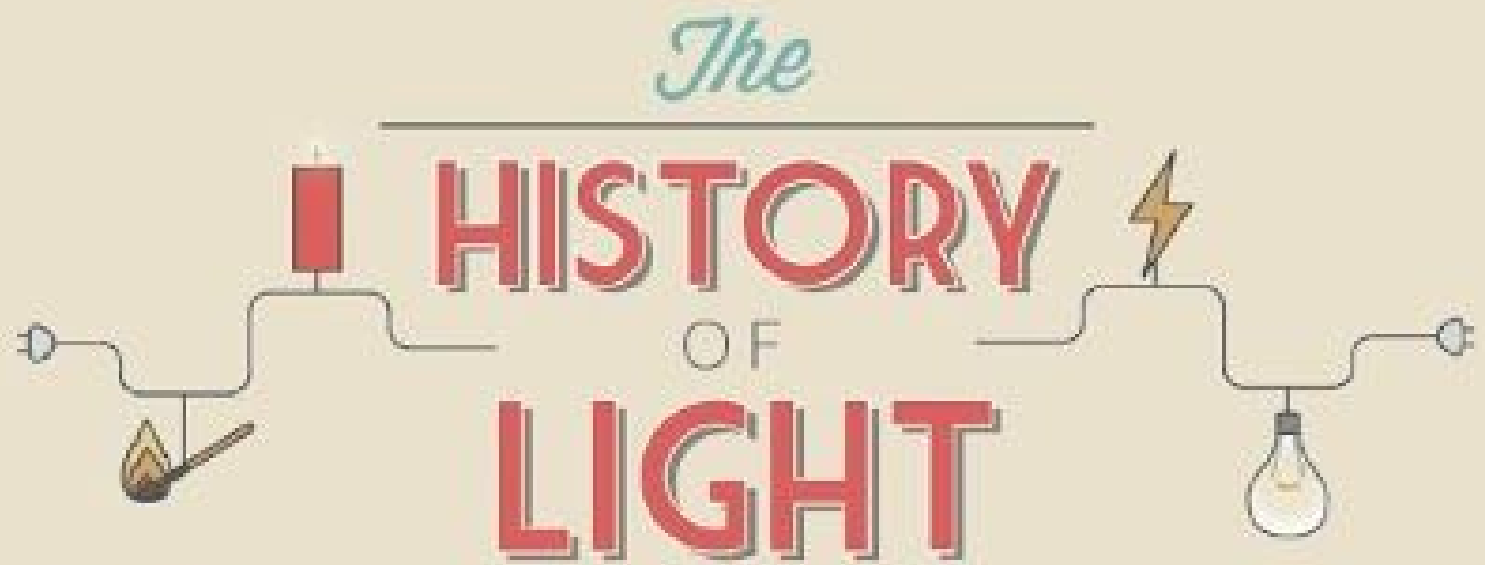


# The HISTORY OF LIGHT



From the strike of a match to the flick of a switch, how we light our lives has drastically changed over the past few millennia. New innovations are happening every day and light is playing a larger part in our everyday lives, without us even knowing!

## BUT HOW EXACTLY DID WE GET HERE?

### *The Primitive Lamp*

Cavemen used shells or hollow rocks to light their caves. They filled them with moss soaked in animal fat and ignited the moss to create a lamp.

13,000 BC



### *Animal Fat Lamp*

Fats and oils from fish, olives, nuts and sesame seeds were used to burn and create light. This meant that lamps were only used by the wealthy, as the poor would simply eat the fat and consume the oil.

5,000 BC

### *The Insect Lamp*

Fireflies were used in countries such as South America and Japan as a source of natural and renewable light. The flies were captured and enclosed in a small cage and used as a lamp.

Lumen is the unit that describes the amount of visible light emitted by

5,000 BC



light emitted by  
the source.

### Pottery Lamp

With the growing pottery industry, the ancient Greeks produced pottery lamps in large numbers and at little cost. This meant for the first time, light was readily available to both the rich and poor.



### First Electric Lamp

The Carbon Arc Light, invented by Sir Humphrey Davy, was the first electric bulb. It was noisy, and the carbon was harmful. Two rods of carbon were hooked up to a source of electricity and when mixed with evaporating carbon, emitted strong white light.



### Light-Emitting Diode (LED)

In 1927 Oleg Losev published original research on LEDs.

600  
BC



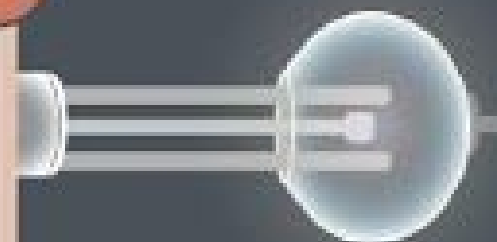
300  
BC

### First Lighthouse

The Pharos Lighthouse of Alexandria was a 137meter-tall lighthouse in Egypt and one of the even ancient wonders of the world. The large burning torch lit the way for trade ships coming in and out of the harbor.

180  
BC

1801



1880

On  
average, a fifth  
of a household's  
electricity bill  
goes on  
lighting.

### Use Of Candles

Basic early candles were used around 300BC in china. Only the wealthy had the luxury of using plant oils and beeswax. The poor had to settle for animal fats that were smelly and produced soot. Due to steady burning, candles were also used as timing devices.



Watt  
is the unit that  
measures the  
rate of energy  
conversion or  
transfer.



### Incandescent Bulb

The Incandescent bulb was invented by Sir Joseph Swan, alongside the concurrent efforts of his American counterpart, Thomas Edison. They joined forces to form the Edison & Swan United Electric Company and gave the world it's first mass produced light bulb.

OPEN

### Neon Lights

Heinrich Geißler and Daniel McFarlan Moore both invented variations of gas filled neon

## Light-Emitting Diode (LED)

In 1927 Oleg Losev published original research on LEDs. Between 1962-1994 the basic Red, Blue & Green LEDs were invented paving the way for simulated white light. They're now widely used for signage and decorating your Christmas trees!



of a household's electricity bill goes on lighting.

1927-1994

1926

## Neon Lights

Heinrich Geißler and Daniel McFarlan Moore both invented variations of gas filled neon tubes. Inspired by his predecessors, French inventor Georges Claude produced the first neon lights for commercial use. His invention can now be seen in every shop window!

## The

# FUTURE LOOKS BRIGHT



Smart lighting technology will enable lighting to be adjusted automatically depending on the surroundings or even your mood and could reduce energy use by 80%.

Environmentally friendly solar panels will be used to power street lights that also save energy by activating only during low light levels or when motion is detected.

Scientists have learned how to bind photons together to form 'solid light'. To the delight of Star Wars fans worldwide, this means Lightsabers are now a possibility!