Drawing Series and Parallel Circuit Diagrams

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| 1. A series circuit consisting of:* 12 V electrical source
* open switch
* two light bulbs
* 10 Ω resistor
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| 2. A parallel circuit consisting of:* 9.0 V electrical source
* open switch
* three 5.0 Ω resistor
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| 3. A circuit consisting of:* three 1.5 V cells connected in parallel
* open switch
* two light bulbs connected in series
* two 15 Ω resistor connected in parallel
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| 4. Draw a circuit diagram consisting of a9.0 V battery, an ammeter, and a 25 Ωresistor in series. Include a voltmeterthat is measuring the potential differenceacross the resistor. |  |
| 5. Draw a circuit diagram consisting of abattery made up of two 1.5 V cells, oneclosed switch, two lamps, and anammeter in series. Show the direction inwhich the current flows. |  |
| 6. Draw a circuit diagram consistingof a battery made up of four 1.5 Vcells, one closed switch, one lamp, two0.50 Ω resistors in series, and avoltmeter. Show the direction in whichthe current flows. |  |

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**Description Diagram**

1. A series circuit consisting of:

* 12 V electrical source
* open switch
* two light bulbs
* 10 Ω resistor

2. A parallel circuit consisting of:

* 9.0 V electrical source
* open switch
* three 5.0 Ω resistor

3. A circuit consisting of:

* three 1.5 V cells connected in parallel
* open switch
* two light bulbs connected in series
* two 15 Ω resistor connected in parallel



1. Draw a circuit diagram consisting of a

9.0 V battery, an ammeter, and a 25 Ω

resistor in series. Include a voltmeter

that is measuring the potential difference

across the resistor.

2. Draw a circuit diagram consisting of a

battery made up of two 1.5 V cells, one

closed switch, two lamps, and an

ammeter in series. Show the direction in

which the current flows.

3. Draw a circuit diagram consisting

of a battery made up of four 1.5 V

cells, one closed switch, one lamp, two

0.50 Ω resistors in series, and a

voltmeter. Show the direction in which

the current flows.