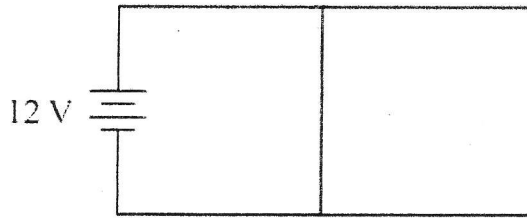
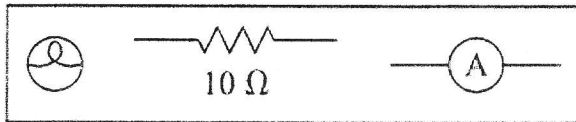


MCAS OPEN RESPONSE #1: ELECTROMAGNETISM

The diagram below shows an incomplete parallel circuit and the components that will complete the circuit.



Circuit Components



- In your Student Answer Booklet, draw the parallel circuit using all the circuit components shown. Place the ammeter in the circuit so that it measures the total current of the circuit.
- Calculate the current flowing through the resistor. Show your calculations and include units in your answer.

When the circuit is operating, the ammeter measures a total current of 1.5 A.

- Determine the resistance of the light bulb. Show your calculations or explain your reasoning. Include units in your answer.
- Describe **one** change that would result if the light bulb and resistor were placed in series instead of in parallel.