



Chemistry – Ionic Quiz

/47

Date:

Name:

Q1. Check whether the following pairs of elements would form an ionic bond. Write “ionic” if it can, or “non-ionic” if it cannot below the pair.

a) Br, Ca	b) Li, O	c) Ti, Ag	d) N, O

0 1 2 3 4

Q2. Name the following ions.

a) Al^{3+}	b) N^{3-}	c) Cl^-	d) Na^{1+}

0 1 2 3 4

Q3. Find the chemical formula when these two elements react. Then name the ionic compound.

Reactants	Rough Work	Chemical Formula	Chemical Name
Aluminum & Nitrogen			
Magnesium & Iodine			
Copper (II) & Phosphorus			
Iron (II) & Oxygen			

0 1 2 3 4 5 6 7 8

Q4. Name the following ionic compounds.

LiF		VO_2	
NiS		$CuCl$	
SnI_4		MgO	
Ca_3P_2		$BeBr_2$	

0 1 2 3 4 5 6 7 8

Q5. Write a paragraph describing the relationship between an atom and an ion. Use the following words at least once in your paragraph: **atom, ion, neutral, charged, cation, anion, metal, non-metal, Noble Gas**

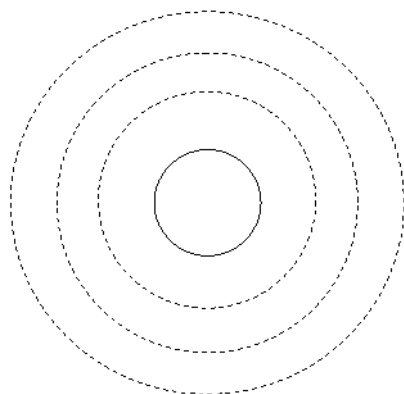
0 1 2 3 4 5 6 7 8 9

Q6. Explain why the ions Ca^{1+} and S^{3-} do not exist.

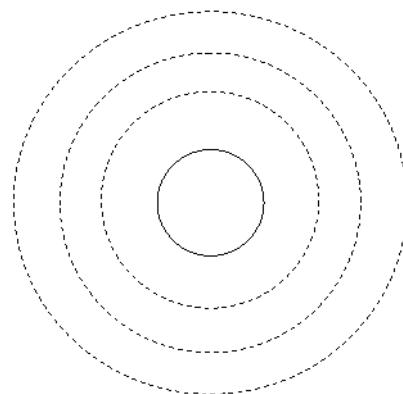
0 1 2 3 4

Q7. Draw the Bohr-Rutherford Diagram for the ions of these elements. Clearly distinguish any electrons that are added or removed. Then write the chemical symbol with the charge.

magnesium
12
Mg
24.305



oxygen
8
O
15.999



0 1 2 3 4 5 6 7 8 9 10