



ELECTRICITY AND MAGNETISM

GREAT SCIENTISTS WHO STUDIED AND
DISCOVERED THE NATURE OF ELECTRICITY AND
MAGNETISM

CEIP NUESTRA SEÑORA DE LOS ÁNGELES (EL ESPARRAGAL-MURCIA)

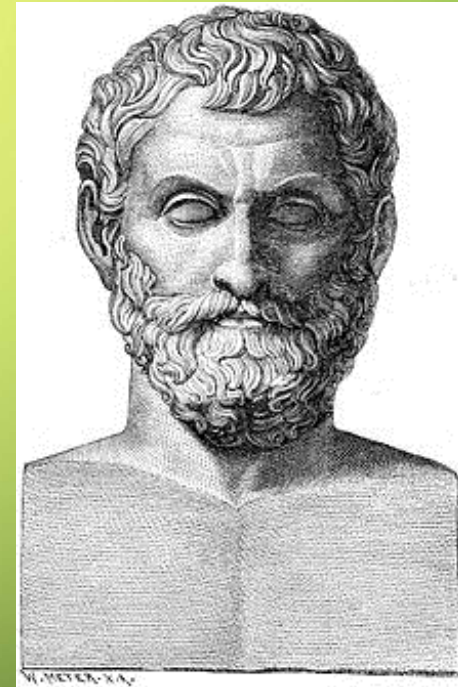
WHAT IS ELECTRICITY???

- The word electricity came from the ancient Greek word “electron” which meant amber or amber like.
- Many ancient cultures have interact with electricity but it is unclear as to whether or not they had any real understanding of it.

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Thales of Miletus (600 b.C.) was a pre-Socratic Philosopher, one of the seven sages of ancient Greek. Thales studied that would occur between fur and another object once the fur has been rubbed with amber.

He felt that the amber was causing some form of magnetism but his mistake was that it was causing static electricity (rubbing a rubber tube)



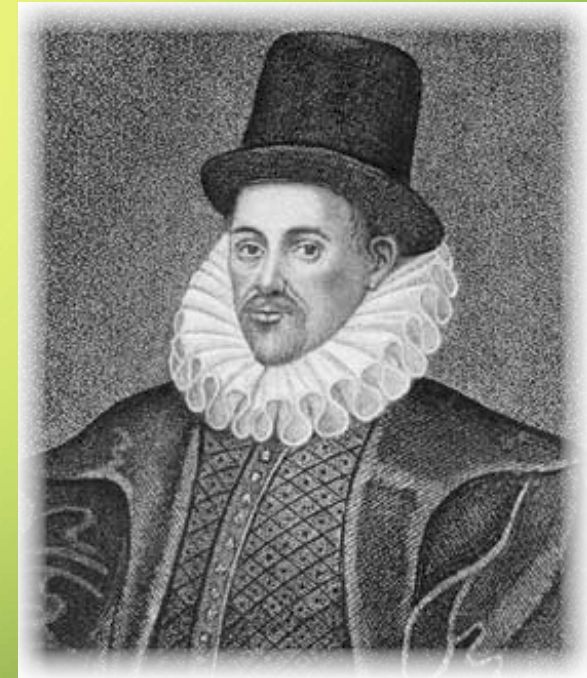
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Willian Gilbert (1544-1603)

English physician, physicist and natural philosopher.

One of his largest contributions was to fix the mistake of Thales of Miletus

He made the difference between static electricity and magnetism clear. He coined the New Latin word “electricus” which would become the modern word electricity.



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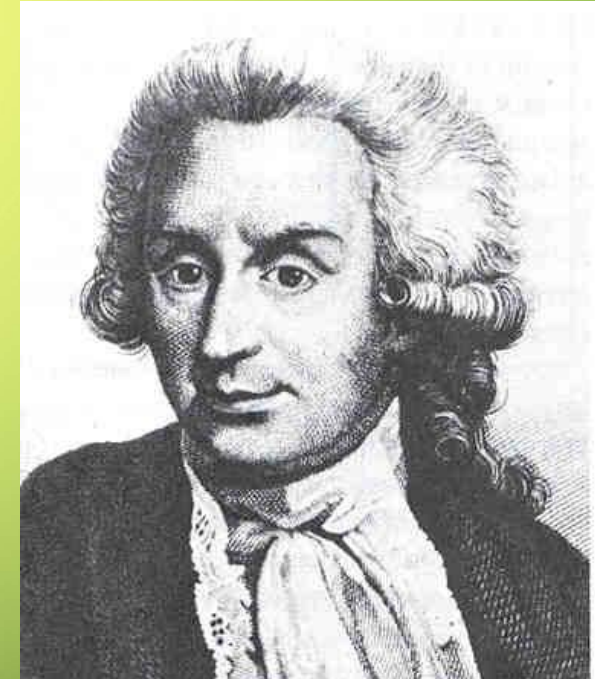
Stephen Gray (1666-1736)

English dyer and amateur astronomer.

He began experimenting with conducting electricity. When he was exploring how glass tubes that were rubbed to gain static charge could produce light effects, he stumbled upon the idea of conduction. He noticed that not only did the tubes attract objects like feathers (which was known) but the cork he used to close the tube also did (new discovery).

He hypothesized that the tube must have passed on its electrical properties to the cork.

He then experimented to see if other material could gain and conduct the electrical properties. This led to the discovery that electricity could be conducted through some materials. This also means that some materials are insulators; do not conduct electricity.



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Charles François du Fay (1698-1739)

French Chemist

He discovered two types/properties of electricity that he named vitreous and resinous. These are now called positive and negative



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Alessandro Volta (1745-1827)

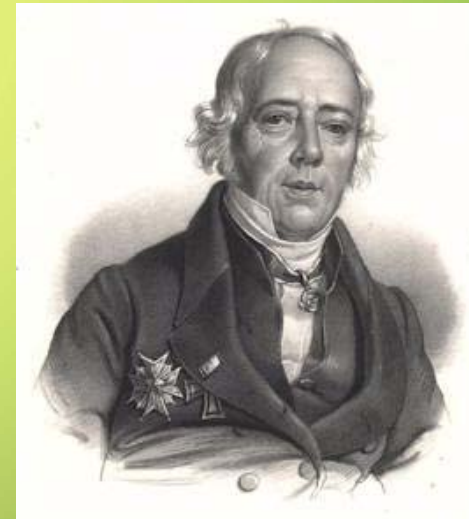
He was an Italian physicist, chemist and a pioneer of electrical science. He is most famous for his invention of the electric battery. In brief he:

- Invented the first electric battery – which people then called the “voltaic pile” – in 1800. Using his invention, scientists were able to produce steady flows of electric current for the first time, unleashing a wave of new discoveries and technologies.



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Hans Christian Oersted (1777-1851)
He was the man who discovered the link between electricity or electric currents and magnetism, or electromagnetism. He was a Danish physicist and chemist who discovered that electric currents create magnetic fields, which was the first connection found between electricity and magnetism. He is still known today for Oersted's Law.



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