

current

A) Read the text.

There are two types of current: Direct current (DC) and Alternating current (AC). Direct current is a continuous flow of electrons in one direction and it never changes its direction until the power is stopped or **switched off**.

Alternating current constantly changes its direction because of the way it is generated. The term 'frequency' is used to indicate how many times the current changes its direction in one second.

Alternating current has a great advantage over direct current because it can be transmitted over very long distances through small wires, by making energy high voltage and low current.

There are several quantities that are important when we are talking about electric current. Volts (V) – so **named**

after the Italian physicist Alessandro Volta – measure the difference of electric potential between two points on a conducting wire. Amperes (A) measure the amount of current flowing through a conductor, that is to say the number of electrons passing a point in a conductor in one second.

Coulomb (C) measure the quantity of charge transferred in one second by a **steady** current of one ampere. Power is the rate at which work is performed and it is measured in watts (W). A Kilowatt (kW), which is equal to one thousand watts, is used to measure the amount of used or available energy. The amount of electrical energy consumed in one hour at the constant rate of one kilowatt is called kilowatt-hour.



B) Answer the questions

1) Name the two types of current:

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2) what is direct current?

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3) What is alternating current?

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C) Join the two halves to make a sentence.

1 -Alternating current	a – measure the difference of electric potential Between two points on a conducting wire.
2- Frequency	b – changes its direction.
3-Volts	c – measure the amount of current.
4- amperes	d – measure the rate at which work is performed.
5 –Coulomb	e – the electrons flow in one direction
6 – watts	f – indicates how many times the current changes its direction.
7 – kilowatt	g – measure the quantity of charge transferred in one second
8 – direct current	h – is one thousand watts.

D) How do you call the amount of electrical energy consumed in one hour?