The Chemical Bonding Game

Fun Practice
Getting Started with Ionic Bonding

A Quick Review…..

What are Ionic Bonds?

- Chemical bonds between metals and non-metals
- Form Between ions with opposite charge (opposites attract)

Writing and Balancing Chemical Formulas
A Quick Review.....

If we have these two ions, which do we write first?
Now what do we need to do?

Na$^+$

S$^{-2}$

Na$_2$S

Balance the Charge!!!!
Having Fun With Ionic Bonding

Meeting people through Chemistry
What to do.....

- Tape the card to the front of your shirt so that everyone can see what ion you are.....
  - Make sure you are an ion....
- You will be going around the room making as many ionic bonds with your neighbors as possible
- You will have 5 min.
- Make sure you have a piece of paper and a pencil
  - There will be some things you will need to write down....
What you need to write down

Make the following table:

<table>
<thead>
<tr>
<th>Positive Ion</th>
<th>Negative Ion</th>
<th>Balanced Chemical Formula</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Na⁺</td>
<td>S⁻²</td>
<td>Na₂S</td>
<td>Sodium Sulfur</td>
</tr>
</tbody>
</table>

Na⁺ S⁻²

Let's Practice……
Let’s Do It!
More Bonding

Practice with covalent and metallic bonds
Getting Started with Ionic Bonding

A Quick Review…..

What are Covalent Bonds?

• Chemical bonds between non-metals and non-metals
• Atoms SHARE electrons

What are Metallic Bonds?

• Chemical bonds between metals and metals
What to do.....

- Switch cards with a neighbor
- Tape the card to the front of your shirt so that everyone can see what ATOM you are.....
  - Make sure you are an atom....
- You will be going around the room making as many Covalent or Metallic bonds with your neighbors as possible
  - Don’t make any ionic bonds this time!!!
- You will have 5 min.
- Make sure you have a piece of paper and a pencil
  - There will be some things you will need to write down....
What you need to write down

Make the following table……

<table>
<thead>
<tr>
<th>Atomic symbol</th>
<th>Atomic Name</th>
<th>Valance Electrons</th>
<th>Type of bond</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>Potassium</td>
<td>l e⁻</td>
<td>Metallic</td>
</tr>
</tbody>
</table>

Na K

Lets Practice……
Let’s Do It!