

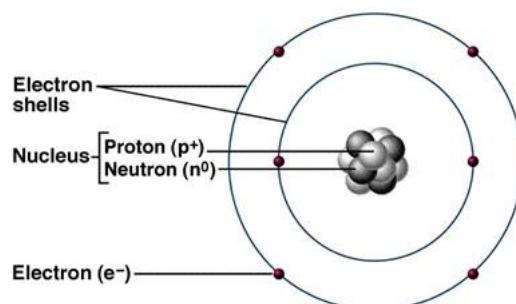
# SCH 3U

## ATOMS & THEIR COMPOSITION

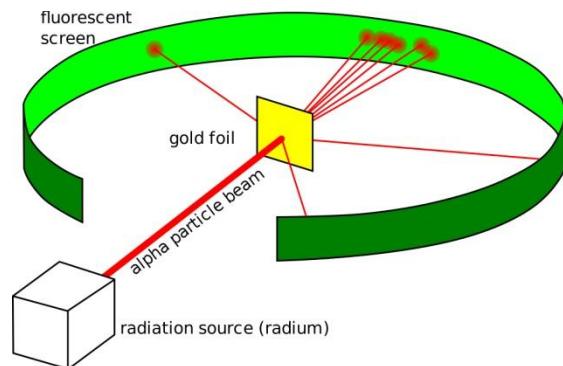
### DEFINITIONS:

- ① elements =
- ② atoms =
- ③ subatomic particles =

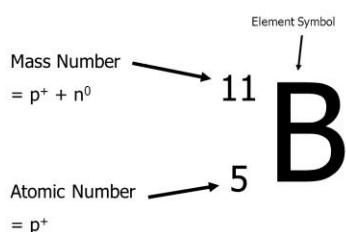
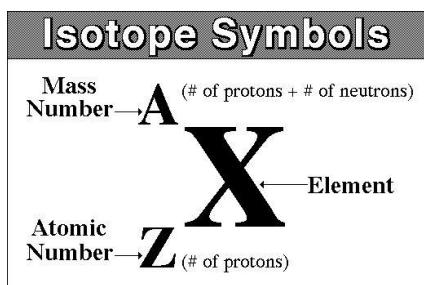
### STRUCTURE OF THE ATOM:



### RUTHERFORD'S GOLD FOIL EXPERIMENT:



### ATOMIC SYMBOLS:

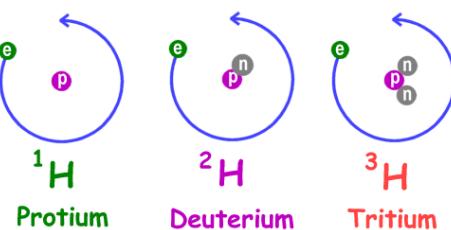


**DEFINITIONS:**

④ isotopes =

Example:

Three Isotopes of Hydrogen



- All isotopes of an element have similar chemical properties since they have the same number of protons & same number of electrons.

⑤ radioisotopes =

Complete the following chart (the first row is done for you):

ELEMENT	SYMBOL	Z	A	# p <sup>+</sup>	# n <sup>0</sup>	# e <sup>-</sup>
carbon – 13	$^{13}_6C$	6	13	6	7	6
oxygen – 18			18			
		38			50	
				17	18	
iron –					29	
			33			16
					118	79
	$^{133}Cs$		133			