

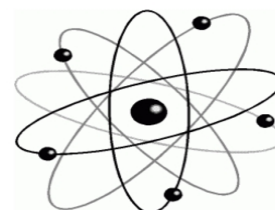
### Chapter 4 Review Worksheet

Name: \_\_\_\_\_ Block: \_\_\_\_\_ Date: \_\_\_\_\_

- Which of the following is the smallest particle of an element that can exist by itself?
  - Ion
  - Atom**
  - Molecule
  - Compound

- Which of the following correctly matches the subatomic particle with its charge and location in an atom?

	Subatomic Particle	Location	Charge
A	Proton	Nucleus	Neutral
B	Neutron	Nucleus	Positive
C	Electron	Shell	Positive
<b>D</b>	<b>Electron</b>	<b>Shell</b>	<b>Negative</b>



- Which of the following are responsible for bonding?
  - Nuclei
  - Protons
  - Neutrons
  - Electrons**
- How do you calculate the number of neutrons in an atom's nucleus?
  - Atomic number
  - Mass number – atomic number**
  - Mass number + atomic number
  - Number of electrons + Number of protons

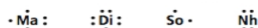
- Which of the following describes a cation?

I.	Examples include Ca <sup>2+</sup> and Al <sup>3+</sup>
II.	A metal atom that has lost electrons
III.	Has an equal number of protons and electrons

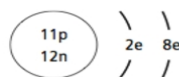
- I and II only**
- I and III only
- II and III only
- I, II and III

- Which of the hypothetical elements shown below represents a metal?

- Ma
- Di
- So**
- Nh



- Which of the following does the Bohr model represent?
  - A neon atom
  - A sodium atom
  - A sodium ion**
  - A fluorine atom



- Draw Bohr diagrams for the following elements:
  - Nitrogen atom



- Potassium ion



- Draw Lewis diagrams to show the following chemical bonds:

- CaCl<sub>2</sub> :



- CO<sub>2</sub> :

