Solids, liquids and gases – Checkpoint Primary Chemistry

1.

Chen finds information about the melting points and boiling points of some substances.

substance	melting point in °C	boiling point in °C
ethanol	–144	78
propanone	–95	56
salt solution	–6	106
water	0	100

(a) What is the meaning of the words **melting point**?

.....

.....

..... [2]

(b) Which substance has the greatest difference between its melting point and its boiling point?

..... [1]

(c) Salt solution is a mixture of salt and water.

Describe the effect of adding salt to the boiling point of water.

..... [1]

2.

This question is about the properties of gases.

Look at the table that shows some properties of four gases.

gas	colour of gas	odour of gas
carbon dioxide	colourless	odourless
chlorine	pale green	like bleach
nitrogen	colourless	odourless
oxygen	colourless	odourless

(a) Write down **two other** properties of all gases.

1 .....

2 .....

[2]

(b) Blessy thinks that all gases are colourless.

Explain why Blessy is **not** correct.

Use information from the table in your answer.

.....

..... [1]

3.

This question is about melting point and boiling point.

(a) Describe the change of state that happens at the melting point.

from ..... to ..... [1]

(b) What is meant by the words **boiling point**?

.....

..... [1]

(c) Ethanoic acid has a melting point of 17 °C and a boiling point of 118 °C.

Room temperature is 25 °C.

Tick (✓) one box to show if ethanoic acid is a solid, liquid or gas at room temperature.

solid ☐

liquid ☐

gas ☐

Explain your answer.

.....

.....

..... [2]