

Date: _____

Complete the table below. You will not need to use the periodic table to do this.

Remember:

- atomic number is the number of protons in the nucleus of an atom
- atoms have equal numbers of protons and electrons
- mass number is the total number of protons and neutrons in the nucleus of an atom.

Chemical symbol	Atomic number	Mass number	Number of protons	Number of electrons	Number of neutrons
${}^4_2\text{He}$	2	4			2
${}^9_4\text{Be}$			4	4	5
${}^{19}_9\text{F}$	9	19			10
${}^{23}_{11}\text{Na}$	11	23			
H		1			
${}^{31}_{15}\text{P}$			15	15	16
${}^{37}_{17}\text{Cl}$	17		17		20
${}^{48}_{22}\text{Ti}$			22		26
Cu		65		29	
Br			35		44

Complete these diagrams to show the electron arrangement of the first 20 elements of the periodic table. You can use dots or crosses to represent the electrons.