Ionic vs. Covalent Reading Guided Notes

An ionic compound is formed by ionic bonds between atoms. What kinds of elements tend to form ionic bonds?

Based on the diagram and your data from the conductivity lab, which elements form cations and which form anions?

At the particle scale, what is the biggest difference between an ionic bond and a covalent bond?

What would a particle diagram of an ionic compound look like?

A covalent compound?

Why is it important that water is a polar molecule when discussing how ionic substances dissolve?

If in water, which is a polar molecule, the oxygen has a negative polarization and the hydrogens have a positive polarization, what would a particle representation of the molecule look like?

How would water molecules orient around dissolved sodium sulfate (Na_2SO_4)?

What is the difference between methane and paraffin wax that explains their different phases at room temperature?

What is the difference between the structure of molecular and ionic materials at the atomic scale?

Why was dextrose ($C_6H_{12}O_6$) able to dissolve in water?