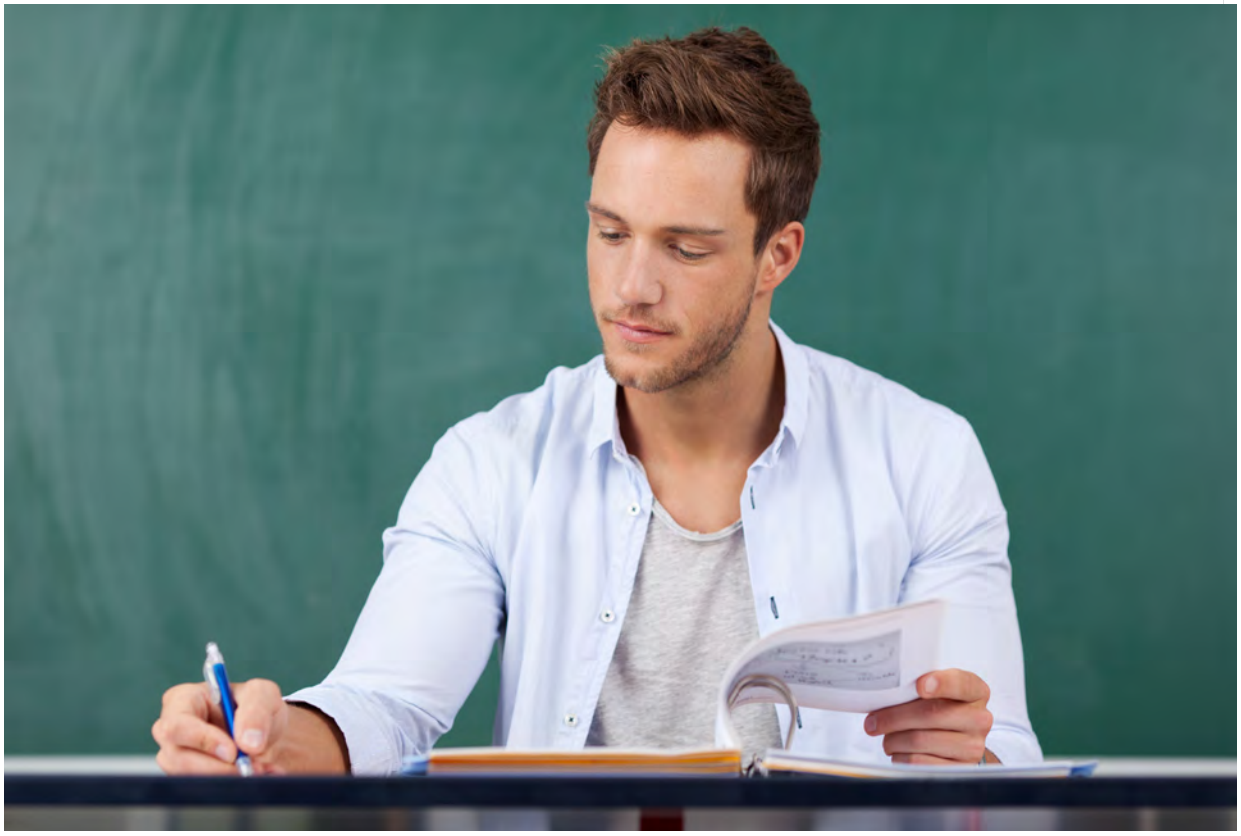
Assessment tasks

6.1
Formal assessment



Chemistry
Heating and cooling curve of water

Name: _____ Date: _____

Aim: To see how the temperature changes over time when ice is heated from -5°C until it boils and evaporates.

Investigative question:

_____

_____

Hypothesis:

_____

_____

Variables:
Fill in the items or quantities that match the headings in the table below.

Independent variable (Which is changed.)	**Dependent variable** (Which is measured.)	**Controlled variable(s)** (Which remain(s) the same.)

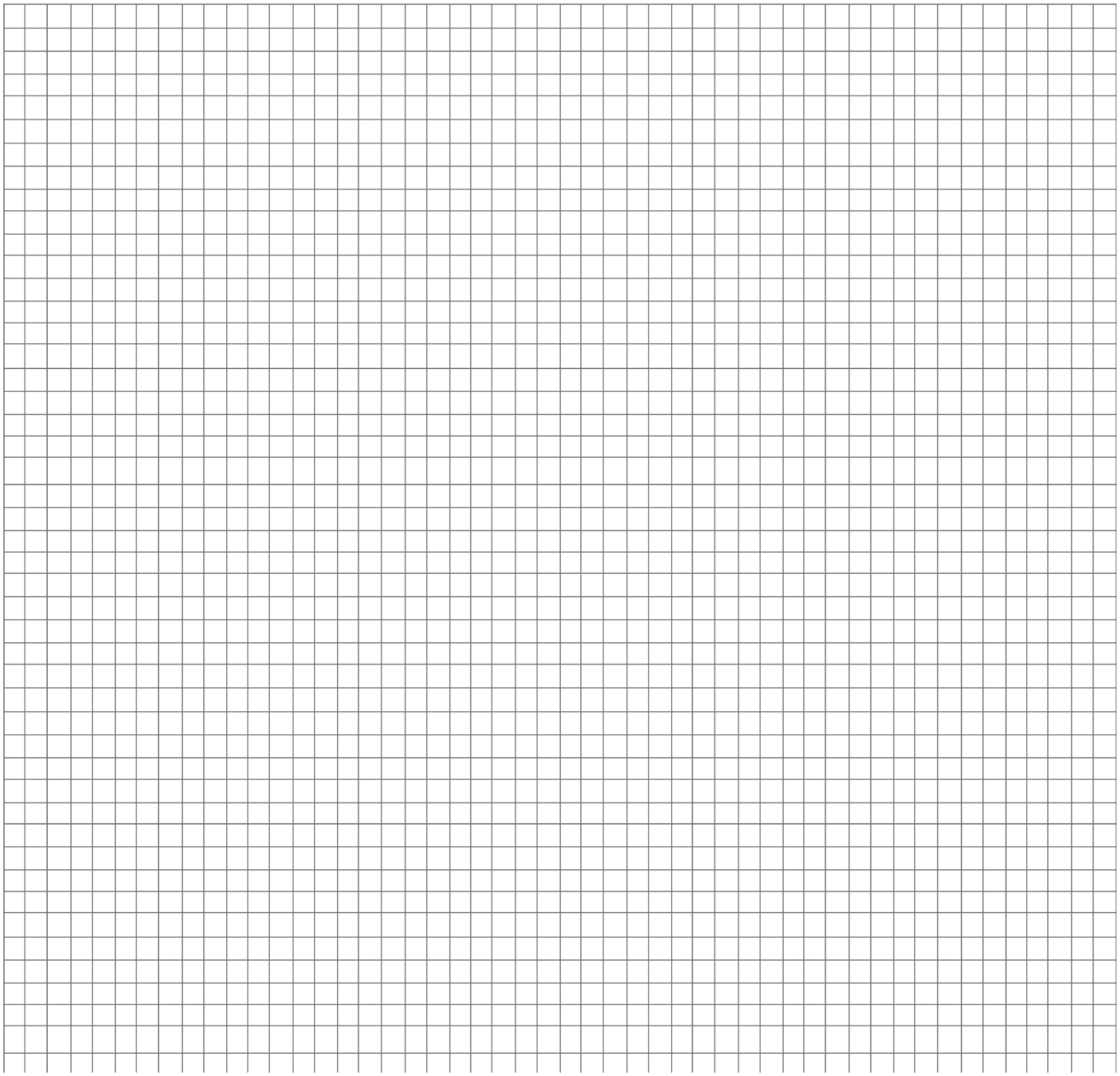
Method:
1. Place a sensitive thermometer in a glass beaker of ice.
2. Heat the beaker.
3. Use a stopwatch and take a temperature reading in °C every 2 minutes.

Observations:
Complete the table for the following time intervals. (Adjust time intervals if necessary.)

Time (minutes)	Temperature (°C)	Time (minutes)	Temperature (°C)
0		18	
2		20	
4		22	
6		24	
8		26	

Time (minutes)	Temperature (°C)	Time (minutes)	Temperature (°C)
10		28	
12		30	
14			
16			

Results:
Draw a graph of temperature (°C) versus time (minutes) to determine the temperature changes over time. The shape of the graph will help you to come to a conclusion.



Conclusions:

Complete the diagram below to summarise the findings of this investigation.