

Name: _____

Electrifying Your Tiny House

1. Each group should have:
 - a. 9V battery
 - b. 9V battery clip
 - c. 4 colored LEDs
 - d. 2 resistors
 - e. wires
 - f. solderless breadboard

Part 1

Draw on a sheet of graph paper a parallel circuit with all the interior lights your group plans to have. Each person needs to have their own, but you need to work together to come up with the design.

Ms. Regina's Initials _____

How many lights will you have in your design _____

How many resistors will you need in your design _____

How many batteries will your tiny house model need _____

Part 2

Once you are approved by Ms. Regina for your design build your parallel circuit (out of the material in your box).

Ms. Regina's Initials _____

Do all the lights turn on?

Measure the voltage _____

Measure the current _____

Draw what you discovered.

Part 3

Make a parallel circuit with 2 light bulb and 1 resistor. Once you make the light bulbs light up call me over to initial

Ms. Regina's Initials _____

Draw what you discovered.

Part 4

Make a parallel circuit with 2 light bulb and 2 resistor. Once you make the light bulbs light up call me over to initial

Ms. Regina's Initials _____

Draw what you discovered.

Part 5

Now experiment and try to have four LED light up. Make sure to use a resistor with the light.

Did you make a series or parallel circuit? (circle one)

Ms. Regina's Initials _____

Draw what you discovered.

