

SCIENCE (Chemistry)

Worksheet – Kinetic Theory II

Name: _____ () Class: _____ Date: _____

1. How will an impurity alter the melting point of a substance?

2. How will an impurity alter the boiling point of a substance?

3. Why do people in cold countries, during freezing weather, sprinkle rock salt on the roads?

4. Why does the sea rarely freeze?

5. The table below gives the melting and boiling points of some substances.

Substance	Melting Point ($^{\circ}\text{C}$)	Boiling Point ($^{\circ}\text{C}$)
A	-111	-78
B	-7	58
C	0	100
D	44	280
E	801	1413

(a) Which substance is water? _____

(b) Which substance is a gas at room temperature? _____

(c) Which substances are solids at room temperature? _____

(d) Which substance is a volatile liquid? _____

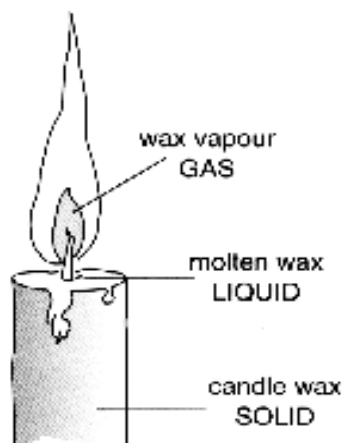
6. Why when food is being boiled, is salt often added to the water? (apart for added flavour)

7. What do iodine and ammonium chloride have in common?

FANCY THAT!

1. A Candles Burning: All Three States

For a candle to burn the solid wax must be in the vapour phase. This is achieved by the wax melting to a liquid which is then absorbed up the wick. At the top of the wick the heat vaporises the wax which can then burn. Wax is a hydrocarbon and burns, in a plentiful supply of air to form steam and carbon dioxide.



2. Amazingly Small Atoms!

- If you magnified a golf ball to the size of earth, then an atom in this ball would be the size of a marble.
- If atoms were placed in a straight line touching each other, then two million atoms would be needed to cover a full stop.
- A straight line of 40 cm length and assumed to be one atom thick contains more atoms than there are people in the world.