

Memo Gr 10 February 2018

Question 1: 1.1 c 1.2 b 1.3 c 1.4 b 1.5 a  
1.6 a 1.7 c 1.8 a 1.9 d 1.10 b

Question 2:

2.1 solid ✓

2.2.1 melting ✓

2.2.2 boiling / vapourisation (not evaporation)

2.3.1 No✓, there are 2 phase changes / substance goes through liquid phase / melting and boiling took place etc.

2.3.2 The process✓ during which a solid changes✓ to a gas (without moving through the liquid phase).

2.4.1 The temperature✓ where the atmospheric pressure is equal to the vapour pressure.

2.4.2 100°C ✓

2.4.3. increase in altitude ✓

decrease in atmospheric pressure ✓

less energy required for vapour pressure to be equal to atmospheric pressure.

2.4 latent heat of vapourisation ✓

### Question 3

3.1

#### Evaporation

- Happens at any temp
- Happens at surface
- Slow process
- Causes cooling

One mark per pair. Any 3

#### Boiling

- Specific temp
- Happens throughout liquid
- Fast process
- Constant temp

3.2

In order to move from the liquid to the gas phase, energy is required to weaken the forces of attraction/intermolecular forces (not bonds) between the particles. This energy is taken from the environment, causing a drop in temperature.