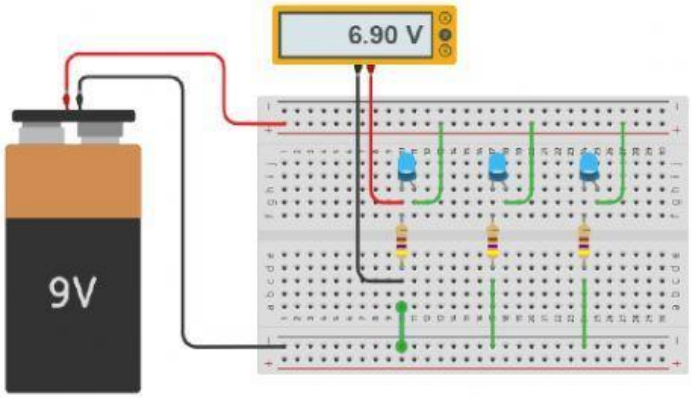
LED circuit



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

	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.

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.