

1. Complete each sentence.

Unit 2 Test → Wednesday

- IONIC bonds form through a transfer of electrons, while COVALENT bonds form when atoms share electrons.

- Positive ions are called CATIONS and form when atoms LOSE electrons.

- Negative ions are called ANIONS and form when atoms GAIN electrons.

- METALLIC bonds form between metals with a SEA of electrons.



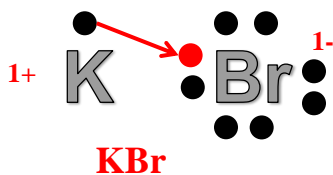
2. Complete the chart. You may use your COLORED periodic table to help you.

Element	Atomic Symbol	Total # of Electrons	# of Valence Electrons	# of Electrons Gained or Lost	Oxidation Number
Bromine	Br	35	7	G1	1-
Lithium	Li	3	1	L1	1+
Calcium	Ca	20	2	L2	2+
Sulfur	S	16	6	G2	2-
Boron	B	5	3	L3	3+
Silicon	Si	14	4	G4/L4	4- 4+
Phosphorus	P	15	5	G3	3-

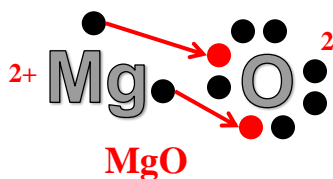
Check
your
answers!

3. IONIC BONDS - Draw the Lewis structures for each atom, draw arrows to show the transfer of electrons, write the charge for each ion, and then write the chemical formula.

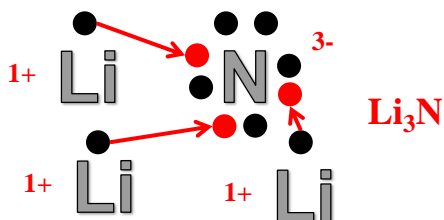
(A) Potassium + Bromine



(B) Magnesium + Oxygen

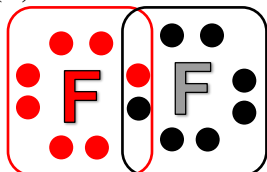


(C) Lithium + Nitrogen



4. COVALENT BONDS – Draw the Lewis structures for each atom, draw circles to show the electrons that are shared, and then write the bond structure and chemical formula.

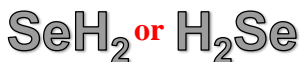
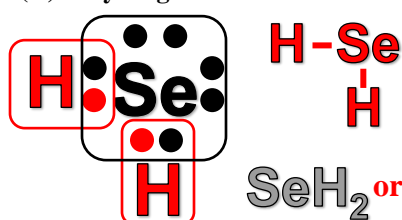
(A) Fluorine + Fluorine



(B) 3 Hydrogen + 1 Arsenic



(C) 2 Hydrogen + 1 Selenium



Unit 2 Test – Will be next Wednesday

The only resource you can use on your test is your colored periodic table. No YELLOW or WHITE tables allowed!

What information do you need to add to your periodic table before the test?

cation anion

+ M NM -

Ionic

(transfer)

M+M
Metallic

← coefficient
of molecules

2 H₂O

↑ subscript
of atoms

Oxidation # = e⁻ → G or L

mg. L2 → 2+

Cl: G1 → 1-

NM

COVALENT

NM

Share e⁻

Single Cl-Cl

→ Double O=O

→ Triple N≡N

← Diatomic

Cl₂

O₂

N₂

Miss class? Need to check your notes?

**Go to mrstomm.com → Assignments
and look in the right-hand column**

Things to do today ...

Fri, 1/18

- **Unit 2 Test** - Moved to Wednesday!

- Discuss **Unit 2 Review worksheet**

Assignments:

- Finish both sides the **Design-A-Firework worksheet** before class on Tuesday!
 - Use the **EDPuzzle Fireworks** video to help you do the front.
 - Use the links on the **Matter & Atoms** page to do the back.
- **Legends Playlist** - Due Tues, 1/22 - Only 3 games to do for this playlist
- Study for the **Unit 2 Test** and add notes to your colored periodic table (it is the only page you can use on the test!)

Textbooks

Chem Unit 2: Chemical Bonding

Periodic Tables

J-LAB Periodic Table

List of Elements (A to Z)

PTable - Valence Electron (SVG)

Class Notes/Tutorials

Chem Unit 2 Class Notes

Bonding Basics Chart Tutorial

Ionic Bond Tutorial

Covalent Bond Tutorial

Review & Reinforce

Chemistry Unit 1 Vocab

Element Names Challenge

Chemistry Unit 2 Vocab

Atomic Changes

**You may listen to
music IF you
finished EDPuzzle
AND you are
working quietly!**