**Series and parallel circuits questions GCSE Physics**

1. Draw a circuit with cell, bulb and an ammeter and voltmeter connected correctly.
2. What is the rule for current in a series circuit?
3. How do you calculate the total resistance of 2 resistors in series?
4. What equation do you use to calculate the p.d. if you know the current and the resistance?
5. In the series circuit shown here, the battery has P.d = . 6.0 V. Calculate:

**a** the total resistance of the circuit [1]

**b** the current in each resistor [2]

**c** the potential difference across the 220 Ω resistor. [2]

1. What is the rule for p.d in a parallel circuit?
2. What is the rule for current in a parallel circuit?
3. In the parallel circuit shown here, the cell has p.d =. 1.5V

**a What is the p.d across the 68** Ω resistor and what is the p.d across 120 Ω resistor?

**b Calculate the** current flowing each resistor.

c) Calculate the reading on the the ammeter.

