

ENQUIRY QUESTION

How have inventors changed the world?

Inventions that Changed the World

Key Knowledge Overview

An inventor is someone who creates something to solve a problem or answer a question.

Alexander Graham Bell was a Scottish scientist and inventor. His most famous invention was the first telephone.

Katherine Johnson was one of three black students to attend integrated graduate school in West Virginia in 1939. Katherine worked at NASA creating equations and calculations to safely allow the first human flight to space.

IPads and non-fiction texts books can be used to research and learn about the past.

The Wright Brothers were the first people to successfully fly in a plane. (D.T. planning)

Charles Macintosh invented waterproof material used for raincoats (Science planning)

In 1992, Mae Jemison became the first African American woman in space. She was a scientist.
Gitanjali Rao, 15, won times child of the year in 2020. She is a scientist who has created technology to tackle issues including contaminated drinking water and cyberbullying.

Historical figures



HOOK: Children to guess who the inventors are? (Zoom interview with Gitanjali Rao)

OUTCOME: Video to be filmed to answer the key enquiry question

Key shared reading texts to support knowledge building:



20 th and 21 st centuries			
Invention	Inventor	Date	Location
Aero plane (First flight)	Wright Brothers	1903	USA
Colour photography	Lumiere Brothers	1907	France
Plaster (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 by 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	Advanced 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 MP3 player	Karlheinz Brandenburg/The Fraunhofer Institute	1999	Germany
iPhone	Apple	2007	USA

Key dates

1876	The year the telephone was invented
1903	First recorded powered flight
1918	Compulsory for girls to attend school until 14
1961	America's first human spaceflight
1964	Civil Rights Act
1983	Birth of the internet

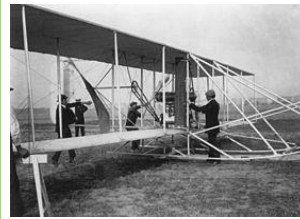
Key vocabulary

Inventor	person who invented a particular process or device or who invents things as an occupation
Diversity	the practice or quality of including or involving people from a range of different social and ethnic backgrounds and of different genders.
Past	gone by in time
Present	existing or occurring now
Research	investigate systematically.
Timeline	a graphical representation of a period of time, on which important events are marked
Chronological	following the order in which they occurred
Global	relating to the whole world; worldwide
Local	relating or restricted to a particular area or one's neighbourhood.
Significant	sufficiently great or important to be worthy of attention
Event	a thing that happens or takes place, especially one of importance
History	the study of past events, particularly in human affairs.
Impact	a marked effect or influence

Year 2 Autumn Term

Why Inventors?

As historians in Year 2, we learn about changes within living memory and the lives of significant individuals. Through the focus of inventors and inventions, we will learn about a diverse range of people who have contributed to our way of life in the present. This will allow us to develop an awareness of the past and a chance to reflect on what we consider 'inventors'. We hope this will inspire our pupils to become problem solvers, as well as gain an understanding of the diversity that has influenced our way of living today.



Inventors

Recovery Curriculum

During Autumn Term, we will be providing our pupils with additional Phonics, Reading, Writing and Maths sessions in order to support all pupils in securing key knowledge that was missed in during remote learning. Investing in this during Autumn through high quality, teacher-led learning will allow us to address any gaps in pupil knowledge.



Computing

We will become information collectors. Pupils will begin to use a search engine in order to answer a question.



Science

Our unit of learning will be 'Materials'. We will learn about different Scientists, as well as completing investigations into the properties of different materials.

R.E

We will be learning about the importance of being kind to everyone. We will be learning about the Christian religion and how different people have different beliefs.

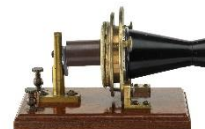
History

We will be using different sources to research and complete historical enquires. We will consider significant individuals such as Alexander Graham Bell and Katherine Johnson and reflect on how they have changed the world we live in. We will be able to order chronologically on a simple time line.



PE

In PE this half term, we will be focusing on improving our Yoga. We have Lucy leading our P.E sessions this term as well as the daily mile sessions to improve our fitness.



Jigsaw

During circle time will continue to explore our understanding of our emotions in relation to changes in our world. In our PSHCE lessons we will focus on Relationships and Changing Me.

Music

In Autumn we are learning to sing in a group and we will also be beginning to develop skills using the Glockenspiel.

Art

We will be exploring our photography skills and gaining a broader understanding of this medium.

Design Technology
Using the 'Design, Make, Evaluate' model, we will be creating models with moving mechanisms.