

CIRCUITS LAB

Name _____

SIMPLE CIRCUITS

1. Use as few components in your bag as possible to make your light bulb light. Once your light bulb is lit, draw a sketch below using symbols from yesterday's graphic organizer. Color the bulb(s) that are lit yellow.
2. Is this an open or closed circuit? Why?
3. Now remove one wire so the light bulb is no longer lit. How can you compare this to a light switch? What conclusions can you make about light switches and open/closed circuits?
4. Now draw a sketch below using symbols from yesterday's graphic organizer. Color the bulb(s) that are lit yellow.

PARALLEL CIRCUITS

1. Use as few components in your bag as possible to create a parallel circuit. You may use your graphic organizer from yesterday's notes. What happens with this type of circuit? Do both bulbs light up?
2. Draw a sketch below using symbols from yesterday's graphic organizer. Color the bulb(s) that are lit yellow.
3. Unscrew one bulb from its socket. What happens?

4. Draw a sketch below using symbols from yesterday's graphic organizer. Color the bulb(s) that are lit yellow.

SERIES CIRCUITS

1. Use as few components in your bag as possible to create a series circuit. You may use your graphic organizer from yesterday's notes. What happens with this type of circuit? Do both bulbs light up?
2. Draw a sketch below using symbols from yesterday's graphic organizer. Color the bulb(s) that are lit yellow.
3. Unscrew one bulb from its socket. What happens?
4. Draw a sketch below using symbols from yesterday's graphic organizer. Color the bulb(s) that are lit yellow.

EXTENSION- COMPLETE THESE QUESTIONS ON A SEPARATE SHEET OF PAPER AND STAPLE TO THE BACK OF THIS!

1. Give two examples of everyday situations where series circuits are used, and explain why they are better to use in these situations than parallel circuits.
2. Give two examples of everyday situations where parallel circuits are used, and explain why they are better to use in these situations than series circuits.
3. Create the most complicated parallel circuit you can by using the materials in your bag. Show me when you've got it!
4. Create the most complicated series circuit you can by using the materials in your bag. Show me when you've got it!