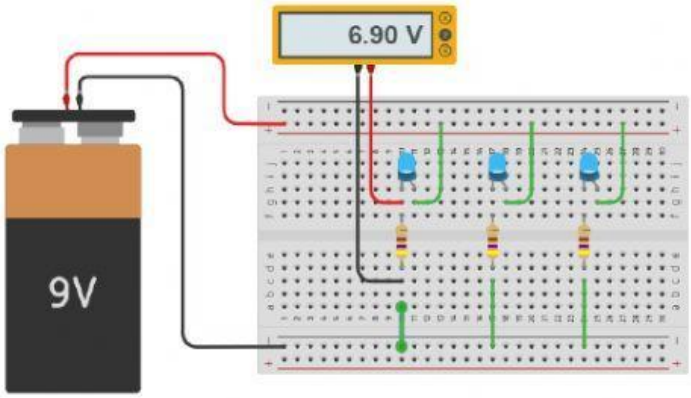
LED circuit



In **electronics**, an **LED circuit** is an **electrical circuit** used to power a **light-emitting diode** (LED). The circuit must provide sufficient **current** to light the LED at the required brightness, but must limit the current to prevent damaging the LED. This is done by a **resistance**, which is the electronic element of the circuit.

A LED's **lifespan** is between 80.000 and 100.000 hours before its light starts fading.

This circuit is formed by a **direct current** (DC) **source of voltage,** a LED, a resistance and a **conductor.** These four components are all connected.

Due to its small size, the LED's diodes can be assembled in LED strips forming **LED RGB**. By controlling the emission of both current and light, a great **colour range** is created. For this reason, LED strips are commonly used in ornaments and shows.

One of the most important characteristics of LED circuits is the great **lighting power** that they have. They can do so even without increasing their **temperature**, and this makes it possible for them to be used in many **appliances**.

Due to the fact that they can be used for a long period of time, their **maintenance expense** is rather low, as they do not need to be substituted so often. In addition, the installation of this particular type of lighting is considerably cheaper than that of **traditional lighting,** specially because its **energy use** is also low.

Activity 1

Write the words in bold from the text next to their Spanish translation.

ENGLISH	TRANSLATION
	Electrónica
	Circuito de LED
	Circuito eléctrico
	Diodo emisor de luz
	Corriente

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	Resistencia
	Vida útil
	Corriente continua (CC)
	Fuente de alimentación
	Conductor
	LED RGB
	Gama de colores
	Potencia de iluminación
	Temperatura
	Artefactos
	Costo de mantenimiento
	Iluminación tradicional
	Consumo de energía

Activity 2

Match the beginnings of the sentences to their correspondent endings.

1. A LED's lifespan is between… _____
2. One of the most important characteristics of LED circuits is… _____
3. This circuit is formed by... _____
4. In electronics, an LED circuit is an electrical circuit used to.... _____
5. LED strips are commonly used in… _____
6. Due to its small size, the LED's diodes can be… _____

A. ornaments and shows.
B. the great lighting power that they have.
C. power a light-emitting diode (LED).
D. 80.000 and 100.000 hours before its light starts fading.
E. a direct current (DC) source of voltage, a LED, a resistance and a conductor.
F. assembled in LED strips forming LED RGB.

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Activity 3

Choose the most appropriate title.

1. Learn more about LED Electronic Circuits.
2. What is an LED circuit?
3. Where to find LED Circuits.
4. Fun facts about LED Circuits.

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