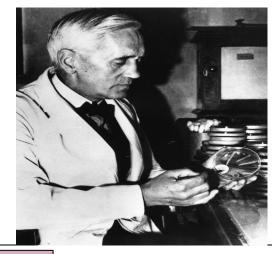
Summary

Massive advances in the understanding, treatment and prevention of disease. Better diagnosis of illness using technology such as X-Rays, blood tests and CT, Ultrasound and MRI scans. Better treatment of disease is made possible with the discovery of antibiotics and the development of "magic bullet" drugs. The discovery of DNA and mapping of human genome enables great strides in understanding hereditary factors in disease. Advances in surgical techniques make life-saving treatments possible, such as transplants and mastectomies. The introduction of the NHS in 1948 means that free healthcare is provided to everyone in Britain. Mass vaccination campaigns to help eradicate diseases such as tetanus, polio and measles. There is more understanding of the lifestyle factors affecting disease, such as the links between obesity and diabetes and the link between smoking and lung cancer.



1906-1914– Lib-
eral reforms
include pen-
sions, national
insurance and
school meals.

1909: Discovery of Salvarsan 606

1928: Alexander Fleming discovers penicillin.

1932: Prontosil
discovered to
kill bacterial
infections in
mice

1941: Penicillin successfully used on a human

1942:Publication of the Beveridge Report

Key Vocabulary	
Antibiotic	A treatment that destroys or limits the growth of bacteria in
	the human body.
Beveridge Report	A 1942 report chaired by William Beveridge which identified
	five "Giant Evils" in society: squalor, ignorance, want, idle-
	ness, and disease, and went on to propose widespread re-
	form to the system of welfare.
DNA	Short for deoxyribonucleic acid, a substance that carries
	genetic information that determines characteristics such as
	hair and eye colour.
Genome	The complete set of DNA containing all the information
	needed to build a particular organism
Haemophilia	A genetic disease passed from parent to child that stops
	blood from clotting
The Human Genome	A 10-year project which decoded and mapped all the ge-
Project	nomes in DNA. This made it possible for scientists to better
	understand genetic diseases such as cancer.
Magic Bullet	A chemical treatment that targets specific microbes without
	harming the rest of the body.
Key Hole Surgery	Surgery that takes place through a tiny incision using cam-
	eras to see inside the body and operate.
NHS	National Health Service which provides free medical care
	for the entire population of Britain
Penicillin	First antibiotic to be discovered
Prontosil	A bright red dye which was discovered by scientist Gerhard
	Domagk to kill bacterial infections in mice, then successfully
	tested on his daughter who had blood poisoning in 1935.
Salvarsan 606	First magic bullet drug which treated Syphilis.
Streptomycin	Powerful antibiotic, discovered in 1943, effective against
	tuberculosis which until then, had been considered incura-
	ble.

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Key Figures	
Gerhard Domagk	Discovered that Prontosil could cure bacterial infections
Paul Ehrlich	Tested over 600 arsenic compounds to fond a cure for syphilis. His research was continued by a Japanese scientist named Hata who found compound 606 (salvarsan) cured syphilis.
Alexander Fleming	Discovered that penicillin (a type of mould)could kill harmful bacteria after noticing the mould growing on an old petri dish of bacteria.
Howard Florey and Ernst Chain	Two scientists who took Fleming's discovery of penicillin as WWII broke out and developed it as an antibiotic treatment for use on humans.
Rosalind Franklin and Maurice Williams	Took the first X-ray photographs of DNA.
Francis Crick and James Wat- son	Two scientists working at Cambridge University who identified the double helix structure of DNA.
Aneurin Bevan	The Health Minister who opened the NHS in 1948.
Joseph Salk	Pioneered a vaccination for Polio
Dt Christi- aan Barnard	Performed the first human to human heart transplant.

1948: NHS launched.

1954: Polio vaccine discovered by Joseph Salk

1967: First successful heart transplant.

https://www.bbc.co.uk/bitesize/guides/zchw4j6/revision/1

https://www.youtube.com/watch?v=my14ZuzjH5I

G7TZ-RC98G—Schoology Code

Challenge

Which factor forced progress more in the Twentieth century, Technology or War?

How have treatments changed for ordinary people between 1900 and present day?

What was the most important breakthrough in medicine

between 1900 and the present and why?



Y10 Schoology page





1978: Louise Brown, the first test tube baby born.

1990:Lauch of the human genome project