

## Mark Scheme (Results)

January 2017

International GCSE Chemistry (4PH0) Paper 1C Science Double Award (4SC0) Paper 1P

Pearson Edexcel Certificate in Chemistry (KPH0) Paper 1C Science (Double Award) (KSC0) Paper 1P



Question number	Answer	Notes	Marks
7 (a)	any three of the following:		3
	MP1. current increases during first <b>0.04s</b> / to maximum of <b>0.4A</b> ;  MP2. current increase is <b>linear</b> /proportionate to time;	allow 'at first' for first 0.04s	
	MP3. (then) current drops for next <b>0.44s</b> / by <b>0.48s</b> ; MP4. current decrease is <b>nonlinear</b> ;	allow 0.5s	
	MP5. (final)current constant value is <b>0.2 A</b> / from <b>0.48s</b> onwards;	allow 0.5s	
b i	0.2 A;		1
ii	V= I R;	accept words or standard symbols	1
iii	substitution; rearrangement; evaluation; unit; e.g. $12 = 0.2 \times R$ $R = 12/0.2 = 60$ $\Omega$	accept ecf from bi independent mark	4
iv	P= IV;	accept words or standard symbols	1
V	substitution; evaluation; e.g. P= 0.2 ×12 2.4 (W)	accept ecf from bi	2
С	filament heats up very rapidly (at the start); causing it to melt/ break;	allow wire for filament	2

**Total 14 marks** 

other POT error only loses conversion mark	

**Total 10 marks**