**Chemical Bonding**

There are 3 links below, click on each and answer the questions below each link. Then submit the assignment on LMS. I will grade it and it will count for the virtual lab. No lab report will be required.

<https://pbslm-contrib.s3.amazonaws.com/WGBH/conv20/lsps07-int-chembonds/index.html>

*Answer the following questions after exploring the interactive on Chemical Bonding at the link above.*

1. Describe one type of chemical bond—covalent, ionic, or metallic.

2. Why is it easy for some elements to lose electrons and harder for others?

3. What types of elements are most likely to form covalent bonds? Ionic? Metallic?

<https://hawaii.pbslearningmedia.org/resource/lsps07.sci.phys.matter.covalentbond/covalent-bonding/>

*Follow the instructions closely as you move through this activity! There are some screens where you have to do something before you can move onto the following screen.*

1. What do you observe when you move two hydrogen atoms closer together?

2. Why do you think nonmetals tend to be good at sharing electrons?

3. Can one atom in this type of reaction win the "tug of war"? What might happen if it did?

4. How can a piece of wood floating on water illustrate the condition of lowest potential energy and maximum stability?

<https://pbslm-contrib.s3.amazonaws.com/WGBH/arct15/SimBucket/Simulations/chemthink-ionicbonding/content/index.html>

1. Why do ionic bonds form between metals and nonmetals?

2. In the activity, when Na lost an e- it shrank and the Cl+ grew in size. Does that say anything about the location of the electron before and after it was transferred?

3. Why can different numbers of metal and nonmetal atoms create ionic bonds together?