

Key vocabulary

Need to know Nice to know Super-specialist

invention	programme	humanoid
robot	Kandinsky	engineer
technology	electronic	artificial
timeline	sensors	autonomous
coding	mechanical	technological
flight	market	innovations
volcano	research	roboticists
earthquake	George Devol	
computer	device	
design		
The Iron Man		
inventor		



Topic:

Inventions and Robots



20th and 21st Century inventions

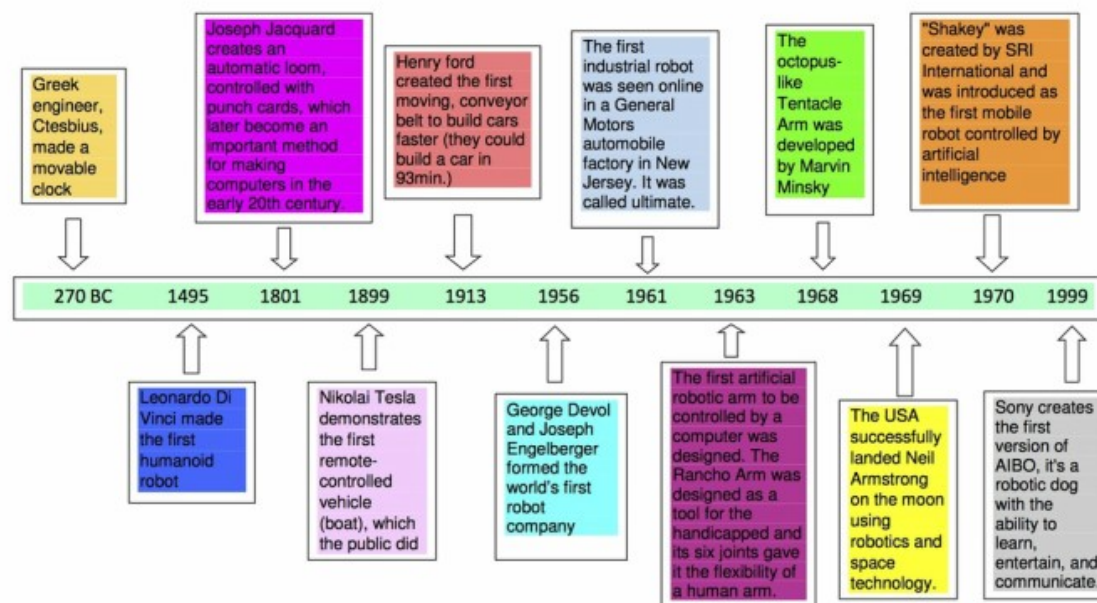
Invention	Inventor	Date	Location
Aeroplane (first flight)	Wright Brothers	1903	USA
Colour photography	Lumiere Brothers	1907	France
Plasters (Band-Aid)	Earle Dickson	1920	USA
Aerosol can	Erik Rotheim	1927	Norway
Jet engine	Frank Whittle & Dr Hans von Ohain	1930	UK/Germany
Helicopter	Igor Sikorsky	1939	USA
Colour TV	Peter Goldmark	1940	USA
Computer controlled software	Konrad Zuse	1941	Germany
Microwave	Percy Spencer	1946	USA
Mobile phone	Bell Laboratories	1947	USA
Credit cards	Ralph Schneider	1950	USA
Microchip	Jack Kilby & Robert Noyce	1959	USA
Internet	Advance Research Projects Agency	1969	USA
Email	Ray Tomlinson	1971	USA
Laptop computer	William Moggridge	1979	UK/USA
World Wide Web	Tim Berners Lee	1991	UK
Portable MPE player	Karlheinz Brandenburg/The Fraunhofer Institute	1999	Germany
iPhone	Apple I	2007	USA

Definitions:

Invent — to create or design something that has not been done before.

Invention— Something that has never been made before, or the process of creating something that has never been made before.

Robot— A mechanical device that works automatically or by computer control.



Subject Links:

Computing: Research based, coding.

Geography: Volcanoes and Earthquakes

Art: Electronic painting

DT: Creating our own inventions and robots, designing and creating our own volcanoes.

History: Timelines of inventions

DID YOU KNOW.....?

Ancient Greek philosopher Plato claimed that "Necessity is the mother of invention." This means that when you really need something, or it is necessary, you are forced to find ways of getting it.

For example, people needed to be able to call and speak to each other in a way that was quicker than writing a letter so phones were invented!



Some texts to support teaching of Inventions and Robots:

The Iron Man (Ted Hughes) F

Runaway Robot (Frank Cottrell Boyce) F

Inventors: Incredible stories of the world's most ingenious inventions (Robert Winston) NF

What on Earth: Robots (Jenny Fretland Vanvoorst) NF

Websites to explore:

[Inventors and Inventions Facts & Worksheets for Kids \(kidskonnnect.com\)](http://kidskonnnect.com)

[robot - Kids](#) | [Britannica Kids](#) | [Homework Help](#)

[inventors at a glance - Kids](#) | [Britannica Kids](#) | [Homework Help](#)

Key people:

Leo Baekeland—Invented Bakelite or plastic

Dr Martin Cooper—The inventor of the cellphone

Both Frank Whittle and Dr Hans von Ohain—Inventors of the jet engine

Sir Alexander Fleming— Discovered and created penicillin

Katharine Burr Blodgett— Created for the invention of "invisible" or nonreflective glass.

Stephanie Kwolek—Invented Kevlar which is used in bulletproof clothing.

Hedy Lamarr—An actress who invented spread-spectrum techniques for communication.

George Devol—created the first industrial robot.

Victorian Inventions



telephone



motorcar



typewriter



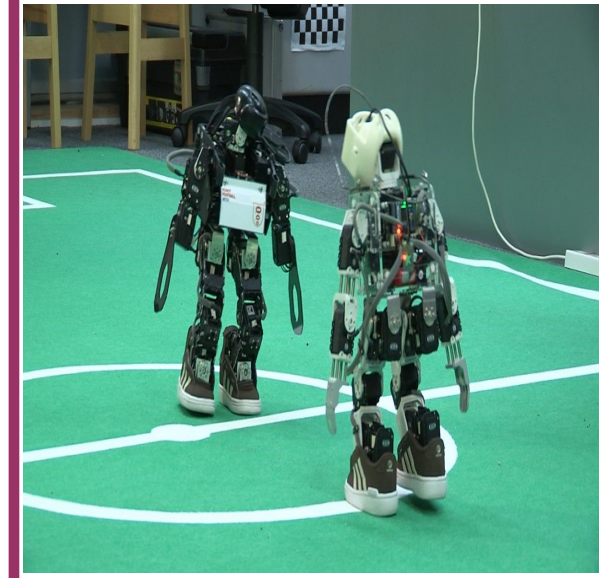
bicycle



bank holidays
and
seaside holidays



moving films



A robot is a machine that does tasks without the help of a person. Many people think of robots as machines that look and act like people. Most robots, though, do not look like people. And robots do only what a person has built them to do.

Writings from ancient Greece and China tell of toys called automatons, which were like robots. They were set in motion by steam, air, water, or falling weights. In the late 1700s and early 1800s complex automatons could play music or write with a pen on paper. During this time people also built machines to help do certain kinds of work. Modern robots only came about after computers were invented. With computers, people could program robots to do tasks on their own.