

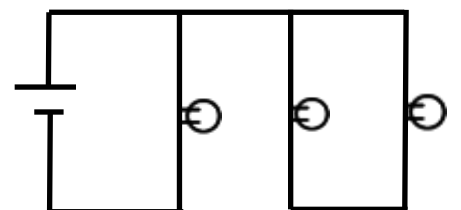
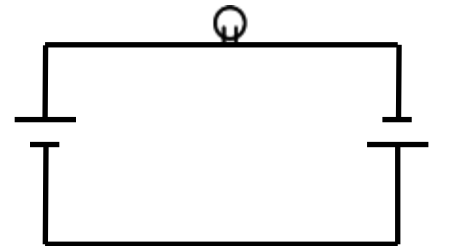
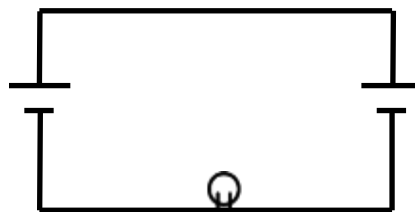
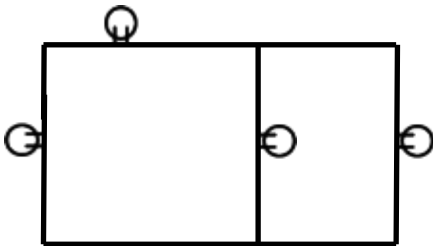
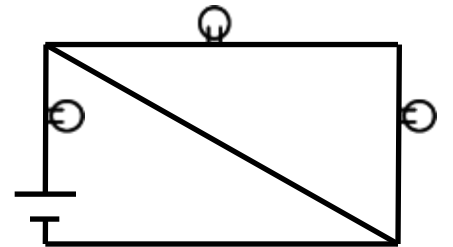
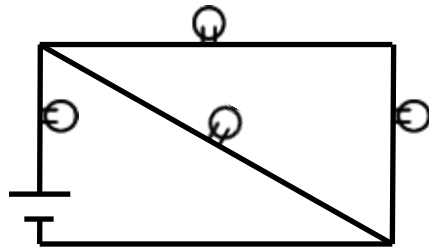
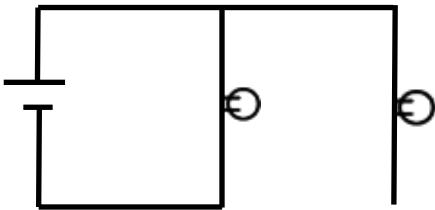
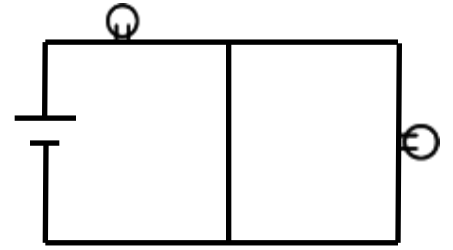
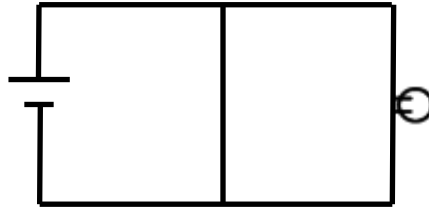
Circuits and Light bulbs

Physics 432

Name _____

1 2 3 4 5 6 7 8

For the following circuits, circle any light bulbs that will not light. Also, determine any batteries that will be short-circuited (or catch on fire).



What are the dangers of modifying existing home electricity?

Code:

120V household wires must be contained within conduit or metal armored cables

| | |
|-------------------------|---------------------|
| Correct Circuit picture | Why is this a rule? |
|-------------------------|---------------------|

Wires may only be joined within junction boxes, and not within conduit

| | |
|-------------------------|---------------------|
| Correct Circuit picture | Why is this a rule? |
|-------------------------|---------------------|

Outlet and switch screw attachment points may only have one wire attached per screw.

| | |
|-------------------------|---------------------|
| Correct Circuit picture | Why is this a rule? |
|-------------------------|---------------------|

White wires must always be neutral (green is always ground, hot can be any other color, but is usually black)

| | |
|-------------------------|---------------------|
| Correct Circuit picture | Why is this a rule? |
|-------------------------|---------------------|

Junction boxes must have 3 inches of wire slack to work with

| | |
|-------------------------|---------------------|
| Correct Circuit picture | Why is this a rule? |
|-------------------------|---------------------|

What is a GFCI outlet any why is it sometimes required?

In what scenarios are you allowed to fix or modify your home electricity?

What should you do before attempting to fix wiring?

