

MARK SCHEME for the May / June 2012 question paper
for the guidance of teachers

0620 CHEMISTRY

0620 / 51

Paper 5 (Practical), maximum raw mark 40

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1 (a) Table of results

volume of aqueous potassium chloride boxes completed correctly (1)
 1,2,4,5, 6 and 7
 heights of solid boxes completed (1) in mm (1)
 ascending order / last 2 level out (1) [4]

(b) all points correctly plotted including origin (2), –1 for any incorrect
 appropriate scale for y axis(at least half of grid) (1)
 best fit straight line graph drawn with a ruler(1) [4]

(c) value from graph (1) unit (1) shown clearly (1) [3]

(d) precipitation / double decomposition (1) [1]

(e) height increases(1) levels off (1) [2]

(f) same heights owtte (1)

all lead nitrate reacted / / reaction finished / excess potassium chloride (1) [2]

(g) yellow precipitate / solid (1) [1]

(h) improvement (1)

e.g. use burette or pipette / leave solid to settle longer / repeat /
 wider range of volumes for KCl
 explanation (1)

e.g. instead of a measuring cylinder / heights more accurate / take average /
 more reliable / accurate [2]

2 (a) white (1) [1]

(b) (i) condensation / drops of liquid / water / steam (1)
 solid is still white no (colour) change (1) [2]
 fizzes / effervescence (1) lighted splint extinguished / owtte (1) [2]

(ii) fizz / bubbles / effervescence (1) limewater(1)
 milky / cloudy / white precipitate (1) [3]

(iii) effervescence / fizz / bubbles (1)
 darkens / turns black / green (1) ignore: blue [2]

(iv) description of smell of ammonia / sublimate (1)
 pH paper turns blue / green or pH > 7 (1) **allow:** litmus goes blue [2]

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- (c) initial temperature recorded (1) °C (1) [3]
 final temperature recorded and lower (1) [1]
 pH > 7 (1)
- (d) carbon dioxide (1) [1]
- (e) ammonia (1) **not**: ammonium [1]
- (f) endothermic (1) [1]
- (g) hydrogencarbonate / carbonate (1) alkaline (1) **not**: sodium hydroxide [2]
 non transition metal (1) max 2