

ATOMIC STRUCTURE

			of the whole atom.							
		-			-					
	•	•	ns have no electric	_	•	e number o	protons and			
•••		. The electrons are	e arranged in energy	/ levels ().					
					_					
	sub-atomic particle	relative mass	relative charge							
	proton									
	neutron	neutron								
	electron									
Atomic number = number of										
Mass number = number of + number of										
The number of protons, neutrons and electrons in an atom can be worked out using the atomic number and mass number.										
Number of protons =										
Number of neutrons =										
Νι	umber of electrons =	=								
At	oms can be represe	ented as follows:								
mass number Symbol e.g. $^{19}_{9}F$ protons = electrons =										
						_				
			same number of							
determines what type of atom it is (e.g. all atoms with 6 protons are carbon atoms). Atoms of different elements have										
an	fferent numbers of .									
Is	otopes are atoms v	with the same num	ber of	. but a different		³⁵ Cl	³⁷ Cl			
nι	ımber of	This me	ans they are atom	s of the same	protons					
	v									
	number									
Ī	Atom	Atomic number	Mass number	Number of protons	Number of neutrons	Number of e	lectrons			
-				•						

Atom	Atomic number	Mass number	Number of protons	Number of neutrons	Number of electrons
²³ ₁₁ Na					
Li	3	7			
Ar		40	18		
K			19	20	
Al				14	13
²³⁵ U					
²³⁸ U					