

### Before starting the lab:

Write a purpose for the lab, write in your safeties after your purpose, record these procedures, balance and name the substances in each reaction and diagram the set-up for the battery into your notes.

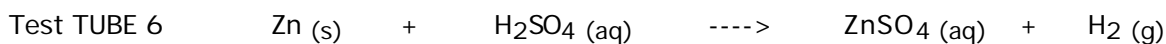
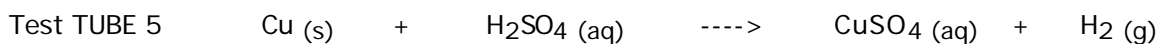
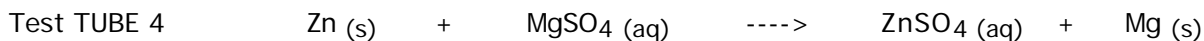
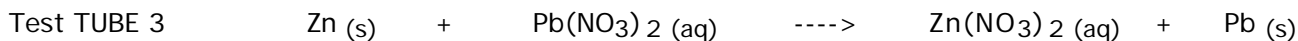
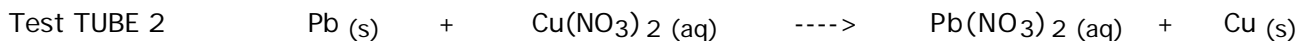
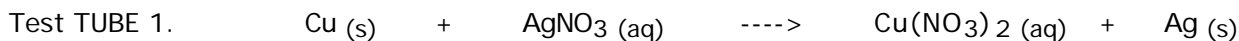
### Safeties

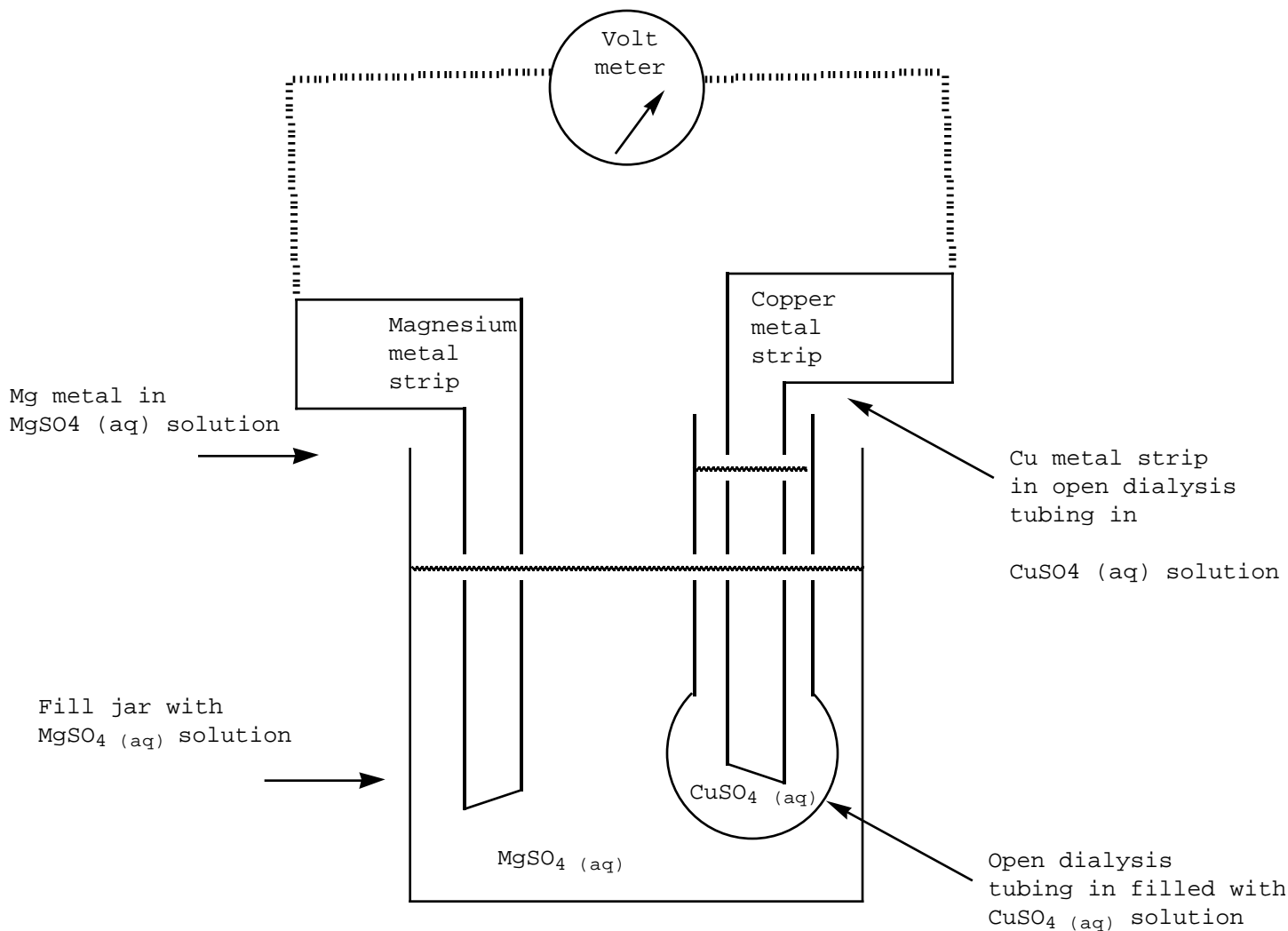
- 1)  $\text{AgNO}_3$  (aq), silver (I) nitrate will OXIDIZE your skin. Don't get it on your skin and if you do wash immediately with plenty of water.
- 2)  $\text{Pb}(\text{NO}_3)_2$  (aq) lead (II) nitrate contains lead (II) ions; wash your hands before leaving the lab. Don't get it on your skin and if you do wash immediately with plenty of water.
- 3)  $\text{H}_2\text{SO}_4$  (aq) sulfuric acid is a strong acid and it will burn your skin. Don't get it on your skin and if you do wash immediately with plenty of water.

### Procedure:

- Review Safeties first
- Prepare six test tubes each with 2 cm high of corresponding liquids solution.
- Place in each test tube the corresponding metal and record your observations in the first minutes.
- Let each test tube 15 minutes and record your observations after 15 minutes.
- Prepare per diagram the battery on the next page and measure the voltage.

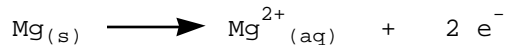
Balance these reactions AND NAME ALL substances.



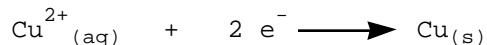


This is what is going to happen

1)  $\text{Mg}^0_{(s)}$  will be oxidized to  $\text{Mg}^{2+}_{(aq)}$  plus two electrons



2)  $\text{Cu}^{2+}_{(aq)}$  plus two electron will be reduced to  $\text{Cu}_{(s)}$  metal



OVERALL

Mg should dissolve and the copper metal strip should grow in size

