

ELECTROCHEMISTRY : GALVANIC AND ELECTROLYTIC CELLS

DATA AND OBSERVATIONS

Name(s) : _____ Date : _____

Class/Section : _____ Instructor : _____

Part A. Oxidation-reduction reactions

Mass of magnesium sulfate = 1.00 g

Mass of copper sulfate pentahydrate = 2.00 g

Observations :

$MgSO_4 + Cu \text{ wire} \rightarrow$ no reaction
 $CuSO_4 + Fe \text{ nail} \rightarrow$ nail coated with brown solid

Part B. The Galvanic cell

Voltage = 2.20 V

Room temperature = 23°C

Observations :

voltmeter needles moves to 2.20 V when salt bridge added

Part C. The Electrolytic cell

Observations :

Bubbles of gas seen at both electrodes

solution turns pink at cathode