Let's Review

Section A: Multiple-Choice Questions

1. Diagrams I, II and III illustrate the particles of three different substances at room temperature.

I II III

Which diagrams illustrate the particles of mercury, helium and copper at room temperature?

	I	II	III
A	copper	helium	mercury
B	helium	copper	mercury
C	helium	mercury	copper
D	mercury	helium	copper

2. Some scientists predicted that there are rivers of methane on a moon called Titan. Methane has a melting point of –182°C and a boiling point of –161°C. What do you think the temperature on the surface of Titan is, that led to the scientists' prediction?

A Above –161°C
B Below –182°C
C Between –182°C and –161°C
D It is impossible to tell.

3. Some crushed ice is put in a beaker and warmed. The ice melts because its particles _____.

A change their size
B gain heat energy and escape
C gain heat energy and become closer
D gain heat energy and move away from their fixed positions

4. Hydraulic brakes in cars are filled with liquids and not gases because gases are easily compressed but liquids cannot be compressed. What can you infer from this statement?

A The forces of attraction between the gas particles are weaker than between the liquid particles.
B The gas particles are smaller than the liquid particles.
C The gas particles are spaced further apart than the liquid particles.
D The gas particles have less energy than the liquid particles.

5. Jason, Sarah and Megan were discussing the kinetic particle theory. Jason said that in a solid, the particles are close together. Sarah said that all particles move at a constant speed. Megan said that the higher the temperature, the faster the particles move. Who are correct?

A Jason and Megan
B Jason and Sarah
C Sarah and Megan
D All three are correct.

***6.** Five elements, **A** to **E**, have the following melting points and boiling points.

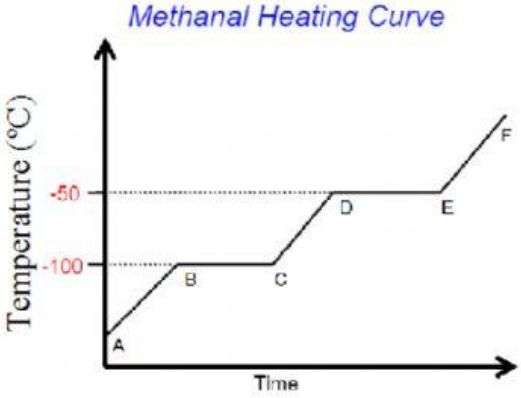
Element	Melting point/°C	Boiling point/°C
A	–219	–186
B	–189	–183
C	–7	58
D	29	222
E	666	2450

(a) At room temperature (30°C), which substances exists as
(i) a solid; A B C D E
(ii) a liquid; A B C D E
(iii) a gas? A B C D E

(b) Describe what would happen to the particles of element **C** when it is cooled from 80°C to –10°C.

a. BOILS b. FREEZES c. MELTS

7. This graph represents a heating curve



Name the processes that occurs

B - C .....
D -E .....

What's the Boiling point of Methanal? ..... °C

What's the Melting point of Methanal? ..... °C

LIVEWORKSHEETS