

Names:

**DATA TABLE: COMPLETE THIS TABLE DURING THE EXPERIMENT.**

**From Part 1:**

Determine whether the following compounds are molecularly or ionically bonded based on the Pauling Electronegativity Numbers given above (on table).

- Determine the electronegativity difference between each of the following pairs of elements. Determine whether the bonds formed would be ionic or molecular.

Bonds	Electronegativity Difference	Ionic or Molecular
H and O	<input type="text"/>	<input type="text"/>
Si and H	<input type="text"/>	<input type="text"/>
Cl and F	<input type="text"/>	<input type="text"/>
K and F	<input type="text"/>	<input type="text"/>
Be and O	<input type="text"/>	<input type="text"/>
Ca and S	<input type="text"/>	<input type="text"/>
Na and Cl	<input type="text"/>	<input type="text"/>
Si and C	<input type="text"/>	<input type="text"/>
Al and N	<input type="text"/>	<input type="text"/>

**Part 2:**

	Flame Color	Cation (metal ion)	Anion	compound formula	compound name
Sample 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sample 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sample 3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sample 4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sample 5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Observation with boric acid:

**Part 3: (Fill In the Provided Data Sheet for this part.)**