

SUBJECT CURRICULUM OVERVIEW – Science **Biology**, **Chemistry**, **Physics**

Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Year 1</b>	<p><b>Seasonal change</b></p> <p><u>Key Scientists</u> <b>John Dalton (1766 – 1844)</b> Famous for the amount of time he kept a weather diary for.</p>	<p><b>Everyday Materials</b></p> <p><u>Key Scientists</u> <b>John Boyd Dunlop (1840 – 1921)</b> - <b>Charles Macintosh (176 – 1843)</b> - <b>John McAdam (1756 – 1836)</b> -</p>	<p><b>Animals including humans</b></p> <p><u>Key Scientists</u> <b>Carl Linnaeus (1707-1778)</b> - The inventor of modern scientific classification. <b>Amy Vedder (1951 -)</b> – Wildlife biologist and conservationist</p>	<p><b>Seasonal change</b></p> <p><u>Key scientists</u> <b>Gabriel Fahrenheit (1686 – 1736)</b> – Inventor of the first modern thermometer.</p>	<p><b>Plants</b></p> <p><u>Key scientists</u> <b>Barbara McClintock (1902 – 1992)</b> <b>Joseph Banks (1743 – 1820)</b> <b>Gregor Mendel (1822 -1884)</b> <b>Carl Linnaeus (1707 – 1778)</b> <b>George Forrest (1873 – 1932)</b></p>	<p><b>Seasonal Change</b></p> <p><u>Key scientists</u> <b>Inez Fung (1941 - )</b> – Studies climate change</p>
<b>Year 2</b>	<p><b>Uses of everyday Materials</b></p> <p><u>Key Scientists</u> <b>Leo Hendrik Baekeland (1863 -1944)</b> - <b>Goodyear(1800- 1860)</b> –</p>	<p><b>Uses of everyday Materials</b></p>	<p><b>Plants</b></p> <p><u>Key scientists</u> <b>Barbara McClintock (1902 – 1992)</b> <b>Joseph Banks (1743 – 1820)</b> <b>Gregor Mendel (1822 -1884)</b> <b>Carl Linnaeus (1707 – 1778)</b> <b>George Forrest (1873 – 1932)</b></p>	<p><b>Living things and their habitats</b></p> <p><u>Key scientists</u> <b>Kate Humble (1968 - )</b> – naturalist and presenter on BBC of wildlife programs <b>Steve Backshall (1973 - )</b> – naturalist and presenter on BBC of wildlife programs <b>Chris Packham (1961 - )</b> - naturalist and presenter on BBC of wildlife programs</p>	<p><b>Living things and their habitats</b></p>	<p><b>Animals including humans</b></p> <p><u>Key scientists</u> <b>David Attenborough (1926 - )</b> <a href="http://www.davidattenborough.co.uk/biography/">http://www.davidattenborough.co.uk/biography/</a> <u>Key scientists</u> <b>David Attenborough (1926 - )</b> <a href="http://www.davidattenborough.co.uk/biography/">http://www.davidattenborough.co.uk/biography/</a></p>

<b>Year 3</b>	<p><b>Forces and Magnets</b></p> <p><u>Key Scientists</u></p> <p>William Gilbert (1544 – 1603) -</p> <p>Hans Christian Oersted (1777 – 1851) –</p>	<p><b>Forces and Magnets</b></p>	<p><b>Animals including humans</b></p> <p><u>Key scientists</u></p> <p><b>Diane France (1954 - )</b> Diane France solves mysteries and crimes by deciphering the stories bones tell her</p>	<p><b>Rocks</b></p> <p><u>Key scientists</u></p> <p>Professor Ian Stewart (contemporary geologist)</p> <p><b>Adriana Ocampo (1955 - )</b> Space geologist <a href="http://iwaswondering.org/inez_homepage.html">http://iwaswondering.org/inez_homepage.html</a></p> <p><b>Friedrich Mohs (1773-1839)</b></p> <p><b>Inge Lehmann (1888-1993)</b></p> <p><b>Alfred Wegener (1880 – 1930)</b></p> <p><b>Tuzo Wilson (1908- 1993)</b></p> <p><b>Marie Tharp(1920 – 2006)</b></p> <p><b>Dorothea Bate (1878 – 1951)</b></p>	<p><b>Light</b></p> <p><u>Key Scientists</u></p> <p><b>James Clerk Maxwell (1831- 1879)</b> - <a href="http://www.clerkmaxwellfoundation.org/html/who_was_maxwell_.html">http://www.clerkmaxwellfoundation.org/html/who_was_maxwell_.html</a></p> <p><b>Thomas Young (1773 – 1829)</b></p>	<p><b>Plants</b></p> <p><u>Key scientists</u></p> <p>Barbara McClintock (1902 – 1992)</p> <p>Joseph Banks (1743 – 1820)</p> <p>Gregor Mendel (1822 -1884)</p> <p>Carl Linnaeus (1707 – 1778)</p> <p>George Forrest (1873 – 1932)</p>
<b>Year 4</b>	<p><b>Electricity</b></p> <p><u>Key Scientists</u></p> <p><b>Benjamin Franklin (1706-90).</b></p> <p><b>Charles Augustine Coulomb (1736-1806).</b></p> <p><b>Alessandro Volta (1745-1827).</b></p> <p><b>Andre-Marie Ampere (1775-1836).</b></p>	<p><b>Sound</b></p> <p><u>Key Scientists</u></p> <p><b>Robert Boyle (1627- 1691)</b></p> <p><b>Ernst Mach (1838-1916).</b> Described how shock waves are formed.</p> <p><b>Heinrich Hertz (1857-94).</b></p>	<p><b>States of matter</b></p>	<p><b>States of matter</b></p> <p><u>Key Scientists</u></p> <p><b>Alfred Barnhard Nobel (1833-1896) -</b> <a href="http://www.nobelprize.org/alfred_nobel/">http://www.nobelprize.org/alfred_nobel/</a></p> <p><b>Royal Society of Chemistry</b></p>	<p><b>Animals including humans</b></p> <p><u>Key scientists</u></p> <p><b>Al-Jahiz (9<sup>th</sup> Century)</b> – Provided one of the earliest descriptions of food webs. He was working in Baghdad, Iraq, in the early 800s.</p> <p><b>Charles Elton (1900 – 1991)</b> – Initiated the study of animal ecology</p>	<p><b>Living things and their habitats</b></p> <p><u>Key scientists</u></p> <p>Carl Linnaeus (1707 – 1778) – Developed a method for classifying all living things on the planet. <a href="http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/linnaeus/">http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/linnaeus/</a></p>
<b>Year 5</b>	<p><b>Animals including humans</b></p> <p><u>Key Scientists</u></p>	<p><b>Properties and changes of materials</b></p> <p><u>Key Scientists</u></p>	<p><b>Earth and space</b></p> <p><u>Key Scientists</u></p> <p><b>Aristarchus (310 – 230 B.C.).</b> He was the first to figure out</p>	<p><b>Living things and their habitats</b></p> <p><u>Key scientists</u></p>	<p><b>Forces</b></p> <p><u>Key Scientists</u></p>	<p><b>Forces</b></p>

SUBJECT CURRICULUM OVERVIEW – Science **Biology**, **Chemistry**, **Physics**

	<p><b>Professor Robert Winston (1940 - )</b> – contemporary scientist</p>	<p><b>Antoine Lavoisier (1743 - 1794)</b></p> <p><b>Dmitri Mendeleev (1834 - 1907)</b></p> <p><b>Sir Humphry Davy (1778 - 1829)</b></p> <p><b>John Dalton (1766 - 1844)</b></p> <p><b>Marie Curie (1967-1934)</b></p> <p><b>Royal Society of Chemistry</b> – ‘The 175 Faces of Chemistry’ provides information on contemporary chemists and chemists of the past - <a href="http://www.rsc.org/diversity/175-faces/all-faces">http://www.rsc.org/diversity/175-faces/all-faces</a></p>	<p>that the Earth travels around the Sun.</p> <p><b>Nicolas Copernicus (1473 – 1543)</b>. Had the idea that Earth revolves on its axis and the Earth and other planets orbit around the Sun</p> <p><b>Galileo Galilei (1564 – 1642)</b></p> <p><b>Edwin Hubble (1889-1953)</b>.</p> <p><b>William Huggins</b>. Showed that stars are made up of the same elements that exist on Earth.</p> <p><b>Cecilia Payne-Gaposchkin (1900-79)</b>.</p> <p><b>Arthur Eddington (1882-1944)</b>. He was the first to work out what the inside of a star was like.</p> <p><b>Professor Brian Cox (1968 -)</b> Contemporary physicist, presents many BBC programmes)</p> <p><b>Heidi Hammel (1960 -)</b> Astronomer</p>	<p>There are plenty of contemporary scientists working in this field. Look out for current information on science related to reproduction. For example:</p> <p>Kansas State University is currently investigating how to shut down the reproductive ability and desire in pest insects - <a href="http://www.sciencedaily.com/releases/2013/08/130826182917.htm">http://www.sciencedaily.com/releases/2013/08/130826182917.htm</a></p> <p>Berry J. Brosi, an assistant professor at Emory University in Atlanta, and Heather M. Briggs, a graduate student at the University of California, Santa Cruz found that a loss of bees affects a plant’s ability to reproduce. <a href="http://www.nytimes.com/2013/07/23/science/loss-of-bees-can-affect-plants-ability-to-reproduce-study-finds.html?_r=0">http://www.nytimes.com/2013/07/23/science/loss-of-bees-can-affect-plants-ability-to-reproduce-study-finds.html?_r=0</a></p>	<p><b>Sir Isaac Newton (1642 – 1727)</b> – Formulated the laws of motion - <a href="http://www.bbc.co.uk/history/historic_figures/newton_isaac.shtml">http://www.bbc.co.uk/history/historic_figures/newton_isaac.shtml</a></p> <p><b>Christopher Cockerell (1910- 1999)</b> – Inventor of the hovercraft - <a href="http://www.design-technology.info/inventors/page11.htm">http://www.design-technology.info/inventors/page11.htm</a></p> <p><b>Archimedes (c.287 - c.212 BC)</b> – Greek inventor - <a href="http://www.bbc.co.uk/history/historic_figures/archimedes.shtml">http://www.bbc.co.uk/history/historic_figures/archimedes.shtml</a></p>	
<p><b>Year 6</b></p>	<p><b>Living things and their habitats</b></p> <p><b>Key scientists</b></p> <p><b>Carl Linnaeus (1707-1778)</b></p> <p>The following video outlines the work of Carl Linnaeus - <a href="http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/linnaeus/">http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/linnaeus/</a></p>	<p><b>Electricity</b></p> <p><b>Thomas Edison (1847-1931)</b>. Inventor of the fuse.</p> <p><b>Benjamin Franklin (1706-90)</b>. Showed that lightning is caused by electricity.</p> <p><b>Charles Augustine Coulomb (1736-1806)</b>.</p> <p><b>Alessandro Volta (1745-1827)</b>. Invented the first battery. The volt, the unit of electromotive force, is named after him.</p>	<p><b>Evolution and inheritance</b></p> <p><b>Key Scientists</b></p> <p><b>Charles Darwin (1809 – 1882)</b> The following video outlines the work of Charles Darwin - <a href="http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/charles-darwin/index.html">http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/charles-darwin/index.html</a></p>	<p><b>Animals including humans</b></p> <p><b>Key scientists</b></p> <p><b>William Harvey (1578 – 1657)</b> Discovered the circulatory system. <a href="http://www.bbc.co.uk/history/historic_figures/harvey_william.shtml">http://www.bbc.co.uk/history/historic_figures/harvey_william.shtml</a></p>	<p><b>Animals including humans</b></p>	<p><b>Light</b></p> <p><b>Key Scientists</b></p> <p><b>Thomas Young (1773 – 1829)</b> – Wave theory of light. Double-slit experiment.</p> <p><b>Sir David Brewster (1781 – 1868)</b> - Deduced ‘‘Brewster’s law’’ giving the angle of incidence that produces reflected light which is completely polarized; invented the kaleidoscope and the stereoscope, and improved the spectroscope</p>

	<p><b>Evelyn Cheesman (1881 – 1969)</b></p> <p>The following video outlines the work of Evelyn Cheesman -  <a href="http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/evelyn-cheesman/index.html">http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/evelyn-cheesman/index.html</a></p> <p><b>Sir Hans Sloane (1660 – 1753)</b></p> <p>The following video outlines the work of Sir Hans Sloane -  <a href="http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/hans-sloane/index.html">http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/hans-sloane/index.html</a></p> <p><b>Gilbert White (1720 – 1793)</b></p> <p>The following website outlines the work of Gilbert White -  <a href="http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/gilbert-white/index.html">http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/gilbert-white/index.html</a></p>	<p><b>Andre-Marie Ampere (1775-1836).</b></p>	<p><b>Alfred Russel Wallace (1823 - 1913)</b> The following video outlines the work of Alfred Russel Wallace -  <a href="http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/wallace/index.html">http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/wallace/index.html</a></p> <p><b>Richard Owen (1804 – 1882)</b> The following website outlines the work of Richard Owen -  <a href="http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/richard-owen/index.html">http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/richard-owen/index.html</a></p>			<p><b>Jean-Bernard-Leon Foucault (1819-1868)</b> – Accurately measured the speed of light</p>
--	--	---	---	--	--	---



SUBJECT CURRICULUM OVERVIEW – Science **Biology**, **Chemistry**, **Physics**

--	--	--	--	--	--	--