


Guided Inquiry : Building Circuits – pHet simulation

***Use phet → Circuit Construction Kit (DC only) Follow instructions from last inquiry or use link on website**

1. Read pg. 551. Define **circuit diagram**: _____

2. Complete Table 1. Please add this symbol  to represent any load. (ie: if it's not a lamp or motor)

Part of circuit and the symbol			
Sources of electrical energy			
Electrical conductor			
Switch			
Loads			

3. Read **Series Circuits** on page 552.

a) Define **series circuit**: _____

b) Draw Fig. 2b - Series circuit diagram.

c) Build this circuit with the phet Circuit Builder. Done? Show the teacher and get the teacher signature

3. Read **Parallel Circuits** on page 552.

a) Define **parallel circuit**: _____

b) Draw Fig. 3b - Parallel circuit diagram.

c) Build this circuit with the phet Circuit Builder. Done? Show the teacher and get the teacher signature

4. **Series Circuit:** Build Figure 6 on page 553. Show the teacher and get the teacher signature.



Can you get only 1 lightbulb on? _____ only 2 on? _____ all 3 on? _____

What do you notice if you take OUT 1 light bulb and then take OUT 2 lightbulbs?

5. **Parallel Circuit:** Build Figure 9 on page 553. Show the teacher and get the teacher signature.



Can you get only 1 lightbulb on? _____ only 2 on? _____ all 3 on? _____

What do you notice if you take OUT 1 light bulb and then take OUT 2 lightbulbs?

Homework:

Pg. 554 # 1, 2, 4, 5, 6, 7