

Name _____ stream _____

COMPETENCY BASED CURRICULUM

END OF CYCLE EXAMINATION 2024

S.1 CHEMISTRY PAPER

Time: 1 hour 30 minutes

INSTRUCTIONS

Attempt **ALL** items in this paper

Item 1

Jerry carries out stone quarrying (which involves breaking down of rocks to form small aggregates) as an economic activity to earn him a living. One day as he was breaking the rocks, he came across a certain substance which had 13 protons and atomic mass 27 which is an element on the periodic table. Jerry neither knew the categories nor relevance, applications and environmental impact of this substance.

a) Help Jerry to explain the;

i) category of the element.

ii) properties of the element.

iii) uses of the element.

b) Help Jerry to understand the impact (side effects) of the element to the environment and state the mitigations.

Item 2

Shabbira is an entrepreneur who deals with the production of juice drinks from fruits such as pineapples, mangoes and oranges. For a long time, she's been confused about the category of the final product mixture formed and its relevance.

SUPPORT MATERIAL



a) Help Shabbira to understand the;

i) category of the mixture.

ii) properties of the mixture formed.

iii) uses of the product mixture.

Item 3

Kato is an industrial chemist who supplies chemicals to school laboratories. Recently supplied substance Q to your school but on surprise, he did not indicate the freezing point of the substance Q. your laboratory technician carried out an investigation to determine it's freezing point and obtained results tabulated below.

Time(s)	0	30	60	90	120	150	180	210	240	270	300
Temp (° C)	100	93	85	78	78	78	78	60	43	25	25

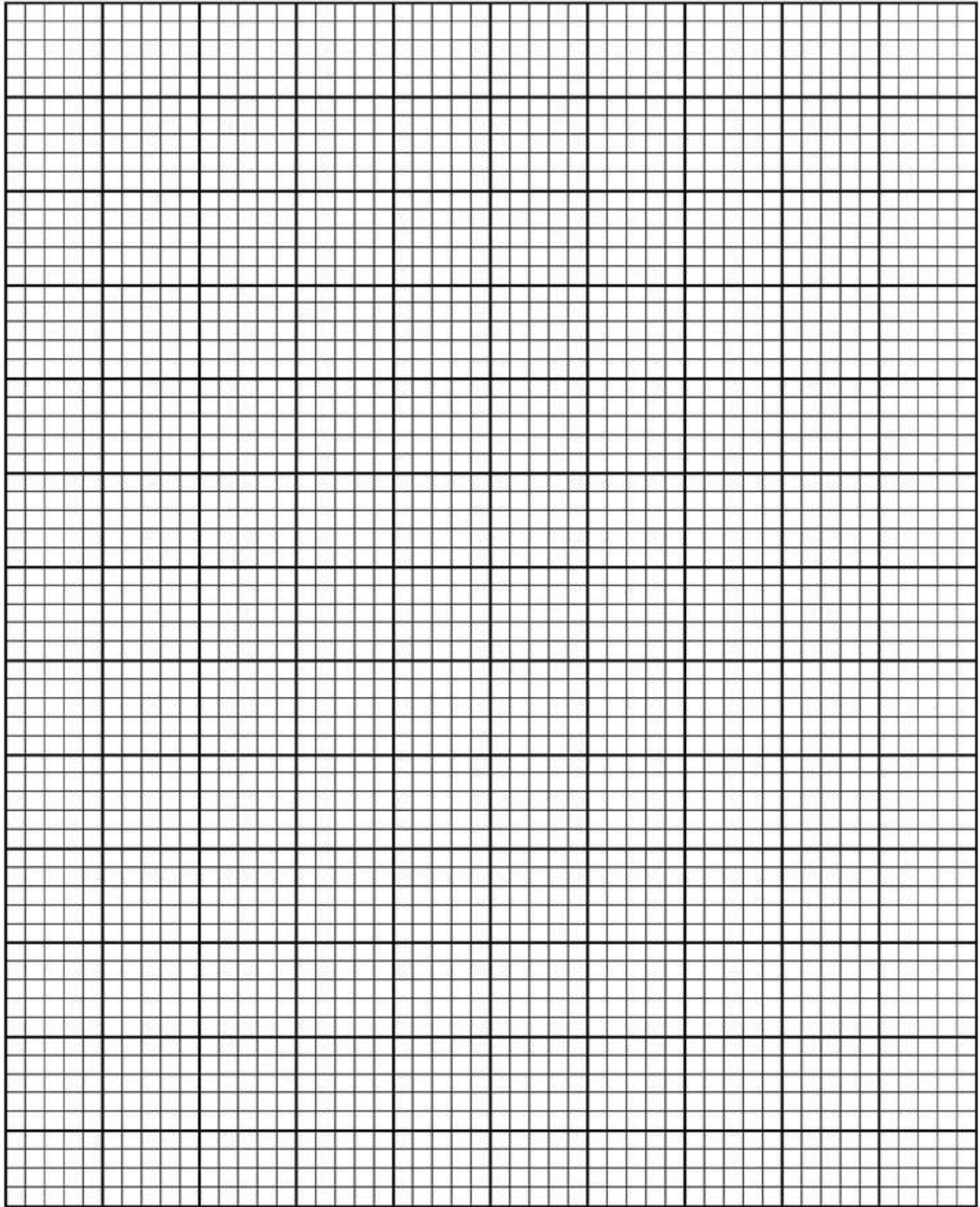
TASK

(a)

- (i). Graphically represent the results of temperature against time.
- (ii). Using your graph, determine the freezing point of substance Q.

(b) Estimate the freezing point of substance Q at;

- (i). 60s
- (ii). 120s
- (iii). 180s respectively.



[illegible]

WISH YOU SUCCESS AND HAPPY NEW YEAR 2025