



GREAT MINDS

for Great

INVENTIONS

EL NEWSLETTER DE KOE



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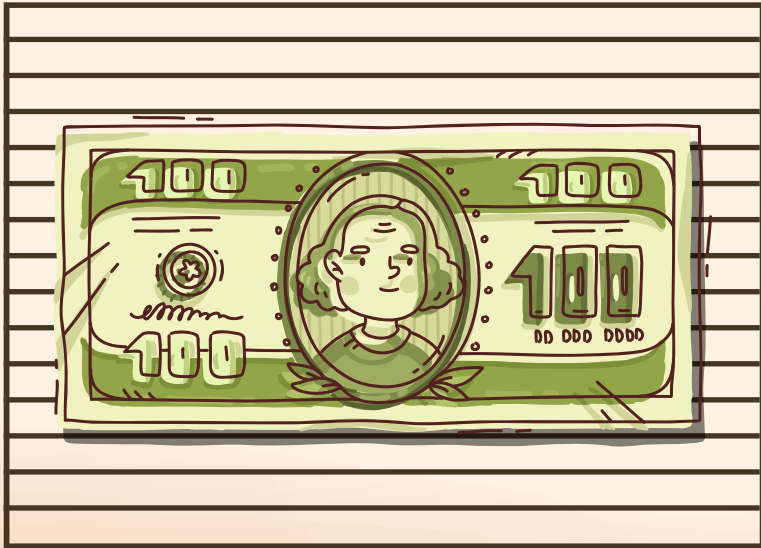
Great Minds for Great Inventions

april 13 1879

Purto conceptam
pri, velit legere
pro et X 125

X7 No 15-3

No nisl dico
adolescens!



Benjamin Franklin

Once said, "either writes something worth reading or does something worth writing." This quote shines through history as we, as a society, celebrate those of great accomplishments, whether it be generous kings, lawful dictators, or even genius inventors.



Invention and, more specifically, inventors play a very important role in modern-day society. Inventors throughout history have not only laid the basis for countless innovations from today's time but also helped shape society itself as a whole. With the invention of new transportation came the revolutionization of international trade and commerce. With the invention of electricity came the creation of modern-day homes, businesses, and jobs.

Even as far back as the wheel, we thank them for countless new ideas and

innovations, but those innovations are not the end of it. Inventors create solutions to help improve the lives of others or to solve a challenge. Their breakthrough creations have advanced human civilization to unimaginable heights.



In this issue,

we'll present famous inventors, as well as lesser-known creators, all of whom have had a substantial impact on the progression of technology, science, art and history. Thomas Edison's inven-

tion of the light bulb, for example, revolutionized the way people live by making it possible to work and enjoy leisure time long after the sun goes down. And few would argue against the fact that without the Wright Brothers, air travel would likely not be as advanced as it is today.

Inventors and their inventions have changed the trajectory of civilization time and again, casting ripples of change and progress across society.

From establishing scientific precedents to improving everyday processes, learn how some of the greatest inventors of all time leveraged their ingenuity to create products that changed the world.



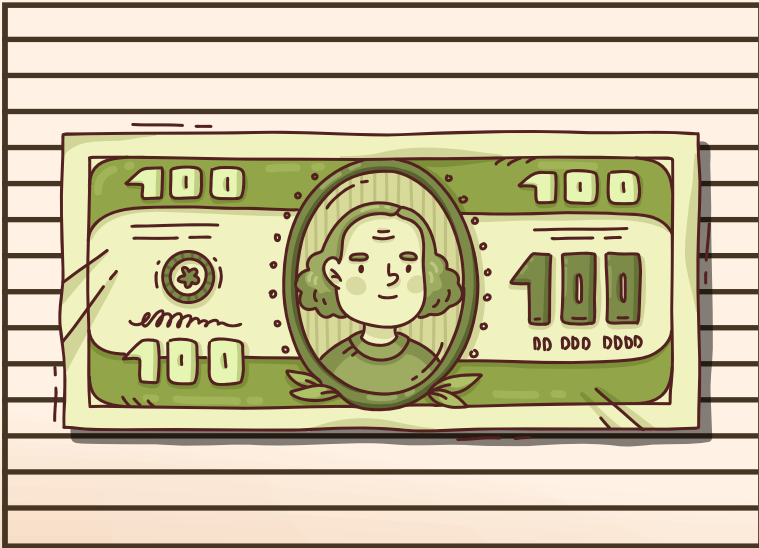
Grandes Mentes para Grandes Inventos

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La invención y, más concretamente, los inventores desempeñan un papel muy importante en la sociedad actual. Los inventores a lo largo de la historia no sólo han sentado las bases para innumerables innovaciones de la época actual, sino que también han ayudado a dar forma a la sociedad en su conjunto. Con la invención de nuevos medios de transporte vino la revolucionar el comercio internacional. Con la invención de la electricidad vino la creación de hogares, negocios y empleos modernos.

Incluso desde la rueda, les agradecemos por innumerables nuevas ideas e innovaciones, pero esas innovaciones no son el final. Los inventores crean soluciones para ayudar a mejorar la vida de otros o para resolver un desafío. Sus innovadoras

creaciones han hecho avanzar la civilización humana a alturas inimaginables.



A continuación,

analizamos inventores famosos, así como creadores menos conocidos, todos los cuales han tenido un impacto sustancial en el progreso de la tecnología, la ciencia, el arte y la historia. La invención de la bombilla por parte de Thomas Edison, por ejemplo, revolucionó la forma de vida de la gente al hacer posible trabajar y disfrutar del tiempo libre mucho después de que se pone el sol. Y pocos se opondrían al hecho de que sin los hermanos Wright, los viajes aéreos probablemente no serían tan avanzados como lo son hoy.

Benjamin Franklin

Dijo una vez: "O escribes algo que vale la pena leer o haces algo sobre lo que vale la pena escribir". Esta cita brilla a través de la historia mientras nosotros, como sociedad, celebramos aquellos con grandes logros, ya sean reyes generosos, dictadores legales o incluso genios inventores.



Los inventores y sus invenciones han cambiado la trayectoria de la civilización una y otra vez, generando ondas de cambio y progreso en toda la sociedad.

Desde establecer precedentes científicos hasta mejorar los procesos cotidianos, aprenda cómo algunos de los mayores inventores de todos los tiempos aprovecharon su ingenio para crear productos que cambiaron el mundo.



9 Technological Inventions

That Have Changed The World

These fascinating inventions paved the way for the development of other innovations that have transformed the planet. All have contributed to changing our environment and thriving in history.

The world has been transformed by technological inventions that changed the lives of our ancestors and helped us prosper and build the future we live in today: from the creation of the first stone tools or the wheel to machines and technologies that once paved the way for a more modern planet. The list of innovations is long. Here are some of the breakthroughs that drove global growth and development.

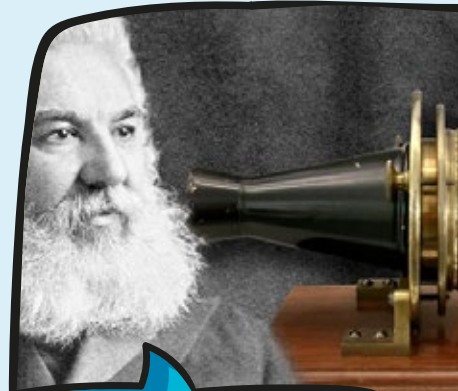
The printing press

The machine devised by the German Gutenberg in the mid-15th century enabled the mass production of books. As a result, it led to the spread of ideas (especially religious ones,) the spread of knowledge, literacy and the creation of libraries in Europe. A key revolution that accelerated the transition from the Middle Ages to the Renaissance. The first work printed with this machine was the Bible. The printing press introduced the idea that machines eliminate jobs, although it gave rise to a powerful industry of printers, booksellers and writers, among other trades.



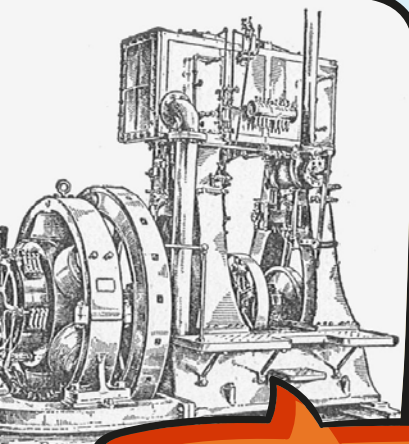
The light bulb

Before Thomas Edison many others tried incandescent lamps or bulbs. He is considered the inventor (in 1880,) but it was not exactly so, but he improved on the innovations of others in electric lighting, such as Humphry Davy, Matthew Evans, Warren de la Rue or Joseph Wilson Swan (with the latter Edison disputed the title of inventor.) It is considered the greatest invention since the discovery of fire: light entered homes and workplaces, becoming a necessity and an engine for economic growth (working hours were extended, electricity generating plants and household appliances were developed, among other advances.)



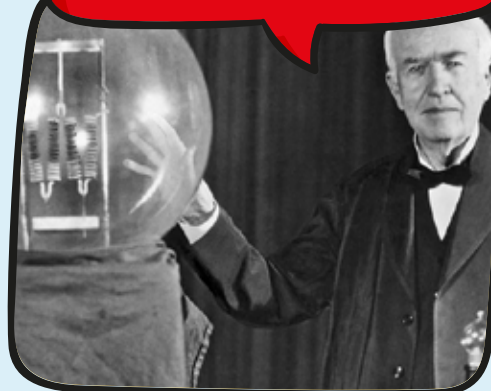
The Scotsman Alexander Graham Bell worked as a speech and hearing expert (his mother and wife were both deaf) and, seeking to improve the telegraph, researched voice transmission until, in 1876, he patented the telephone. This device revolutionized communication by allowing instant speech even over long distances. In its early days, to establish a call, a person had to manually connect the wires, and this continued until the creation of the telephone network. It is one of the most significant advances of the Second Industrial Revolution, to the extent that it marks the beginning of modern society. Without it, the world would not exist as we know it today; it laid the foundations for mobile telephony.

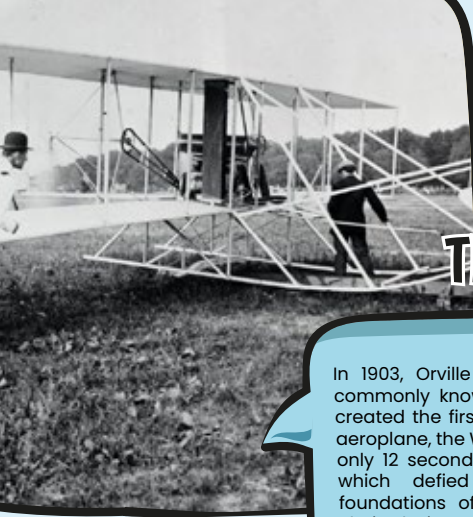
The telephone



The steam engine invented by the Scottish engineer James Watt (in 1775) revolutionized transport and machinery in the 19th century and drove the First Industrial Revolution, rapidly moving from an economy based on agriculture and trade to an industrialized one with much greater production capacity. This technological invention gave rise to locomotives, steamships and even the first automobiles. And the way was paved for the emergence of various types of combustion engines and aircraft. The effect on employment was immediate, and the middle classes and urban centres were born.

The steam engine





The airplane

In 1903, Orville and Wilbur Wright, most commonly known as the Wright brothers, created the first human-piloted motorized aeroplane, the Wright Flyer. The flight lasted only 12 seconds, but with this experiment, which defied gravity, they laid the foundations of aeronautical engineering. Their designs inspired others to develop commercial aviation. In 1927, Charles Lindbergh became a hero for his non-stop crossing of the Atlantic. This technological ingenuity boosted trade, culture, tourism and, today, the air transport industry is key to global economic prosperity.



Computers have redefined people's lives and the way they work, simplifying tasks, storing information and processing data quickly and efficiently. The invention of the transistor or semiconductor in 1947 began the road to personal computers. This component replaced the vacuum tube and was the key to creating smaller, more reliable electronic devices. John Blankenbaker's Kenbak-1 is considered the first personal computer. Another key innovation in the development of the PC (personal computer) was microprocessors (1971).

The first personal computer with a microprocessor was the Micral (1973). Although it was never sold, the Xerox Alto (1973) was the forerunner of home computing: it introduced for the first time a graphical interface and a mouse. In 1975, the Altair 8800 was launched, the first computer with the Microsoft Basic programming language, developed by Bill Gates and Paul Allen, founders of Microsoft.

The personal computers

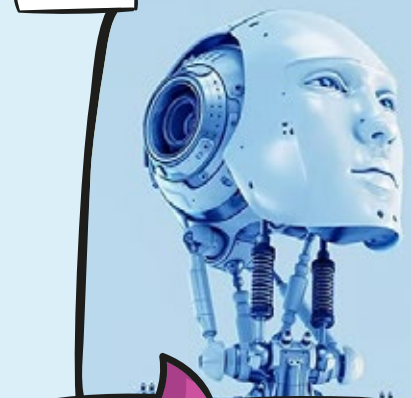


The mobile phone

In 1983, the first mobile phone small enough to be portable was launched: Motorola DynaTac 8000X, designed by engineer Martin Cooper, with a 30-minute battery life. The first generation of mobile phones was only for talking, but as it evolved, the terminals provided new functions, such as sending SMS or email, paving the way for smartphones capable of browsing the internet, capturing photos, listening to music, guiding via GPS or updating social networks, among many other functions. Today it is one of the essential technological inventions in personal and professional life.

As with most technological inventions that have changed the world, the birth of the network of networks would not be understood without earlier experiments and technologies. The connection of four university computers to ARPANet in 1969 was the seed for the birth of the Internet. In the late 1970s, Vinton Cerf developed the "transmission control protocol" or TCP for sending files between computers. This breakthrough was key to Tim Berners-Lee's introduction of the World Wide Web in 1991, transforming society. It continues to evolve today, bringing new forms of interaction and economic, social and cultural growth. The launch of Telefónica's InfoVía service in 1995 popularized the Internet in Spain and introduced it into Spanish homes.

Internet



The precursor of modern computing, Alan Turing, is also the father of artificial intelligence. However, the term was not coined until 1956, when the first artificial intelligence programme, Logic Theorist, was presented at a historic conference. Today, this technological invention has crept into our lives in the form of chatbots, voice assistants, autonomous vehicles, real-time translators, artificial vision, ChatGPT, the Internet of Things... Machines capable of reasoning will further transform the world of the future with applications and uses that we cannot even imagine today. Generative artificial intelligence is becoming increasingly important.

Artificial Intelligence



Most Important Inventions in History

EUREKA!



4500 B.C

Wheel

(La Rueda)

Mesopotamia

(se desconoce al autor).



4000 B.C

Writing

(La escritura)

Mesopotamia, China
y Mesoamérica.



105 B.C

Paper

(El papel)

Cai Lun.



IX Century A.D.

Compass

(La brújula)

Surgió en medio de la búsqueda de
una poción para la inmortalidad.



IX Century A.D.

Gunpowder

(La pólvora)

Surgió en medio de la
búsqueda de una poción para
la inmortalidad.



1041-1048

Printing Press

(La Imprenta)

Alemán Johannes
Gutenberg.

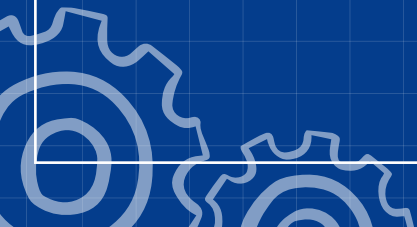



1590

Microscope

(Microscopio)


Zacharias Janssen.



Got idea! 




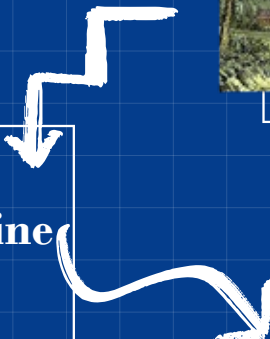
1608
Telescope
(El telescopio)
Holandés Hans Lippershey.



1752
Electricity
(La electricidad)
Benjamin Franklin como uno de tantos pioneros.



1769
Steem Engine
(La máquina de vapor)
James Watt.



1769
Automobile
(El automóvil)
Francés Nicolas Joseph Cugnot.



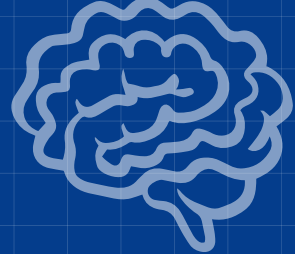
1876
Telephone
(El teléfono)
Alexander Graham.



1928
Peniciline
(El penicilina)
Escocés Alexander Fleming.



1969
Internet
(La internet)
Se atribuye a diversos colaboradores y al proyecto ARPANET.

IDEA! 

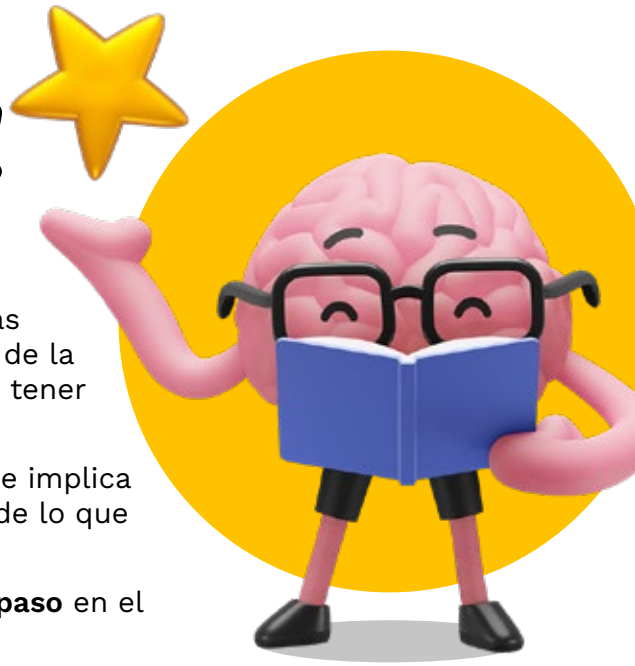
¡INVENTEMOS!

Paso a paso de la invención

Un **invento** consta de un proceso que posee características novedosas y transformadoras. Los inventos pueden surgir de la curiosidad, la creatividad, la necesidad o el azar, y pueden tener un impacto positivo o negativo en la sociedad.

Si tú quieres **crear** un invento debes seguir un proceso que implica diversos pasos y que pueden variar según la complejidad de lo que se quiere hacer.

A continuación te invitamos a conocer cómo es el **paso a paso** en el proceso de la invención:



Identificar el problema o necesidad

Es importante encontrar un problema a resolver o satisfacer con el invento. Este puede ser propio o de otras personas, y puede estar relacionado con diferentes ámbitos, como la salud, la educación, el transporte, el entretenimiento, entre otros. Todo esto se logra a través de la observación, investigación, análisis y más.

Buscar información y generar ideas

Se necesitan encontrar datos relevante sobre el problema o la necesidad, y sobre posibles soluciones que ya existan o que se puedan imaginar. Para buscar información, se puede recurrir a diversas fuentes, como libros, revistas, internet, expertos, otros. Para generar ideas, se puede usar la creatividad, la imaginación, el pensamiento divergente, la lluvia de ideas, entre otras.

Diseñar y construir el prototipo

Es importante crear una versión preliminar y simplificada del invento, que sirva para probar su funcionamiento y su eficacia. Para diseñar el prototipo, se debe definir el aspecto, las dimensiones, los materiales, los componentes y los mecanismos del invento, además de hacer un boceto o un plano que lo represente.

Evaluar y comunicar el invento

Se debe verificar si el invento cumple con el objetivo de resolver o satisfacer el problema o la necesidad, y si tiene algún efecto secundario o consecuencia no deseada. Para comunicar el invento, se debe difundir el conocimiento generado, y dar a conocer los beneficios y las limitaciones del invento a través de los diferentes medios de comunicaciones que deseemos exponerlo.

¡Practicemos en inglés mientras pensamos qué inventar!



Bob:

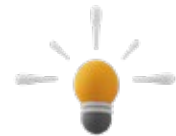
Hi, Alice. I have an idea for a school project.
Do you want to hear it?
Hola, Alice. Tengo una idea para un proyecto escolar.
¿Quieres escucharla?

Alice:

Sure, Bob. What is it?
Claro, Bob. ¿Qué es?

Bob:

I want to make a smart bracelet that measures your
stress level and suggests activities to relax.
Quiero hacer una pulsera inteligente que mida tu nivel
de estrés y te sugiera actividades para relajarte.



Alice:

Wow, that sounds interesting. How does it work?
Guau, eso suena interesante. ¿Cómo funciona?

Bob:

Well, the bracelet has a sensor that detects your heart rate and your
skin conductance, which are indicators of stress. Then, it sends the
data to an app on your phone, which analyzes it and gives you
feedback. It also recommends some activities that you can do to lower
your stress, like listening to music, meditating, or doing yoga.

Bueno, la pulsera tiene un sensor que detecta tu ritmo cardíaco y tu
conductancia de la piel, que son indicadores de estrés. Luego, envía los
datos a una aplicación en tu teléfono, que los analiza y te da
retroalimentación. También te recomienda algunas actividades que
puedes hacer para bajar tu estrés, como escuchar música, meditar o
hacer yoga.

Alice:

That's amazing. I think it would be very useful for people who are
stressed out by school, work, or life in general.

Eso es increíble. Creo que sería muy útil para las personas que
están estresadas por la escuela, el trabajo o la vida en general.

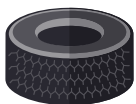
Bob:

I think we can make a difference with this project.
Creo que podemos hacer una diferencia con este proyecto.



Write, find and then circle.

R	B	A	L	L	P	O	I	N	T	C
S	P	E	Q	E	B	H	U	B	E	V
A	A	K	H	Z	R	E	P	N	L	C
T	P	H	O	N	E	J	L	E	E	A
E	R	B	U	L	B	I	A	P	S	T
L	R	G	G	B	F	M	Y	H	C	T
L	F	I	T	O	I	G	E	O	O	R
I	T	R	A	C	T	O	R	S	P	C
T	R	A	F	J	L	C	S	M	E	J
E	D	E	S	R	U	B	B	E	R	E
A	A	U	E	Y	T	A	S	U	I	P



1. This is a mobile _____.
2. This is a _____ tire.
3. This is a _____.
4. This is a _____ pen.
5. This is a light _____.
6. This is _____ navigation.
7. This is an MP3 _____.
8. This is a _____.

Complete the sentences.

Match them with the correct year.

1. John Boyd Dunlop invented the rubber tire .

He invented it in 1938.

2. The Wright brothers invented the first airplane with an engine.

He designed it in 1954.

3. Lazlo Biro invented a type of ballpoint pen.

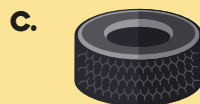
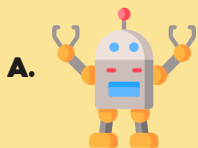
They invented it in 1903.

4. Alexander Graham Bell made the first telephone call.

He made it in 1876.

5. George Devol designed a type of robot .

He invented it in 1888.



d	i	u	v	s	l	a	v	v	v	
f	p	e	s	r	b	e	r	e	f	
t	r	a	f	j	l	c	s	m	e	j
j	e	m	w	a	c	t	o	s	p	r
l	f	i	t	o	i	g	e	o	r	
l	r	g	b	f	m	y	h	c	t	
e	r	b	u	l	b	i	a	p	s	t
t	h	o	n	e	j	i	e	a	v	
a	k	h	z	r	e	p	n	l	c	
s	p	e	o	e	r	h	u	b	e	v
r	a	v	l	p	o	i	n	c		

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