

Exit Pass: Lesson 7

## **Series and Parallel Circuits**

Complete the following:

1 You have been given a battery, some wire, and a light bulb. Construct a diagram to
show how you would use these items to make the light bulb light up. (You may draw a
circuit, copy and paste images from the course or take a photo of your drawing and
submit. Explain how you know it will work.

2. Why are electrical circuits in your home not connected in a single loop?
3. Explain why three bulbs in a circuit connected in separate loops will glow brighter than three bulbs in a circuit connected in a single loop.
4. Jeremy has been asked by his boss to build a circuit with two lamps and a motor, where the motor can be turned on without turning on the lamps. Please draw the circuit and write create a legend to organize your circuit. Explain further if needed.

64 ADLC Science 5