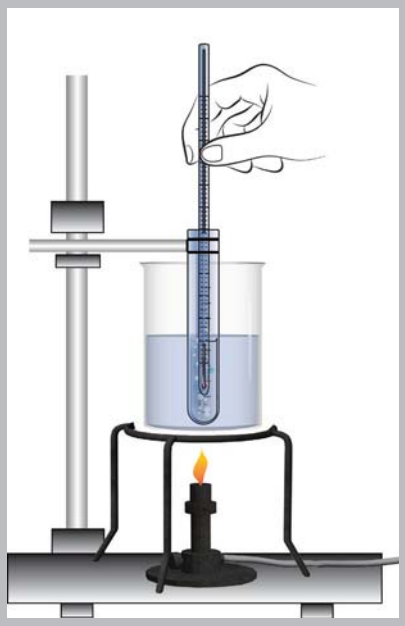
Experiment 16 Date:

Measure the melting point of candle wax.



Aim: To measure the melting point of candle wax.

Apparatus:

- Candle
- Water
- Knife
- Bunsen burner
- Thermometer
- 500 mℓ beaker
- Tripod stand
- Gauze
- Large test tube
- Retort stand

Method:

1. Use a knife to cut the candle wax into small pieces. Ensure that all the wax pieces are more or less the same size.
2. Place the thermometer in the test tube.
3. Add the pieces of candle wax to the test tube, next to the thermometer so the test tube is approximately halfway filled with wax.
4. Place the half-filled test tube in the measuring beaker which stands on top of the tripod stand.
5. Use the clamp to clamp the test tube in such a way that its base does not touch the beaker.
6. Pour tap water into the beaker until the water level is above the level of the candle wax.
7. Heat the water in the beaker until the candle wax melts.
8. Take the temperature of the candle wax every 30 s and record the readings

Results:

Time (s)	Temperature (°C)		Time (s)	Temperature (°C)
0			180	
30			210	
60			240	
90			270	
120			300	
150				

1. What is the temperature at which candle wax melts?

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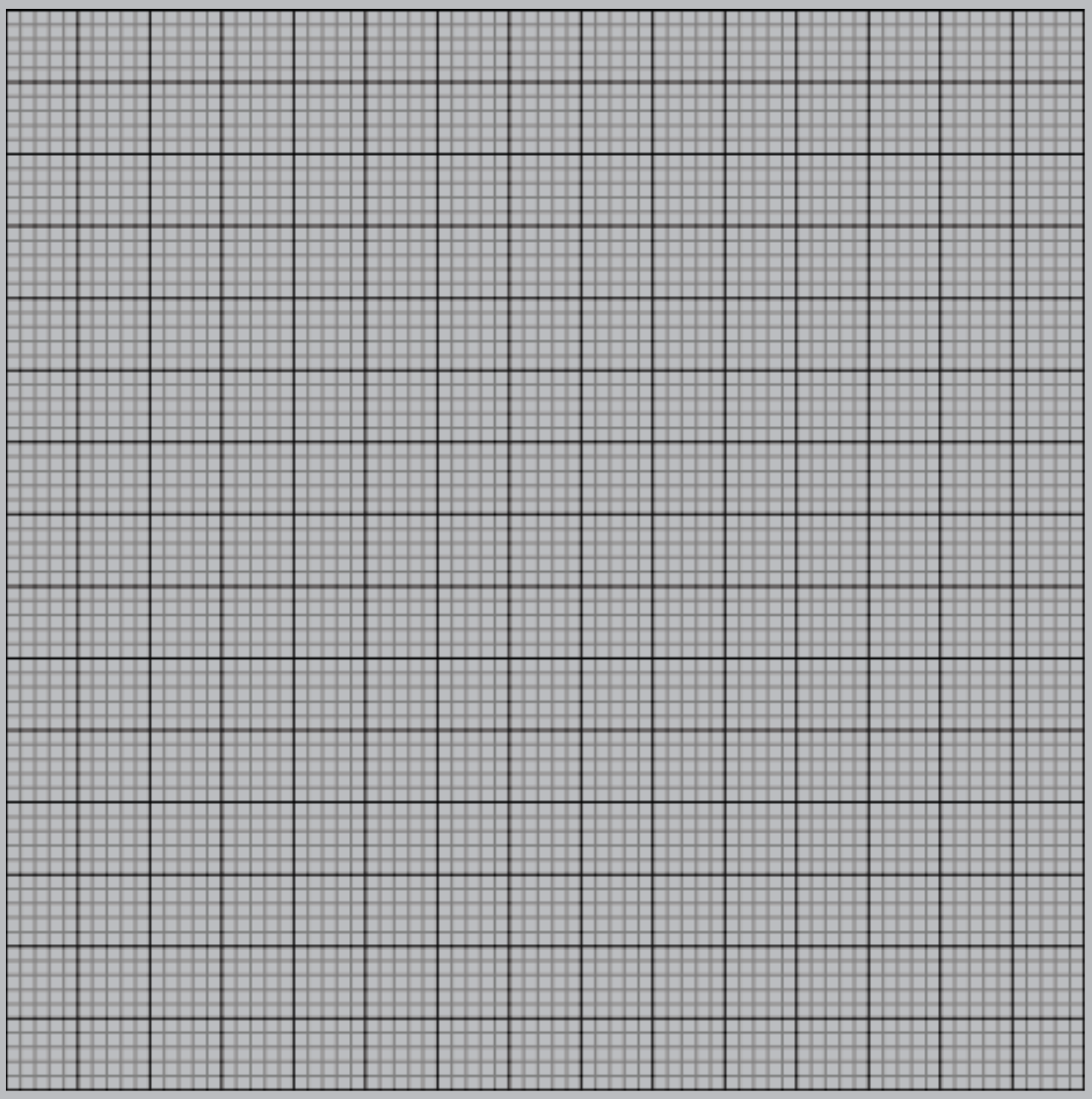
2. Draw a graph of the results you obtained.



3. Why do we use a water bath to heat the candle wax?

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Conclusion:

1. What is the melting point of the candle wax?

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