**Concept Electrical Resistance**

Two students are electrons

Rest of the class represent atoms in a wire. The goal is to demonstrate the 4 characteristics of a wire that determine its resistance. The resistance is measured by the amount of time it takes for both electrons to go from one end of the wire to the other.

**Rules**

1. atoms cannot touch electrons
2. atoms must allow electrons to get by them ( some path however small must be available)
3. electrons cannot travel outside of the wire

start with small group discussions then build to full class demonstration