


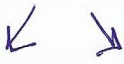



Chapter 16 continued:

1. Activity series:

- a. Represents a series of Half reactions.
- b. What happens to half reactions on the activity series?  
 will be spontaneously paired w/  
 the reverse of any half reaction  
 below it.

2. Terminology:

Term	Definition	Key word/ image
Electrical current	The flow of electrical charge.	• Flow 
Electro chemical cell	A device that creates electrical current from a spontaneous redox reaction.	• electrical current 
Electrolytic cell	An electro chem. cell that uses electricity to drive a chem reaction	• electricity. 
Voltaic cell	An electro chem cell that is constructed of 2 - 1/2 reactions	$\frac{1}{2} + \frac{1}{2} = 1$ 
Anode	Where Oxidation occurs.	Location Oxidation

Cathode	Where reduction takes place	Reduction
Voltage AKA Potential difference.	Causes electrons to flow	Flow 

Chapter 17:

Terminology:

Term	definition	keyword
Radioactivity	The emission of tiny indivisible particles by the nuclei of certain atoms.	Emission.
Isotopes	Atoms w/ diff mass # but same atomic #.	Different
Nucleide	The nucleus of a specific atom.	Nucleus

Radioactive decay	Nuclear decay	Decay
Positron emission	inc # of <del>proton</del> neutrons, dec # of protons.	Neutrons / change.
Electron capture	NUCLEUS absorbs electrons	Absorbs.
Half- Life	The period of time needed for 1/2 of a sample of radioactive atoms of a given isotope to decay	Half-decay.

Questions:

1. What holds the nucleus together?

Strong nuclear force.

2. What is the force of repulsion between the protons in an atom?

electrostatic repulsion.



3. Describe the 3 radioactive particles from greatest penetration to least penetration.

◦ gamma rays -

- lowest ionizing power
- Stopped by several ft. of concrete or several in. of lead.

◦ Beta particles

- Medium ionizing power
- Stopped by clothing / Al.

◦ Alpha particles

- ~~lowest~~ greatest ionizing power
- stopped by paper