

The Royal Society A special issue marking

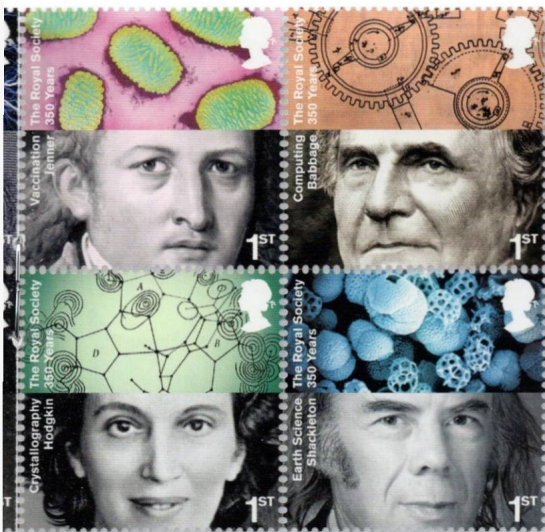


TEN 1ST CLASS stamps featuring prominent scientists and their important works go on sale at Post Office branches and philatelic outlets and Royal Mail Tallents House on 25 February to mark the 350th anniversary of the founding of the Royal Society, the UK's premier scientific organisation. The Society was founded in November 1660 when 12 scientists met and decided to found 'a Colledge for the Promoting of Physico-Mathematicall Experimentall Learning'. The group included Christopher Wren, Robert Boyle, John Wilkins, Sir Robert Moray and William, Viscount Brouncker. Today there are some 1400 Fellows of the Society; the current President is Lord Rees of Ludlow.

The stamps depict: Robert Boyle (chemistry); Isaac Newton (optics); Benjamin Franklin (electricity); Edward Jenner (vaccination); Charles Babbage (computing); Alfred Russel Wallace (evolution); Joseph Lister (antiseptic surgery); Ernest Rutherford (atomic structure); Dorothy Hodgkin (crystallography); and Nicholas Shackleton (earth science). The stamps are 35mm square, designed by hat-trick Design and litho printed by Cartor.

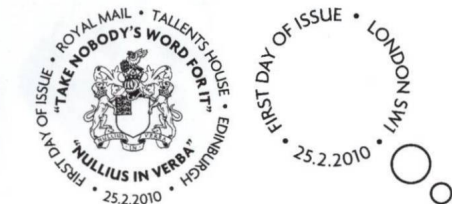
FIRST DAY FACILITIES Orders for serviced FDCs must reach Tallents House by the day of issue. Collectors may send stamped covers on the day of issue to: Royal Mail Tallents House, 21 South Gyle Crescent, Edinburgh EH12 9PB (Tallents House postmark), or to the nearest Royal Mail Special Handstamp Centre (London SW1 postmark) marking the outer envelope 'FD1007' or 'FD1008'. For details of sponsored handstamps and the addresses of the Handstamp Centres see the *British Postmark Bulletin* – available on subscription from Tallents House (£12.25 UK/Europe; £24.95 elsewhere). For a free sample copy write to: The Editor, British Postmark Bulletin, Royal Mail Letters, 35-50 Rathbone Place, London W1T 1HQ •

350 years of remarkable progress in science



The Royal Society prices

Set of stamps	£3.90
Presentation pack	£4.40
Prestige stamp book (PSB)	£7.72
FDC envelope	£0.30
Serviced FDC: stamps (UK customers)	£5.06
Serviced FDC: stamps (overseas customers)	£4.31
Serviced FDC: PSB pane (UK customers)	£4.05
Serviced FDC: PSB pane (overseas customers)	£3.45
Stamp cards set (10 cards)	£4.00



Presentation pack the pack (left), gives a brief illustrated history of the Royal Society and the individuals portrayed on the stamps. It was written by Eugene Byrne, designed by hat-trick, and printed by Walsall.

THE ROYAL SOCIETY – THE ROYAL SOCIETY OF LONDON FOR IMPROVING NATURAL KNOWLEDGE TO GIVE IT ITS FULL NAME – IS THE UK AND COMMONWEALTH'S ACADEMY OF SCIENCE. FOUNDED IN 1660, THE ORGANS OF THE SOCIETY LIE IN AN INVISIBLE COLLEGE OF NATURAL PHILOSOPHERS WHO FIRST MET IN THE MID 1640S AND WERE UNITED BY A COMMON DESIRE TO BETTER UNDERSTAND THE WORLD AND THE UNIVERSE THROUGH OBSERVATION AND EXPERIMENTATION.

THIS SPIRIT OF EMPIRICAL OBSERVATION IS ENCAPSULATED IN THE SOCIETY'S LATIN MOTTO *MULLUS IN VERBA*, WHICH CAN BE FREELY TRANSLATED AS 'TAKE NOBODY'S WORD FOR IT'. A LIST OF THE SOCIETY'S FELLOWS THROUGH THE YEARS READS AS A WHO'S WHO OF KEY FIGURES INVOLVED IN THE GROWTH OF MODERN SCIENCE. TO THIS DAY, FELLOWSHIP OF THE ROYAL SOCIETY IS ONE OF THE GREATEST HONOURS THAT CAN BE CONFERRED ON ANY SCIENTIST.



ROBERT BOYLE (1627–91)
In Robert Boyle, one of the Royal Society's dozen founder-members, we can see how knowledge and learning in Europe evolved from its base of medieval authority and scholastic reasoning and moved to a system based on empirical observation.
A formidable biblical scholar with a strong belief in alchemy, Boyle was also one of the first recognisably modern chemists. His practical approach to science saw him performing controlled experiments and publishing his method, results and conclusions.
With his assistant Robert Hooke he built a vacuum chamber, or air pump, and disproved the previous view that a vacuum was not produced in nature. His first paper for proposing Boyle's Law, which states that the volume of a gas decreases as the pressure it exerts increases proportionally. Boyle also helped to define the modern idea of an element, and devised many chemical tests.

With only two years of formal education, he achieved wealth as a printer, author and publisher. He invented the barometer and the Franklin stove, which he refused to profit from. As a diplomat and statesman, he helped to lead his native American colonies to independence. But all his American virtues – hard work, self-employment, inventiveness and patriotism – should not obscure his achievements as a scientist and inventor. Franklin was a major Enlightenment figure, rising with the leading thinkers of the day during his time spent in London and Paris. His landmark discovery in electricity led to his unassuming election to the Royal Society, and his legacy lives on every fall holiday in the form of the lightning conductor.



ALFRED RUSSEL WALLACE (1823–1913)
Wallace came from a modest background, but his practical training and work as a surveyor served him well when his interest in natural history prompted him to travel to the Amazon and the Malay Archipelago to study flora and fauna.
His Malay expedition was the making of his reputation as a scientist and it was from here that he wrote his famous letter to Charles Darwin, outlining his ideas on evolution. It was this correspondence that prompted Darwin to finally publish his own theory of natural selection following years of deliberation.
Working in the shadow of Darwin, Wallace's historic reputation has suffered. His interest in mesmerism, spiritualism and his opposition to vaccination have also clouded his huge achievements as a biologist, explorer and

and his research led to the introduction of a number of terms that are commonplace today, such as 'bill', 'adaptive' and 'niche'. He conducted numerous experiments that enabled him to unlock the structure of the atom. This 'Rutherford model' of the nucleus, with a number of tiny electrons orbiting around it, remains the symbol for atomic energy in the popular mind to this day.
As director of the Cavendish Laboratory at Cambridge, he gathered a team of brilliant young students around him, and laid the foundations of nuclear physics. He served as President of the Royal Society from 1920 to 1930.



DOROTHY HODGKIN (1910–94)
Dorothy Hodgkin (née Cowdell) pioneered



ISAAC NEWTON (1642–1727)
Newton's mathematical genius encompassed the knowledge of his age, and then added to it, in everything from mathematics and astronomy through to the government's management of currency.
His Philosophiæ Naturalis Principia Mathematica, which describes gravity and lays down three laws of motion, is one of the most important scientific books ever written. Newton built the first practical reflecting telescope and showed that white light can be decomposed through a prism to the colours of the visible spectrum. He also studied the speed of sound and developed differential and integral calculus. He is undoubtedly one of the most significant scientists of all time.
In a 2004 poll to consider whether Isaac Newton or Albert Einstein had made the greater contribution to science, 96 per cent of Society fellows voted for Newton.

EDWARD JENNER (1789–1859)
Country doctor, patients and pills to purify meat. His research in a field he remembers his election as he was actually for the Society, whose about his paper more tests and work involving the agent smallpox was finally published in 1800. Jenner's work was so important that he was made a baronet. His work had been official history to be written.



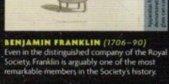
CHARLES BABBAGE (1791–1871)
Babbage was a mathematician who he invented an 'analytical engine', which he called his 'mechanical calculator'. He is best remembered for his work on the 'Difference Engine No. 2' to make the bicentenary of his birth. Accurate to 10 digits, this is better than the average pocket calculator.
A connoisseur of the most important scientific instruments of his time, Babbage devised his Difference Engine as a means of producing these tables more precisely. His later Analytical Engine, though never fully built, was the world's first programmable computer. The Science Museum built a replica of part of his Difference Engine No. 2 to mark the bicentenary of his birth. Accurate to 10 digits, this is better than the average pocket calculator.



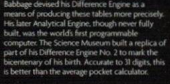
ERNEST RUTHERFORD (1871–1937)
The son of a New Zealand farmer, physicist Rutherford, later 1st Baron Rutherford, was a key figure in decoding the nature of matter. He was distinguished by new discoveries in radioactivity



and his research led to the introduction of a number of terms that are commonplace today, such as 'bill', 'adaptive' and 'niche'. He conducted numerous experiments that enabled him to unlock the structure of the atom. This 'Rutherford model' of the nucleus, with a number of tiny electrons orbiting around it, remains the symbol for atomic energy in the popular mind to this day.
As director of the Cavendish Laboratory at Cambridge, he gathered a team of brilliant young students around him, and laid the foundations of nuclear physics. He served as President of the Royal Society from 1920 to 1930.



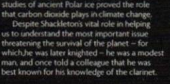
BENJAMIN FRANKLIN (1706–90)
Even in the distinguished company of the Royal Society, Franklin is arguably one of the most remarkable members in the Society's history.



Even in the distinguished company of the Royal Society, Franklin is arguably one of the most remarkable members in the Society's history.



Even in the distinguished company of the Royal Society, Franklin is arguably one of the most remarkable members in the Society's history.



Even in the distinguished company of the Royal Society, Franklin is arguably one of the most remarkable members in the Society's history.



Even in the distinguished company of the Royal Society, Franklin is arguably one of the most remarkable members in the Society's history.

Mrs J Robinson
200 Manorbird Road
Ilkeston
Derbyshire
DE7 4AB

Royal Mail Talents House 21 South Gyle Crescent, Edinburgh EH12 9PE