Gr10 Memo – March 2021

1.1 A

1.2 A

1.3 A

1.4 B (4 x 2 marks)

[8]

2.1.1 seconds (s)

2.1.2 kelvin (K)

2.1.3 ampere (A) (3 x 1 mark)

No unit, no mark for 2.2.

2.2.1 50 000 m ✓

2.2.2 0,275 A ✓

2.2.3 0,515 m ✓

2.2.4 200 minutes ✓ = 12000 s ✓ (Can give both marks for only the answer.)

2.2.5 33,33 $m.s^{-1}$ ✓✓ [10]

3.1 If open question ✓

Ask about relationship between dependant and independent variable. ✓

eg. How would a bigger the surface area affect the evaporation rate?

3.2.1 time / evaporation rate ✓

3.2.2 volume of water ✓

3.3 Must relate to investigative question.

eg. The bigger the surface area, the faster the water evaporated. ✓✓

[6]

4.1.1 filtration ✓

4.1.2 sand ✓

4.1.3 sugar water (not just sugar) ✓

4.1.4 physical process ✓

4.2.1 A substance that cannot be separated by physical means/methods. ✓✓

4.2.2 a) element

b) only one type of atom

c) mixture

d) combination of different elements/compounds (4 x 1 mark)

[10]

5.1 54°C ✓

5.2 93°C ✓

5.3 The temperature where the vapour pressure equals the atmospheric pressure. ✓✓

5.4 liquid ✓and gas✓

5.5 No, ✓ does not boil at 100°C (or does not melt at 0°C). ✓

5.6 No, ✓ there is a liquid phase (is has two phase changes) ✓

5.7 Higher altitude, lower atmospheric pressure. ✓

Less energy required for vapour pressure to equal atmospheric pressure. ✓

Less energy means boiling at lower temperature. ✓

[13]

6.1. A

6.2 C

6.3 II (3 x 1 mark)

[3]

Total [50]