**Covalent Bonding + Organic Chemistry Review**

**Hybridizations + Types of Bonds**

* Know what a hybridization is
* Know the main types of hybridizations
* Know how to find the hybridization of specific atoms within a molecule
* Know what a sigma bond is and how to count it
* Know what a pi bond is and how to count it
* Understand the difference between sigma and pi bonds

**Organic Chemistry**

* Know what a hydrocarbon is
* Know the difference between saturated and unsaturated hydrocarbons
* Know what an alkane is
* Know what a cyclic alkane is
* Know what isomers are
* Know how the general molecular formula for alkanes
* Know how to name alkanes based off their structure
* Know how to name cyclic alkanes based off their structure
* Know what aromatic rings/compounds are
* Know how to explain aromaticity in terms of hybridization
* Know what benzene is
* Know how to name structures with benzene in them
* Know the general trend for naming hydrocarbons
* Know how to draw cyclic alkanes and alkanes