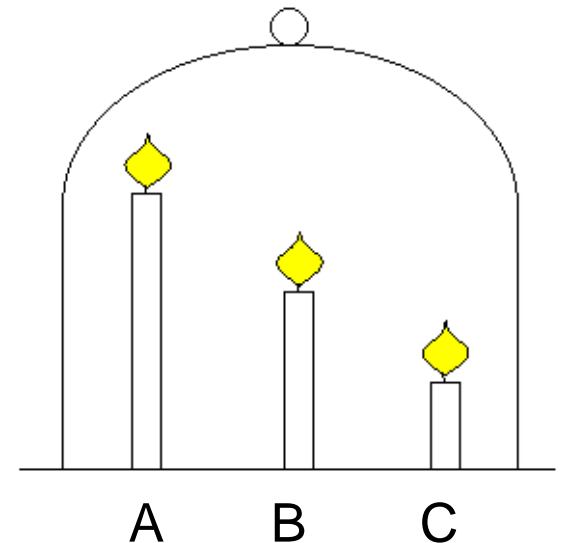
Candle A	
Candle B	
Candle C	
At the same time	



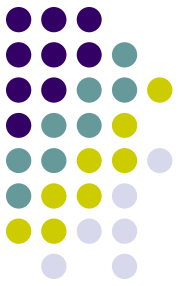
# Experiment:



- Which candle went out first?
- Find the evidence cards that supports the result



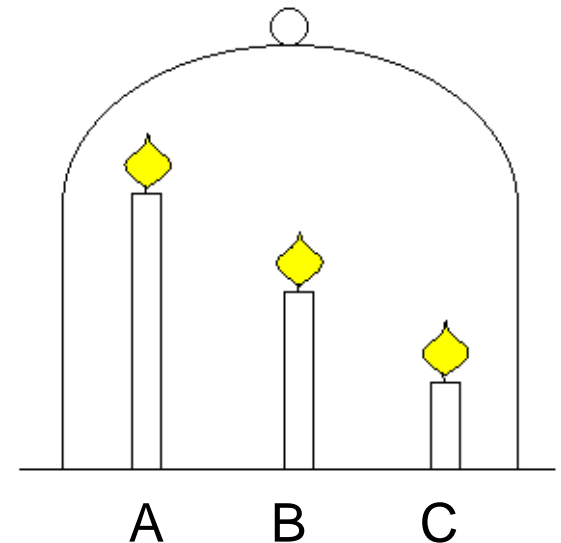
# Experiment:



- Which candle went out first?
- Find the evidence cards that supports the result
- Evidence 1 and 4 do not support the result.  
Are they false statements?

Evidence 1:  
Burning requires fuel.

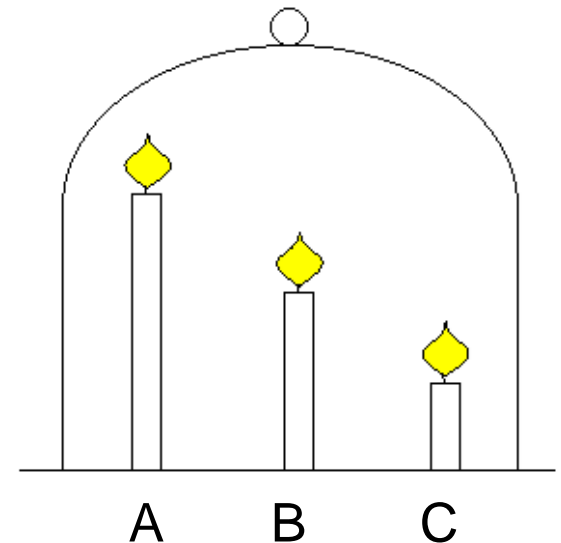
Evidence 4:  
Carbon dioxide is denser than air.



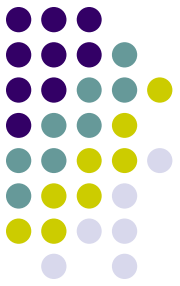
# Experiment:



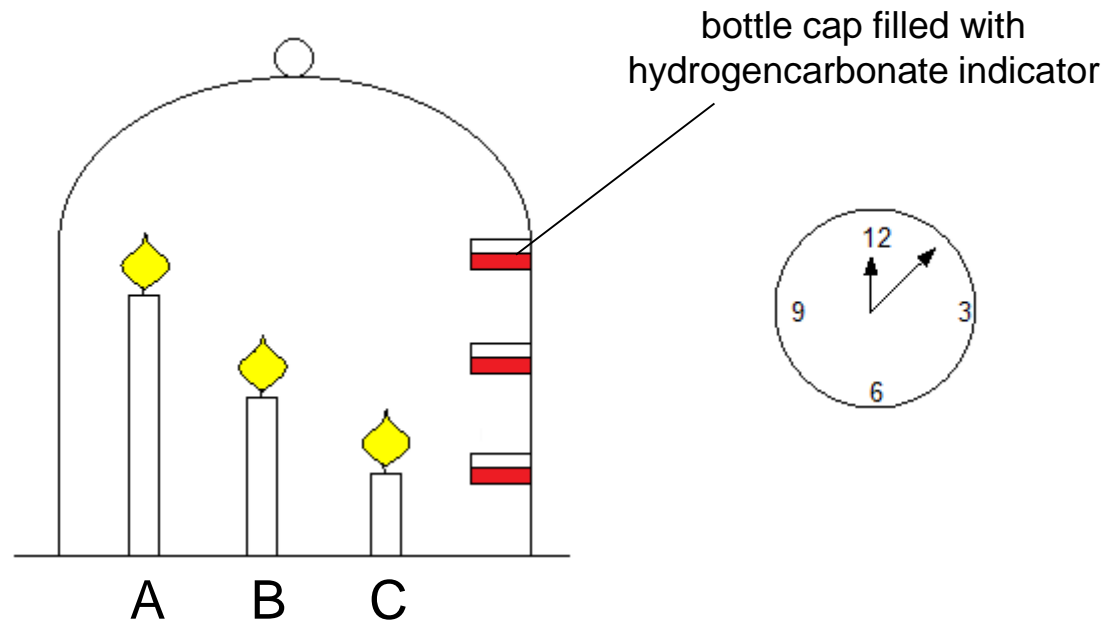
- Proposed explanation:  
Hot carbon dioxide from combustion floats to the top of the bell jar, displacing the oxygen
- Carbon dioxide is a colourless gas
- Modify the experimental set-up to show that carbon dioxide has indeed accumulated at the top



# By **direct** method



- By hanging bottle caps filled with the **hydrogencarbonate indicator** to test the  $\text{CO}_2$  level at **different height levels**



# By **direct** method



- By a CO<sub>2</sub> gas sensor (e.g. Micro:bit gas probe) to test the CO<sub>2</sub> level at **different height levels**

