



Painting of the Great Fire-1666, The Old London Bridge is in the foreground. St. Paul's Cathedral is illuminated by the tallest flames.

Great Fire of London

1666

After surviving the English Civil war in which King Charles I and Oliver Cromwell competed for power as well as a terrible outbreak of Bubonic plague, a great fire occurred in London during the year 1666.

Most of the city was built of timber with thatched roofs. When fire broke out in a baker's shop on Pudding Lane, it spread quickly destroying most of the city including churches, craft and trade guilds, and 13,000 houses. Amazingly, there were no reported deaths!

The people of London rebuilt the city, but this time with stone rather than timber. The famous architect Sir Christopher Wren rebuilt much of the city, including the famous St. Paul's Cathedral.



The Castle of Versailles, by Pierre-Denis Martin, 1722.

Palace at Versailles

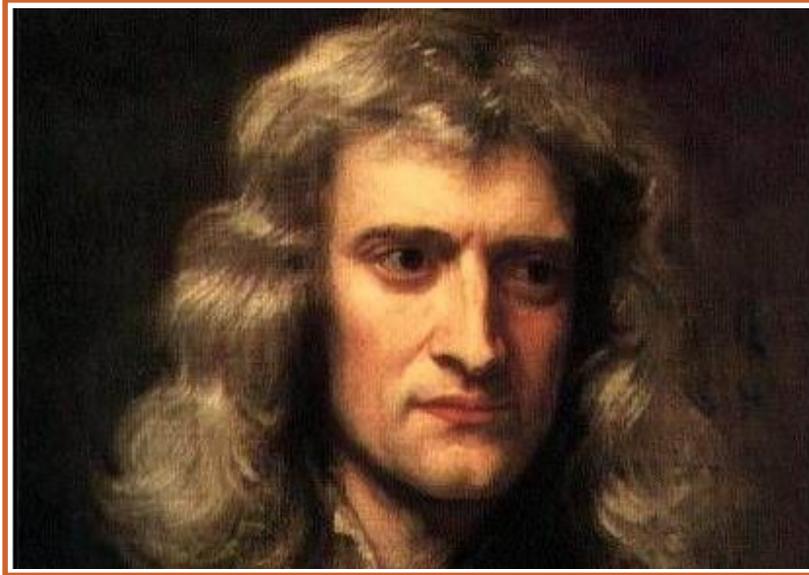
Built by Louis XIV - 1682

The Palace at Versailles in France was begun by Louis XIV in 1682. This 1300 room mansion took more than forty years to build. The palace served as the royal residence for the Kings of France for more than 100 years, with later kings adding to it. It was the favorite home of Marie Antoinette, the wife of Louis XV.

Filled with ornate embellishments, like gilded (gold covered) wood, the palace is over a quarter of a mile long. It contains fanciful rooms such as the famous Hall of Mirrors. The furnishings were so ornate, that this excessively fancy style with carvings and decorations is called "Louis the Fourteenth." The gardens around the Palace are equally splendid, containing fountains, pools, and colorful geometric patterns.

Important events, such as the coronation of Napoleon and the signing of the Treaty of Versailles (end of WWI), were held at this palace.

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Isaac Newton, by Godfrey Kneller, 1689.

Isaac Newton

Newton's Laws Published - 1687

Isaac Newton (1642-1727) advanced our understanding of gravity and how it affects heavenly bodies. Newton shared the following story to explain, "We went into the garden and drank tea under the apple tree. Why does the apple constantly fall straight toward the earth's center? Something in the center must be drawing it. The apple draws the earth as surely as the earth draws the apple."

Newton's Laws of Motion were necessary steps leading to the inventions that would allow the industrial revolution to advance.

Newton's 1st Law: An object in rest tends to stay at rest, an object in motion tends to stay in motion unless acted upon by an outside force.

Newton's 2nd Law: $F = ma$ (Force equals mass times acceleration) The acceleration of an object depends on the force applied and the mass of the object.

Newton's 3rd Law: For every action, there is an equal and opposite reaction.

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Peter the Great, by Paul Delaroche, 1838.

Peter the Great of Russia

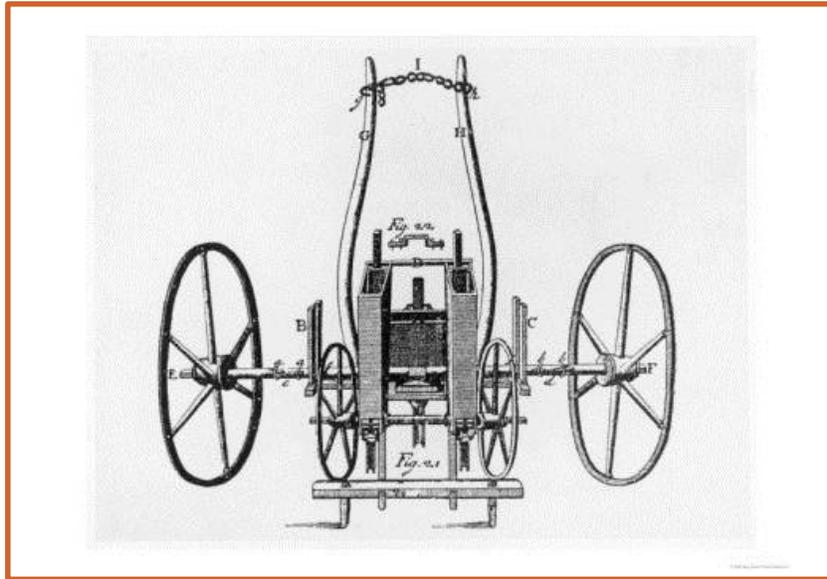
Peter the Great Founds St. Petersburg – 1703

Peter I of Russia (1672-1725) inherited the throne when he was too young to rule. At 17, he took the throne to become the sole ruler of Russia, or Tsar. While most people earn the title “the great” after their death as a reflection of their accomplishments, ruthless Tsar Peter gave this title to himself.

Seeking an eastern seaport, Peter I attacked the Swedish Empire gaining control of the Baltic Sea. Here, he established the city of St. Petersburg in 1703. In 1712, St. Petersburg became Russia’s “Window to the World” when he made it the capital. Next, he attacked Turkey (Ottoman Empire) on the Black Sea, but failed.

A trip to Europe inspired Peter the Great to lead Russia out of medieval ways. He outlawed beards and long robes, charging a beard tax to those who refused and changed the year 7202 (on Russian Calendar which began with creation) to 1700 (Julian Calendar like we use).

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Jethro Tull's Wheat Drill, source unknown.

Agricultural Revolution

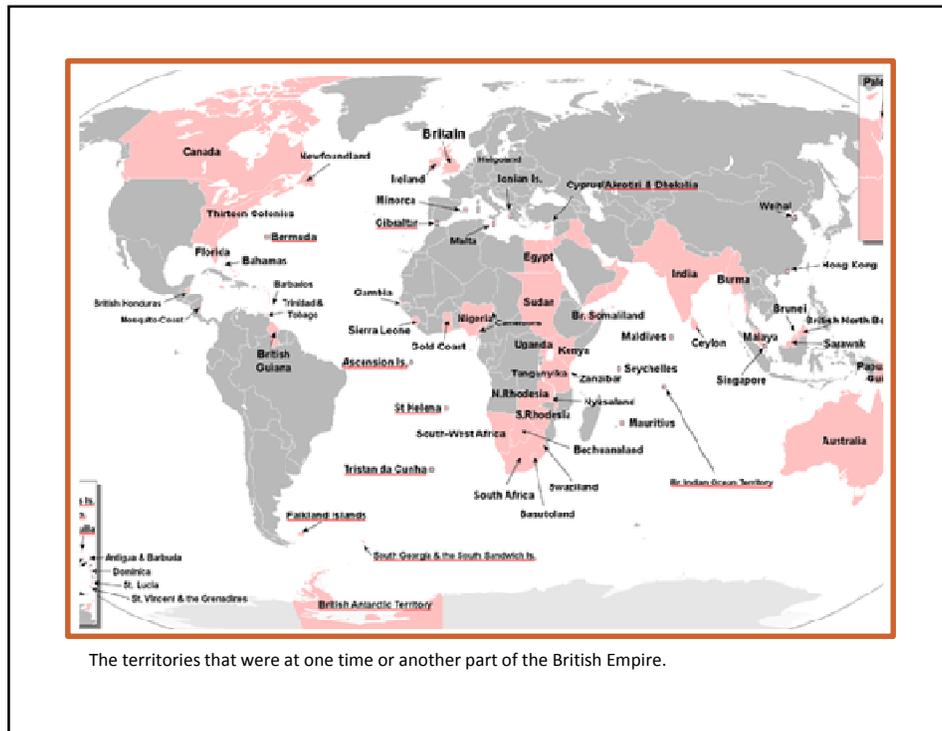
Approximately 1650-1800

A revolution is an event that results in a great change in ideas that transforms the way people live. Before the agricultural revolution, most people raised their own food, and hunger was common.

During the agricultural revolution, new tools and techniques made farms more productive. For the first time, farmers could raise enough food for themselves and still have food left over to sell or share with others.

The discovery of fertilizer, primarily guano (bat droppings), which could be added to the soil, greatly increased the growth of plants. Guano mining became an important industry in the 19th century. New tools, such as the seed drill and plow, made farms more efficient.

Without the fertilizer and tools which led to the agricultural revolution, there would not have been enough workers to man the factories of the industrial revolution.



British Empire Expands

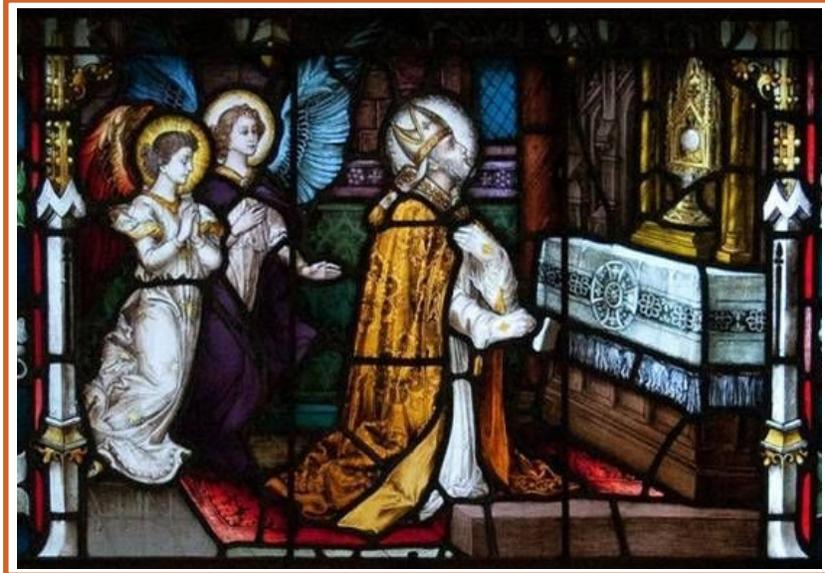
“The Sun Never Sets on the British Empire”

In 1707, Scotland and Wales joined with England to form Great Britain.

This new, more powerful nation with its great navy sent explorers around the world establishing colonies and gaining wealth through trade. Early colonies were in India, Australia, and Asia. Britain gained colonies in America after the Seven Years’ War (French and Indian War).

After Napoleon’s defeat in 1815, the British Empire expanded at an incredibly fast rate into other parts of the world. In order to protect her shipping rights through the Suez Canal, a colony was established in Egypt. Other colonies in Africa soon followed to gain resources.

By the beginning of World War I, the British Empire included lands on all seven continents, even Antarctica! At its peak one quarter of the world’s people lived in lands controlled by the Empire causing English culture and language to spread throughout the world.



Carlow Cathedral, Ireland window; showing St. Alphonsus kneeling before the Most Holy Sacrament. Created by Franz Mayer & Co., 19th century.

St. Alphonsus Ligouri

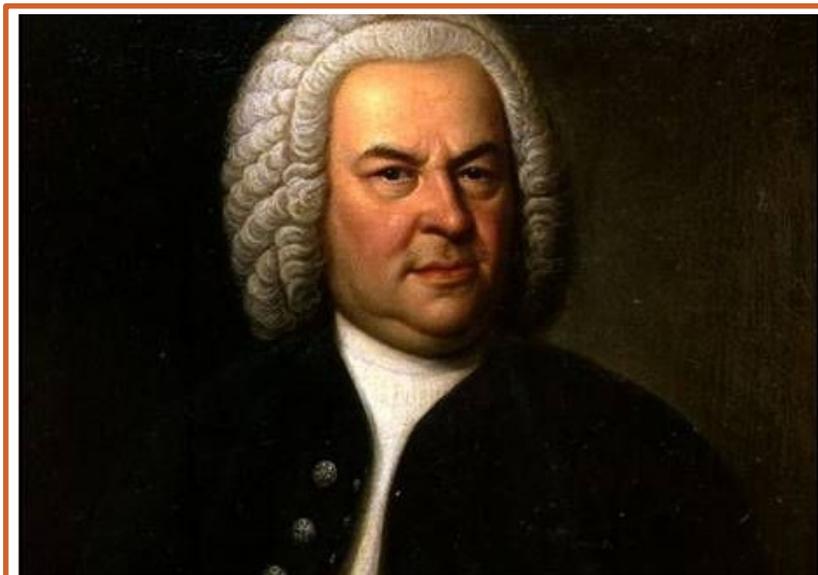
Doctor of the Church – (1696-1787)

On September 27, 1696, the oldest of seven children was born. He was baptised two days later as Alphonsus Mary Antony John Cosmas Damian Michael Gaspard de 'Ligouri! You see why he is known only as St. Alphonsus Ligouri.

St. Alphonsus Ligouri was a courageous man who stood against many of the worldly ideas of the "enlightenment." He fought Jansenism, a heresy within the Catholic Church which denied free will, and emphasized original sin and predestination.

His "Way of the Cross" is widely used for those praying the Stations of the Cross even today.

An expert on moral theology, St. Ligouri was declared a Doctor of the Church by Pope Pius IX in 1871. He is one of only 34 Doctors of the Church, recognized for their outstanding contribution to the development of doctrine.



Johann Sebastian Bach, aged 61, portrait by Elias Gottlob Haussmann, 1746.

Johann Sebastian Bach

Composes “Notebook for Anna Magdalena” - 1722

Johann Sebastian Bach (1686-1750) is considered one of the greatest composers of baroque music. A dramatic and complex style, Baroque music emphasized continual motion, reaching its peak in the early 1700s.

Bach first learned to play the clavichord and harpsichord from his older brother. He later became a violinist, then an organist.

He and his wife, Anna Magdalena, had 13 children, to whom Anna gave music lessons. To make her job easier, Bach wrote the “Notebook for Anna Magdalena” in 1722, never meaning for it to be published.

He composed nearly 300 works, including the cantata (a vocal choir with instruments), *The Passion According to St. Matthew*, the dramatic *Tocatta and Fugue in D minor*, and the melodic “Prelude in C Major” from the *Well-Tempered Clavier*.



The Flute Concert of Sanssouci, by Menzel, 1850-52. Depicting Frederick the Great playing the flute

Frederick the Great of Prussia

Frederick the Great Expands Prussia

In the 1700's, the area which is now Germany was made up of many smaller kingdoms and states. Prussia was the largest of these government regions. Frederick the Great (1712-1786) was born in Berlin (located in Prussia) and transformed Prussia into a major European power. His military ability allowed Prussia to gain more territory. He centralized the government and promoted religious tolerance.

Frederick was also a talented musician and great thinker. As a talented musician, he performed with Bach more than once, and spent time with great thinkers such as Voltaire. The first public education system in the world was developed by Frederick the Great.

Frederick the Great's love of learning encouraged the Prussian people, which would set the stage for Germany to later become a leader in science, industry and the arts.



George Frederic Handel, by Balthasar Denne, 1733.

Handel's Messiah

George Frederic Handel Composes *Messiah* – 1741

The Baroque musician, George Frederic Handel, was in charge of music for the German prince Georg who later became King George I of England. Handel moved to England to supply the royalty with music. In 1741, it took Handel just 22 days to complete the *Messiah*. Its words came entirely from the *Bible*. The entire piece, called an oratorio, tells the complete story of Christ's life and death in 52 movements, including the "Alleluia Chorus."

Another famous piece, *Water Music*, was first played in 1717, at the request of King George I for a concert on the River Thames in London. It was played on a barge by 50 musicians, while King George listened from the Royal Barge.

Later, King George II asked for a piece to celebrate the end of the War of the Austrian Succession. Handel wrote *Music for the Royal Fireworks*, played during the fireworks in London's Green Park.

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