**Let’s Get Wired!**

**Driving Question**: How do we, as apprentice electricians, wire household circuits for HPI, who is building a home for a low-income family?

**Learning Outcomes for Standard 4:  Electricity and Magnetism**

* I understand the interplay of electricity and magnetism.
* I can apply this understanding to electrostatic problems and basic electrical circuits.
* I can describe and determine the force on a stationary charge due to other stationary charges using Coulomb’s Law.
* I can define electric field and describe the motion of a charged particle in a simple electric field.
* I can describe electric potential energy and electric potential (voltage), and use voltage to explain the motion of electrical charges and the resulting electric currents in conductors.
* I can explain and analyze simple arrangements of electrical components in series and parallel circuits in terms of current, resistance, voltage, and power and use Ohm’s and Kirchhoff’s laws to analyze circuits.
* I can describe the magnetic forces and fields produced by, and acting on, moving charges and magnetic materials.

**Team Members**:

**Team Culminating Public Product**: Wiring Diagram Presentation to HPI

**Due Date**: April 10

**Individual Culminating Product**: Summary of Wiring Diagram

**Due Date**: April 8

**Next Steps**:

Choose a housing option (submit with Need to Knows)

Determine Need to Knows (submit today)

Choose team roles/responsibilities

Develop a plan of action (submit today)