**Covalent Compound Structure and Properties**

1. How does the structure of covalent compounds differ from that of ionic compounds? Draw a diagram below to illustrate your answer.
2. Based on the structure of covalent vs. ionic compounds, why do covalent compounds tend to have much lower melting and boiling points than ionic compounds?
3. Why don’t covalent compounds conduct electricity? If covalent compounds are, in fact, insulators, why would you be electrocuted if you showered with a toaster?
4. What’s a molecule? Define not just the term, but how molecules act differently than crystalline structures.