Using Simple Circuits as Thermal Models for your Home

ADELE POYNOR, Allegheny College — One of the most cost effective ways to improve the energy efficiency of your home is to increase your home’s insulation. But would it be better to insulate your walls or by new windows? Not all options are equally effective, nor do they have equal costs. So how can you determine which option improves your home’s insulation the most? I present an analogy to simple resistor circuits that can be used by introductory students to answer these questions.