

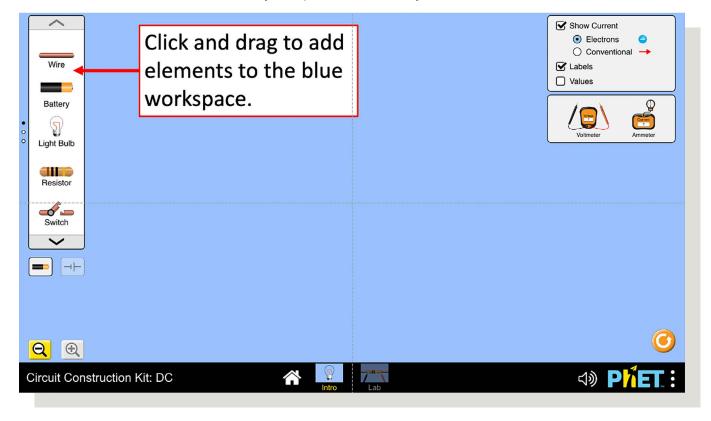




Scan the QR code with your smart device or follow this link to access the simulation.

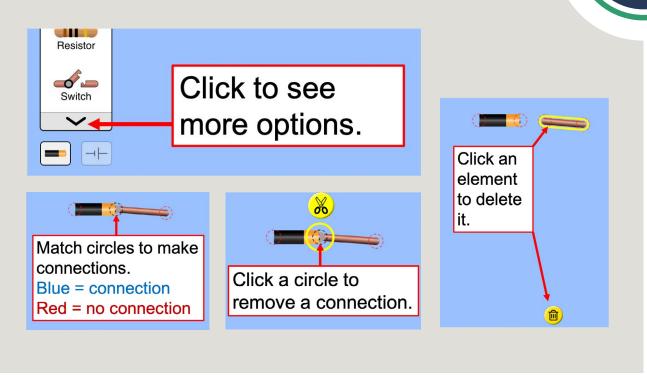
Orientation

This is how the simulation looks when you open it. What do you notice?



Using the Simulation Tools





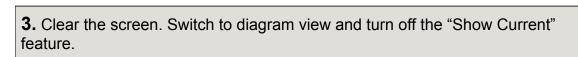
1. Use one battery, one light bulb, and wire to make a simple circuit. Draw a picture of your circuit.

2. Click the arrow to see more options for the different elements. Select an element that you would like to use in place of one of the wires in your diagram. Predict what will happen to the light bulb if you replace the wire with that element. Then test it to see what happens.

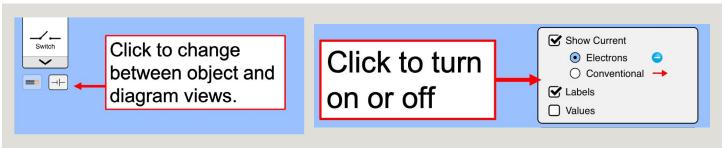


Repeat this step until you have played with all of the elements available to you. Which elements are good conductors? Why do you think that might be?

Element Label	What I Predict	What I Observed







4. Add two batteries, two light bulbs, and as much wire as you would like. Build a circuit that you think will light both light bulbs at the same time. Draw a picture of the circuit diagram.

5. Switch back to object view. Did your circuit work like you had expected it to? Explain what happened in your circuit.



6. Switch back to diagram view. How many different ways can you find that light up two light bulbs? Explain.

Explore the Simulation

Can you:

- O Create a short circuit?
- O Blow a fuse?
- O Change the battery voltage?
- O Change the battery polarity?
- O Build a circuit without using any wires?

Note: If you want to use the voltmeter or ammeter tools, you will need to click and drag them to place them on the screen or to put them away.

Talk with your partner about your observations.

