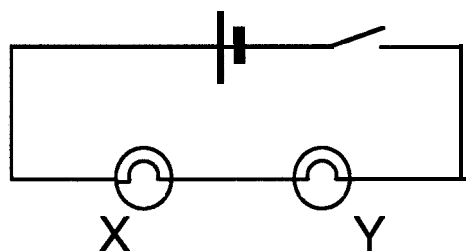


Homework 35b In series

1. Copy the circuit diagram shown below.



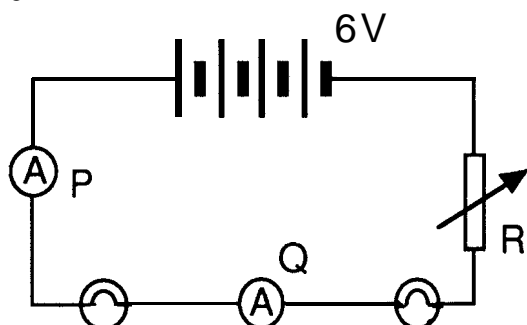
Use the words in the HELP-BOX to copy and complete the paragraph below.

resistance	plastic	current
cell	conductor	switch

The diagram shows a , a switch and two lamps connected in series. When the is closed, electrons are pushed by the cell around the circuit. The flow of electrons is called a The wires in the circuit are made of a good such as copper. Materials which have a very high to the flow of current are called insulators. is an insulator.

2. In the circuit shown in Question 1, the switch is closed and a current of 2 A flows through lamp X.
- (a) How much current flows through lamp Y ?
- (b) Lamp Y breaks and stops lighting. What will happen to lamp X ? Explain your answer.

3.



- (a) How many cells make up the battery?
- (b) Ammeter P reads 1.5 A. What will Q read?
- (c) What is component R?
- (d) Explain what happens if R is adjusted to increase its resistance.