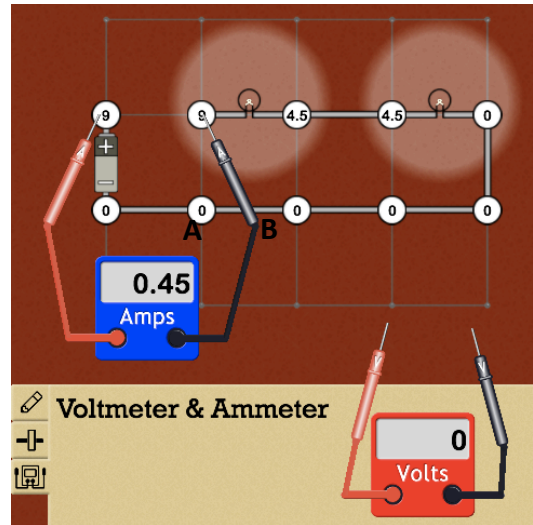


www.simbucket.com -> simulations -> DC Circuit Builder

Part I: Using a Voltmeter and Ammeter

Create the series circuit shown at right and use the voltmeter and ammeter to help complete the table below. Note that you might need to remove a different wire and insert the ammeter in a different spot each time!

	ΔV (Volts)	I (Amps)	R (Ohms)	P (Watts)
Battery				
Bulb A				
Bulb B				



Part II: Removing a Series or Parallel Bulb

Series Circuit
Removing a Bulb

2. Create a series circuit with three bulbs and insert the image below.

Remove one of the bulbs.

What happened to the brightness of the other bulbs?

Why?

Parallel Circuit
Removing a Bulb

1. Create a parallel circuit with three bulbs and insert the image below.

Remove one of the bulbs.

What happened to the brightness of the other bulbs?

Why?

Part III: Adding Bulbs in Series and Parallel

Series Circuit Adding Bulbs in Series

5. Create a series circuit with two bulbs and insert the image below.

Use the voltmeter and ammeter to determine the power produced by a single bulb.

Bulb Power = _____ W

6. Add a third bulb in series with the first two.
Use the voltmeter and ammeter to determine the power produced by a single bulb.

Bulb Power = _____ W

What happened to the brightness of each bulb?

Why?

Parallel Circuit Adding Bulbs in Parallel

3. Create a parallel circuit with two bulbs and insert the image below.

Use the voltmeter and ammeter to determine the power produced by a single bulb.

Bulb Power = _____ W

4. Add a third bulb in parallel with the first two.
Use the voltmeter and ammeter to determine the power produced by a single bulb.

Bulb Power = _____ W

What happened to the brightness of each bulb?

Why?
