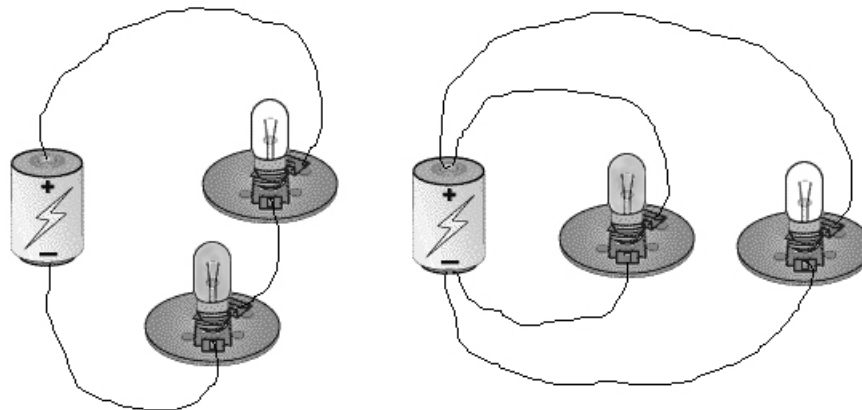


Simulator Exploration #2: What happens if you connect a burned out bulb in a series or parallel circuit?



Below are two circuits, each containing a battery, a regular bulb, and a “burned out” bulb (the darker shaded one). Below each circuit indicate whether the other bulb in each circuit would light (assuming the simulator is turned on). Briefly explain your reasoning.



STEP 1: From the Simulator Index Page, open *Chapter 1 Activity 6 Homework Setup 2*. In addition to the regular tools palette on the right side of the setup window, there are a couple of “burned out bulbs” at the bottom.

Construct a **series** circuit with a battery, one regular bulb, and one of the “burned out” bulbs (similar to the above circuit on the left). Turn on the simulator.



What happens to the regular bulb?

STEP 2: Construct a **parallel** circuit, similar to the above circuit on the right. Turn on the simulator.