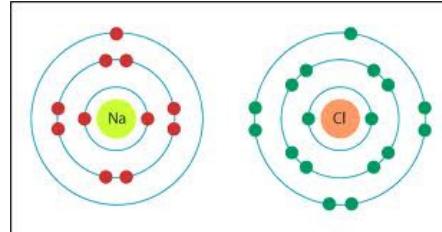


Mini Poster Assignment for Covalent and Ionic Compound Formation

Name: _____
Bl: _____



Objective: To show through Bohr Diagrams how ionic and covalent compounds are formed and how they are similar and different.

How to do it:

1. Choose one ionic compound and one covalent compound
2. Write down the formula and the name
3. Draw the individual atoms involved as Bohr models
4. Show how those atoms become compounds – through **diagrams and description**. Ionic compound formation requires 3 steps and covalent compound formation requires just 2 steps.
5. Indicate all of the similarities and differences between ionic and covalent compounds – in general.

Ionic:

Choose any compound that can be created using the first 20 elements in the periodic table from Hydrogen to Calcium. - Do not do use: NaCl or CaF₂ as they are both in the text.

Covalent:

Please choose from the following list of covalent compounds – or get the okay from me for another compound: CH₄, NF₃, CCl₄, SF₂, NCl₃, NH₃, SiO₂, CS₂, Cl₂O, NH₃, Cl₂, F₂, S₂

You will do a rough draft due: _____ and then good copy due: _____.

The rough draft will be on the back of this sheet and just be a sketch of the compounds and list of similarities and differences. For the good copy use a 11x17 sheet of paper that is provided. If you lose the sheet – please buy an appropriately sized paper. Do not hand in a large poster.

MYP Criteria:

Criterion A: Knowledge and Understanding

(0)	Beginning (1-2)	Developing (3-4)	Accomplished (5-6)	Exemplary (7-8)
<i>I have not achieved a standard described by any of the descriptors to the right.</i>	<i>I am able to:</i> state scientific knowledge	<i>I am able to:</i> outline scientific knowledge	<i>I am able to:</i> describe scientific knowledge	<i>I am able to:</i> explain scientific knowledge

Explain scientific knowledge

- An exhaustive list of similarities and differences between ionic and covalent compounds is given.

Criterion D: Reflecting on the Impacts of Science

(0)	Beginning (1-2)	Developing (3-4)	Accomplished (5-6)	Exemplary (7-8)
<i>I have not achieved a standard described by any of the descriptors to the right.</i>	<i>I am able to:</i> apply scientific language to communicate understanding but does so with limited success	<i>I am able to:</i> sometimes apply scientific language to communicate understanding	<i>I am able to:</i> usually apply scientific language to communicate understanding clearly and precisely	<i>I am able to:</i> consistently apply scientific language to communicate understanding clearly and precisely

Consistently apply scientific language to communicate understanding clearly and precisely

- Bohr diagrams - include nucleus, nuclear particles, orbits/shells, electrons clear, transfer or sharing made clear, colour used to enhance understanding
- Steps of ionic and covalent bonding correctly shown
- Following vocabulary is used correctly - electrons, proton, neutrons, ionization, transfer, sharing, ionic bonding, covalent bonding, orbits, charges and brackets, a thorough and complete list of similarities and differences

Set up the poster like this:

Ionic	Covalent
Name and Formula	Name and Formula
Bohr diagrams of the atoms	Bohr diagrams of the atoms
Ionization step	Covalent bonding step
Ionic Bonding step	
Similarities and Differences between Ionic and Covalent Compounds	

Use section 7.2 of the text – to help you with the bonding part