Activity 5 – Chemistry

Paper 1C, Q4a

(4)

1 The student uses ink as the baseline. This is wrong as the ink could smear the ~~chromatography~~ chromatography paper which could make the test invalid

2 The student submerges the pen inks into the water. This will ruin the test as the inks will not travel up the paper properly. The student should have put the baseline and inks just above the water line.

1 water level needs to be below the baseline so as to allow the water to get absorbed up the paper. Otherwise the ink dots will just diffuse into the water as opposed to up the paper.

2 the baseline needs to be drawn in pencil and not ink. Ink is soluble ~~or~~ in water so will rise up the paper along with the inks being tested which will make it very hard to distinguish any of the inks and get any results.

Paper 1C, Q14e

- Put the filtrate into an evaporating basin
- place over a bunsen burner to evaporate excess water.
- Remove evaporating basin from the bunsen burner and place it in a warm, dry place to evaporate the remainder of the moisture
- After time blue crystals will be left in the evaporating basin.

From the filtered mixture, boil the liquid off until it is about half full in an evaporating dish. Leave the rest to evaporate off, leaving crystals behind in the evaporating dish. Run de-ionized water through the crystals to wash out any impurities. From here, put the crystals in an oven to dry off, leaving a pure, dry sample of hydrated copper (II) sulfate crystals.

(3)

Add the filtrate to an evaporating basin. Gently heat the sample with a bunsen burner to evaporate some of the water. Regularly dip a glass rod into the sample while heating, once crystals start to form on it, stop heating the sample. Leave the crystals to cool and dry on a window sill. Once the crystals have formed filter the sample to remove remaining excess water. Dry the crystals between two clean sheets of filter paper.