**Unit 5 EOC Concepts**

1. Bond Comparison

Fill in the chart for a detailed comparison of an ionic and covalent bond

|  |  |  |
| --- | --- | --- |
|  | Ionic bond | Covalent bond |
| Type of elements that form the bond |  |  |
| END |  |  |
| Form ions? |  |  |
| Transfer or share Valance electrons |  |  |

1. Compound Comparison

Fill in the chart with a comparison of ionic versus covalent compounds

|  |  |  |
| --- | --- | --- |
|  | Ionic compound | Covalent compound |
| State at room temp |  |  |
| High or low Boiling points |  |  |
| High or low melting points |  |  |
| Conduct electricity in pure state? |  |  |
| Conduct electricity when dissolved in water? |  |  |
| Brittle? |  |  |

1. Phase change comparison

Show at the particulate level what happens when an

Ionic solid melts

Molecular solid melts

**NOTE:** failure to draw a correct particulate level drawing will result in a zero for this unit