Hello, this a video for Engineering Measurement & System Monitoring unit

This learning outcome one and we are going to measure the supply voltage and the voltage across the resistors.

We have a Power supply output DC, the voltage must be checked using our Multimeter set on volts.

Board here is with resistors, each resistor can be connected using leads.

We set our multimeter to DC volts, first check the voltage output of the power supply. Turn the power supply on and turn the voltage setting to 10volts DC. Plug in the leads to multimeter and power supply, the reading gives 11.18V with is the measured voltage. We connect the power supply to the circuit with two resistors. If the resistors were the same value, then the voltage would be split equally across them. But in this case, we have different resistors so the sum of the voltages will equal the supply voltage. We measure the voltage across the resistor as when the current goes through the resistor there is a voltage drop, so the voltage will be greater before than after and this gives the potential difference. Across the first resistor we get 3.1 Volts and the other one we expect to get about 8 volts, but it is actual reading is 7.82 volts. SO that is how to measure voltage.

Thank you for listening.