

Atoms and Ions

All matter is made of atoms. A neutral atom has equal numbers of _____ and _____.

If an atom (or molecule) loses or gains an _____, it becomes an _____.

For example:

H represents a neutral atom of _____.

H⁺ represents a _____, that is, an atom which has _____ one _____.

Cl represents a neutral atom of _____.

Cl⁻ represents a _____, that is, an atom which has _____ one _____.

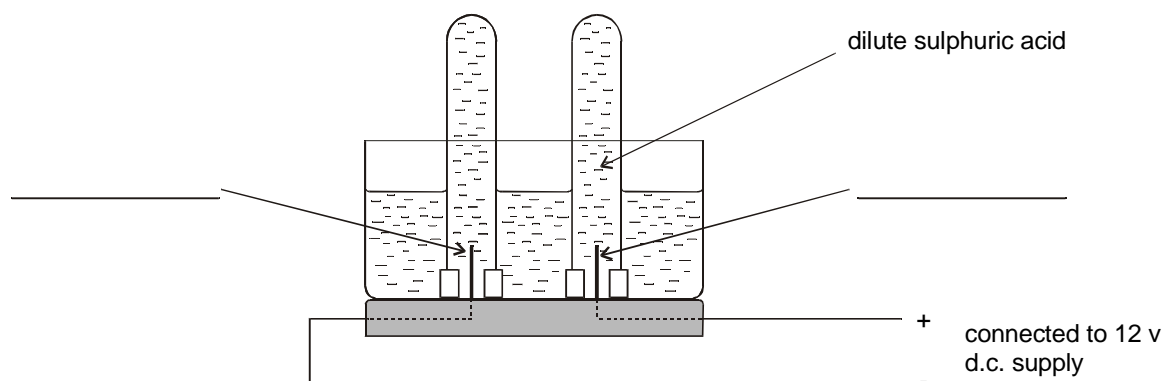
Mg represents a neutral atom of _____.

Mg²⁺ represents a _____, that is, an atom which has _____.

Experiment: Electrolysis of dilute Sulphuric Acid

The word "electrolysis" means _____

Set up apparatus as shown below.



The test tubes should be **completely full** of the dilute sulphuric acid (the chemical formula for sulphuric acid is _____).

Observations

Testing the gases produced

At the positive electrode (the _____)

At the negative electrode (the _____)

Conclusion

When an electric current is passed through dilute sulphuric acid, the _____ in the solution is “split up” into _____ and _____.

Pure water is *not* a good conductor of electricity. Explain briefly why water with a little sulphuric acid added to it *is* a good conductor.
