

INERT ELECTRODES

1 The results of experiments on electrolysis using inert electrodes are given in the table.

Complete the table; the first line has been completed as an example.

electrolyte	change at negative electrode	change at positive electrode	change to electrolyte
molten lead(II) bromide	lead formed	bromine formed	used up
.....	potassium formed	iodine formed	used up
dilute aqueous sodium chloride
aqueous copper(II) sulfate
.....	hydrogen formed	bromine formed	potassium hydroxide formed

[Total: 8]

MARKING SCHEME:

molten potassium iodide	NOT aqueous	[1]
hydrogen		[1]
oxygen		[1]
water used up or solution becomes more concentrated or sodium chloride remains		
NOT no change		[1]
If products are given as hydrogen, chlorine and sodium hydroxide then 2/3		
copper		[1]
oxygen (and water)		[1]
sulfuric acid	accept hydrogen sulfate	[1]
aqueous or dilute or concentrated potassium bromide		[1]
accept correct formulae		

[Total: 8]