

FURTHER RESEARCH

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Teachers and students visit these websites at their own risk.

Galileo

USEFUL WEBSITES

- 1 galileo.rice.edu/
Very detailed site with biography, chronology, family notes and images for Galileo. It also contains a library with projects and lesson plans.
- 2 csep10.phys.utk.edu/astr161/lect/history/galileo.html
This site contains more notes about Galileo's telescope, sunspots, the moons of Jupiter and the Phases of Venus.
- 3 en.wikipedia.org/wiki/Galileo_thermometer
This Wikipedia page provides detailed notes about Galileo's thermometer.
- 4 www.bbc.co.uk/history/historic_figures/galilei_galileo.shtml
This BBC website provides further notes about Galileo's life and inventions.
- 5 www.astronomynotes.com/history/s6.htm
This site details Galileo's fight with the Catholic Church which ended with his house arrest.

PRINTED RESOURCES

- 1 *Starry Messenger* (Sunburst, 2000) by Peter Sis
An account of Galileo's life and discoveries told in simple language with beautiful illustrations.
- 2 *The Life and Legacy of Galileo Galilei* (CreateSpace Independent Publishing Platform, 2013) by Charles River Editors
Offers a detailed account of Galileo's life and inventions.

René Descartes

USEFUL WEBSITES

- 1 www.britannica.com/EBchecked/topic/158787/Rene-Descartes
This very detailed site provides biographical notes, a chronology of inventions, and images of Descartes's work.
- 2 www.publicbookshelf.com/public_html/Outline_of_Great_Books_Volume_I/ithinkth_bga.html
This site contains notes written by Descartes about his famous saying, 'I think, therefore I am.'
- 3 www.storyofmathematics.com/17th_descartes.html
This site deals with Descartes's influence on the field of mathematics.
- 4 marilynkaydennis.wordpress.com/2010/08/25/the-three-dreams-of-rene-descartes/
This site details Descartes's three dreams which led to his search for truth and reason.

FURTHER RESEARCH (CONTINUED)

PRINTED RESOURCES

- 1 *A Discourse on the Method* (Oxford University Press, 2006) by René Descartes
The full text of Descartes's thesis, translated by Ian Maclean.
 - 2 *I Think, Therefore I Am: All the Philosophy You Need to Know* (Michael O'Mara Books, 2010) by Lesley Levene
Gives a historical background to the wider school of philosophy which surrounded Descartes's work, looking at the great philosophers who came before and after him.
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Isaac Newton

USEFUL WEBSITES

- 1 www.newton.ac.uk/newtlife.html
This site gives further biographical notes about Isaac Newton including information on his work on optics, calculus, mechanics and gravitation.
- 2 csep10.phys.utk.edu/astr161/lect/history/newtongrav.html
This site gives further information about the famous story of Newton's apple and the discovery of gravity.
- 3 www.bbc.co.uk/science/space/universe/scientists/isaac_newton
This BBC site gives biographical notes, images, videos and further programmes looking at Newton's theories.
- 4 teachertech.rice.edu/Participants/louviere/Newton/newton.html
This site provides a lesson on Newton's Three Laws of Motion.

PRINTED RESOURCES

- 1 *The Life of Isaac Newton* (Cambridge University Press, 1994) by Richard Westfall
Gives a detailed biography of Newton's life and inventions.
 - 2 *Gravity* (Dover Publications, 2002) by George Gamow
Looks at the philosophies of Galileo, Newton and Einstein and includes detailed drawings.
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Carl Friedrich Gauss

USEFUL WEBSITES

- 1 www.math.rochester.edu/people/faculty/doug/UGpages/gauss.html#law
This site gives further explanations of Gauss's Law of Quadratic Reciprocity and other discoveries. It provides images, mathematical formulae and many external links provided for further reading.
- 2 www.thefamouspeople.com/profiles/carl-f-gauss-442.php
This site provides more biographical data and a timeline of Gauss's life.
- 3 [en.wikipedia.org/wiki/Gauss%27s_lemma_\(number_theory\)](http://en.wikipedia.org/wiki/Gauss%27s_lemma_(number_theory))
This Wikipedia site provides further explanations and diagrams explaining Gauss's number theory.
- 4 www.sciences360.com/index.php/carl-friedrich-gauss-influence-on-modern-mathematics-2-25147/
This site looks at the impact of Gauss's work on modern mathematics.
- 5 www.storyofmathematics.com/19th_gauss.html
This site gives a detailed biography and is filled with graphs to illustrate and further explain Gauss's work.

FURTHER RESEARCH (CONTINUED)

PRINTED RESOURCES

- 1 *General Investigations of Curved Surfaces* (Dover Publications, 2005) by Carl Friedrich Gauss
The theory of surfaces and Gaussian Curvature explained in the master's own words.
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Charles Babbage

USEFUL WEBSITES

- 1 www.cbi.umn.edu/about/babbage.html
This site provides a detailed biography of Charles Babbage with a bibliography and further reading section.
- 2 www.sciencemuseum.org.uk/objects/computing_and_data_processing/1878-3.aspx
This site provides an image of Babbage's Engine with detailed notes.
- 3 en.wikipedia.org/wiki/Analytical_Engine
This Wikipedia page provides detailed notes and further images of the engine.
- 4 www.ras.org.uk/
The website for the Royal Astronomical Society, which Babbage helped to start.
- 5 en.wikipedia.org/wiki/Dynamometer_car
This Wikipedia site gives further information on the Dynamometer car and also provides links to further information.

PRINTED RESOURCES

- 1 The British Library provides a library of micro-film copies of the papers of Charles Babbage.
Note: There is a subscription fee for this service
 - 2 *The Cogwheel Brain: Charles Babbage and the Quest to build the First Computer* (Little, Brown, 2000) by Doron Swade
This biography of Babbage describes his meeting with Ada Lovelace and his journey from first idea to working machine.
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Ada Lovelace

USEFUL WEBSITES

- 1 www.computerhistory.org/babbage/adalovelace/
This site gives a further biography of Ada's life and her work with Charles Babbage.
- 2 www.i-programmer.info/history/8-people/173-ada-the-first-programmer-.html
This site looks in more detail at Ada's work and its influence on the future of computer software.
- 3 womenshistory.about.com/od/sciencemath1/a/Mary-Somerville.htm
This site provides further biographical details about Mary Somerville, Ada's teacher and friend.
- 4 en.wikipedia.org/wiki/Lord_Byron
This Wikipedia page provides further information about Ada's famous father, the poet Lord Byron.
- 5 www.theguardian.com/lifeandstyle/womens-blog/2013/oct/17/women-in-science-ada-lovelace-gender
This *Guardian* newspaper article discusses the life and work of Ada Lovelace at a time when women were not encouraged to enter the sciences.

FURTHER RESEARCH (CONTINUED)

PRINTED RESOURCES

- 1 *A Female Genius: How Ada Lovelace, Lord Byron's Daughter, Started the Computer Age* (Gibson Square Books, 2013) by James Essinger
Provides a detailed biography of Ada's life and work at a time when women were not expected to enter science or the arts.
- 2 *The Cogwheel Brain: Charles Babbage and the Quest to build the First Computer* (Little, Brown, 2000) by Doron Swade
This biography of Babbage (also mentioned above) describes his meeting with Ada Lovelace and his journey from first idea to working machine.