AQA Chapter 5 Checklist 2017 (Triple)

Can you…?	☺	😐	☹
Chapter 5: Electricity in the Home			
Write down what direct current is and what alternating current is.			
Describe what is meant by the live wire and the neutral wire of a mains circuit.			
Describe the National Grid.			
Describe how to use an oscilloscope to measure the frequency and peak potential difference of an alternating current.			
Describe what the casing of a mains plug or socket is made of and explain why.			
Write down what is in a mains cable.			
Write down the colours of the live, neutral, and earth wires.			
Explain why a three-pin plug includes an earth pin.			
Describe how power and energy are related.			
Use the power rating of an appliance to calculate the energy transferred in a given time.			
Calculate the electrical power supplied to a device from its current and potential difference.			
Work out the correct fuse to use in an appliance.			
Calculate the flow of electric charge given the current and time.			
Write down the energy transfers when electric charge flows through a resistor.			
Describe how the energy transferred by a flow of electric charge is related to potential difference.			
Link the electrical energy supplied by the battery in a circuit to the energy transferred to the electrical components.			
Calculate the energy supplied to an electrical appliance from its current, its potential difference, and how long it is used for.			
Work out the useful energy output of an electrical appliance.			
Work out the output power of an electrical appliance.			
Compare different appliances that do the same job.			
Chapter 5: Equations I need to know.			
power supplied (*P*) = current (*I*) x potential difference (*V*) (watts, W) (amperes, A) (volts, V) **Power (*P*)** (watts, W) = **energy transferred *(E)*** (joules, J) / **time (*t*)** (seconds, s) **power (*P*) = current^2 (I^2) x resistance (*R*)** (watts, W) (amperes, A) (ohms, Ω)			

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charge flow (*Q*) = current (*I*) x time taken (*t*) (coulombs, C) (amperes, A) (seconds, s)			
Chapter 5: Equations I am given and need to use.			
None!			
Chapter 5: Key words I need to know			
Alternating current: *electric current in a circuit that repeatedly reverses its direction.*			
Circuit breakers: *an electrical component that interrupts the current in a circuit if there is a fault and the current rises to dangerous levels.*			
Direct current: *electric current in a circuit that is in one direction only.*			
Earth wire: *the wire in a mains cable used to connect the metal case of an appliance to earth.*			
Fuse: *a fuse contains a thin wire that melts and cuts the current off if too much current passes through it.*			
Live wire: *the mains wire that has a voltage that alternates in voltage (between + 325V and 325 V in Europe).*			
Neutral wire: *the wire of a mains circuit that is earthed at the local substation so its potential is close to zero.*			
Power: *the amount of energy (in joules) transferred every second. It is measured in watts (W).*			
Power rating: *the energy transferred per second by an appliance.*			
watts (W): *the unit for measuring power. 1 watt = 1 joule of energy transferred every second.*			