

If this sheet gives you issues you need to see me!

Properties of Ionic Compounds

Objectives

- a. Student will be able to identify internal and external factors that cause a substance to be a ionic solid.

1. How do you know an ionic compound when you see one?

Metal - Non-Metal or Ion

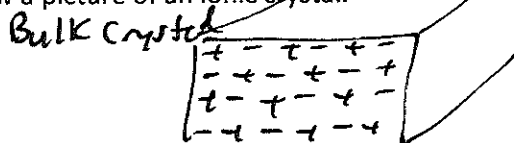
2. Why does an ionic compounds charge always equal zero.

When formed $\square e^- \rightarrow \square - \leftarrow$ formed
+ formed equals

3. What holds together an ionic bond?

- Coulombic
- electrostatic attraction

4. Draw a picture of an ionic crystal.



5. Why are ionic compounds always solid... do they always have to be solid?

Ionic: Strong Bond

6. Explain the factors that affect the melting points ionic compounds.

- size of charges
- internuclear distance

7. A student writes an ionic compound formula Na_2Cl_2 . Is this ok, or what is wrong with this?

Those atoms are not a special group, in crystal

8. Describe the concepts that indicate how an ionic compound dissolve.

$\text{O}^{\delta-}$ ← water is polar
cations attract
 $\text{H}^{\delta+}$ ← anions

9. When you melt an ionic compound what actually breaks?

Ionic Bond

10. Create 4 different ionic compounds. Order them in increasing melting point.

~~Na~~ NaCl NaF CaCl_2 AlCl_3

