

The Primary Stage of Grades (4-5)
School Year 2022-2023

Name:

Subject: Science

Unit 5: interactions of matter

Worksheet 2: Investigating The melting
point and boiling point of water
Lab report

Date: / /

Class: Grade 4 CP (All sections)

- **Objective/s:**

Investigating the melting point and boiling point of pure water.

You will need:

A thermometer, beaker, ice cubes (Crushed ice), a spoon, bunsen burner, stop watch.

Part 1: Investigating the melting point

1. Place the thermometer in the cup of water.
Wait for about two minutes.
2. Measure and record the water temperature.
3. Take the thermometer out of the water.
Add the ice cubes (Crushed ice) and stir with the spoon.
4. Repeat the first two steps.
5. Measure and record the water temperature every two minutes until all the ice has melted.

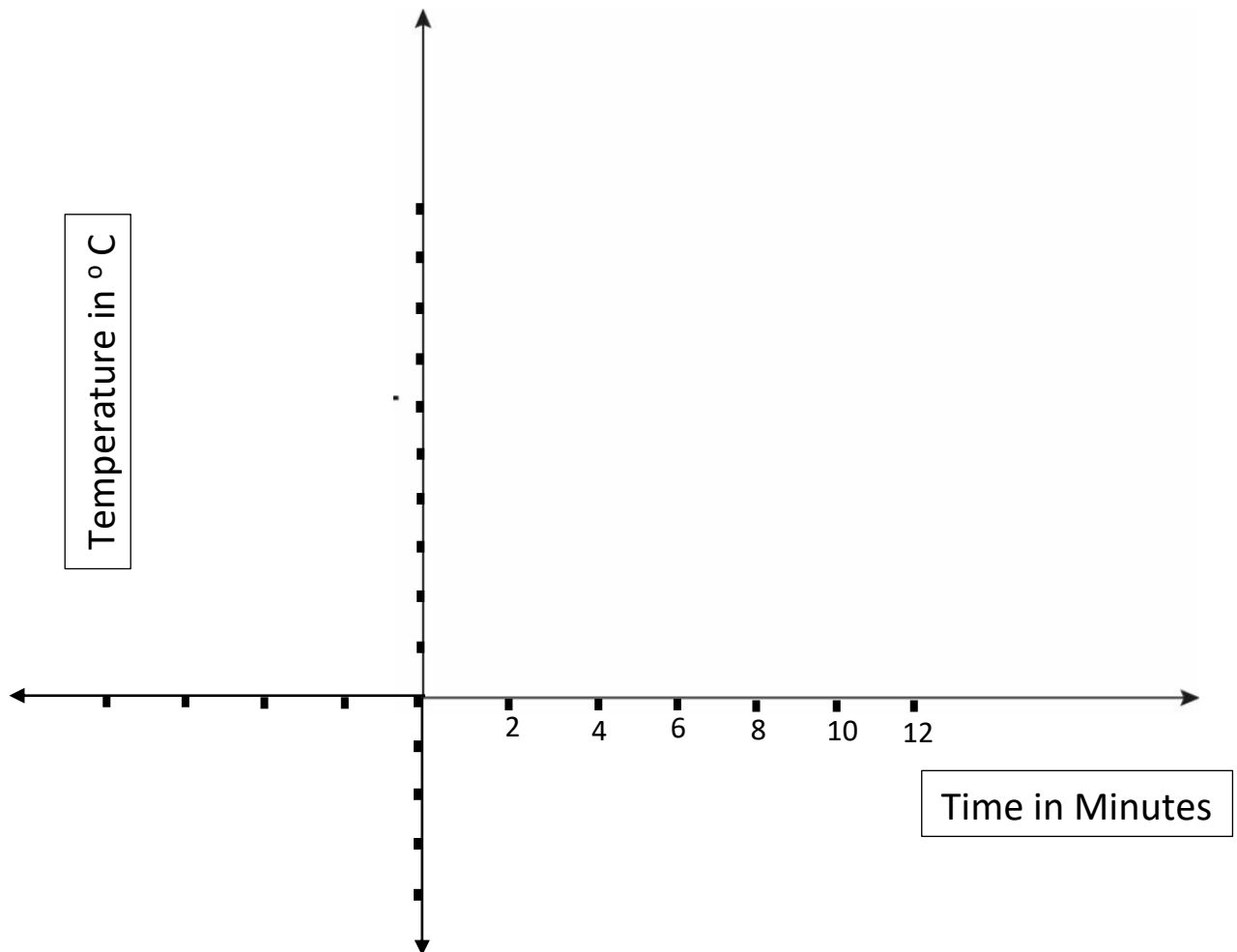


Observation:

Time in minutes	Water temperature in °C
0	
2	
4	
6	
8	
10	
12	

6. Draw a line graph of your results.

- We draw a line graph when we measure how something changes over time.
- We plot the variable that we measure (e.g. temperature) on the y-axis and time on the x-axis.



- Questions:

1. What did you notice about the temperature of ice water up to the time when all the ice had melted?

.....

2. What was the temperature of water when all the ice had melted?

.....

3. What do we call this temperature at which a substance melt?

.....

4. How many minutes did it take for all the ice to melt?

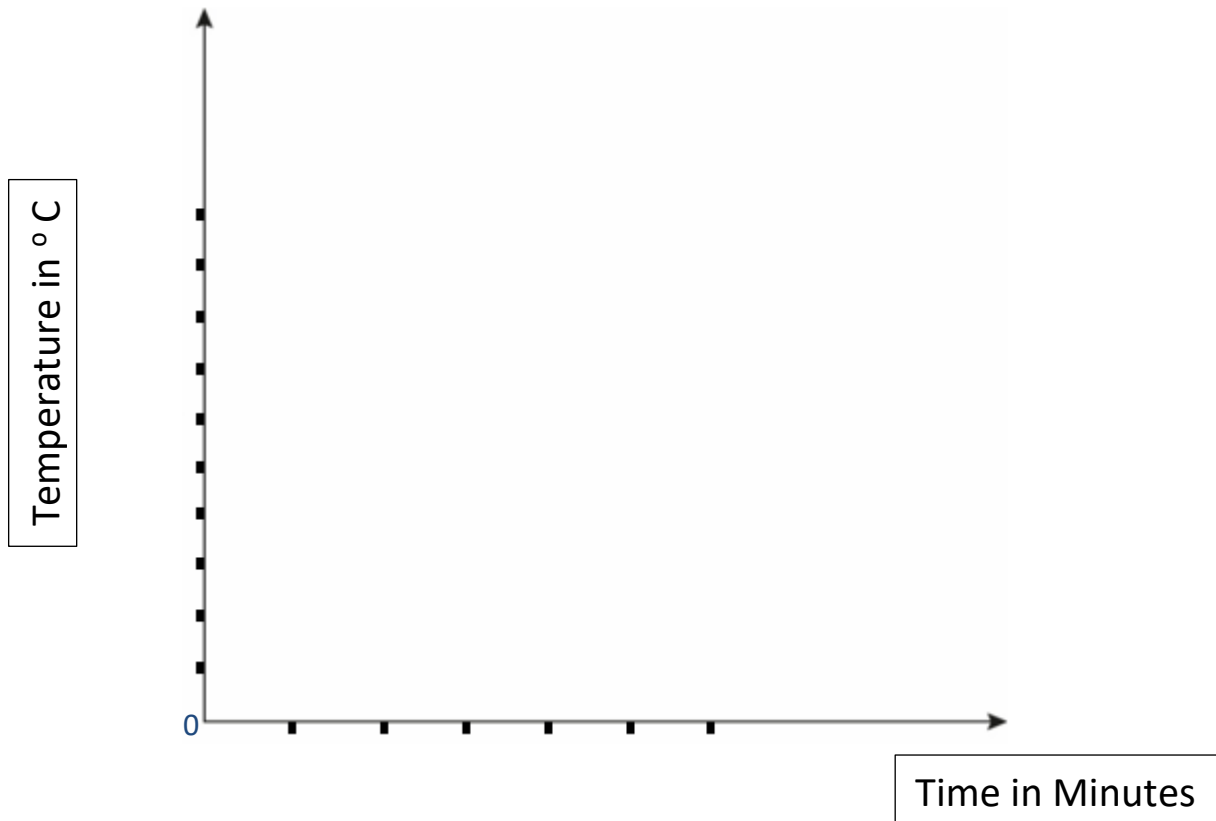
.....

Part 2: Investigating the boiling point

Next, the students used a thermometer to measure the change in temperature of water as it heats up. These are their results.

Time in minutes	Water temperature in °C
0	20
2	40
4	60
6	80
8	100
10	100
12	100

1. Draw a line graph of the results.



2. At which temperature did water start to boil?

.....

3. How did you know that water started to boil?

.....

4. What happened to the temperature of water while boiling?

.....

5. What do we call the temperature at which a liquid starts to boil?

.....