

01

JANUARY

	M	T	W	T	F	S	S
1	30	31	1	2	3	4	5
2	6	7	8	9	10	11	12
3	13	14	15	16	17	18	19
4	20	21	22	23	24	25	26
5	27	28	29	30	31	1	2

1 Astronomer Giuseppe Piazzi discovered the first asteroid, which he named Ceres (1801).

10 Scientists have announced that the extinction of *Gigantopithecus blacki*, the largest known primate, was due to an inability to adapt to a new diet. (2024)

12 A new study has shown that caterpillars can detect their predators by the static electricity they emit. (2024)

24 The Voyager 2 space ship flies over the planet Uranus for its first overflight, at about 81,500 km distance. (1986)

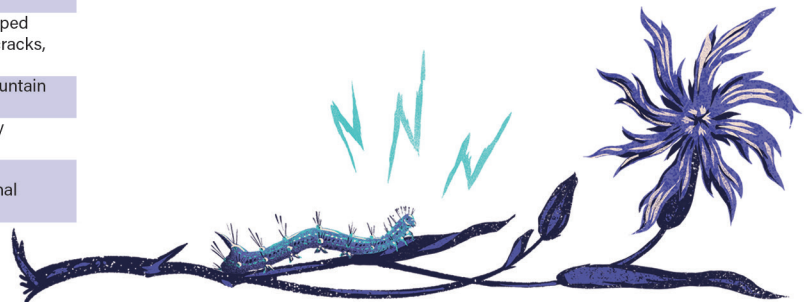
JANUARY

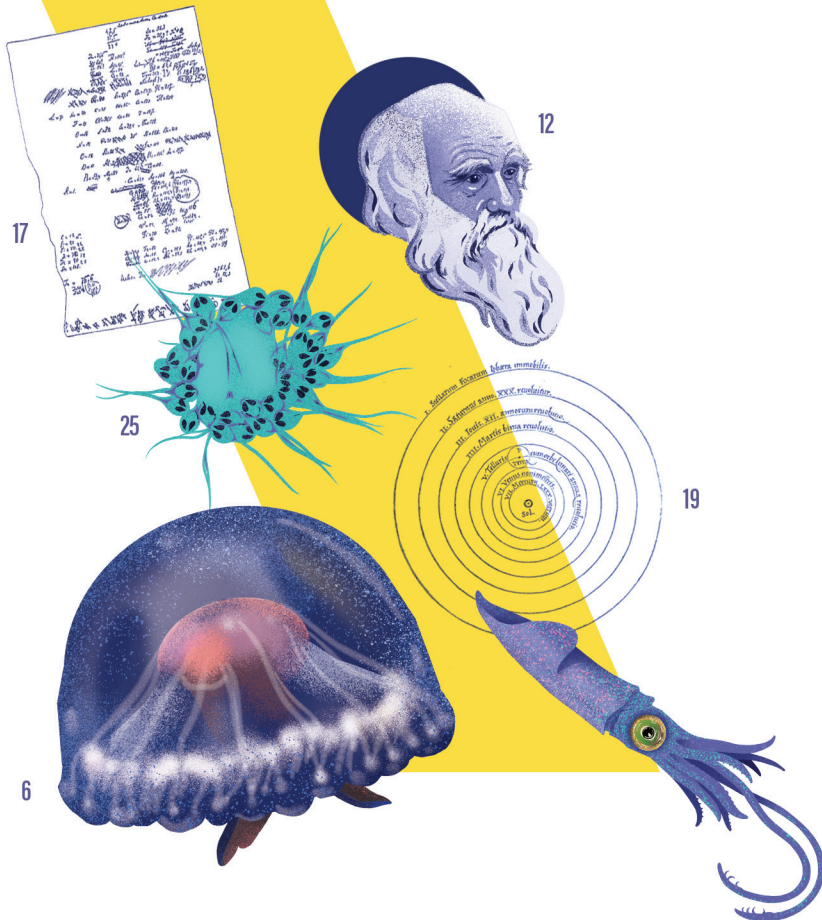


SCIENTIFIC
CALENDAR

- 1 M 1801 • Astronomer Giuseppe Piazzi discovered the first asteroid, which he named Ceres.
- 2 J 1822 • Rudolf Clausius, a physicist and mathematician who is considered one of the founders of thermodynamics, was born.
- 3 V 2018 • A team of researchers in Rome has unveiled the first bionic hand that has tactical sense.
- 4 S 1809 • Professor Louis Braille was born, the inventor of the blind reading system.
- 5 D 1892 • The Northern Lights were photographed, for the first time in history, by Martin Brendel.
- 6 L 2021 • Scientists report the successful use of gene editing in mice with progeria, a premature aging disease.
- 7 M 2021 • A team of researchers presented a potential RNA vaccine for multiple sclerosis.
- 8 M 1823 • Alfred Russel Wallace, one of the biologists who formulated the theory of evolution by natural selection, was born.
- 9 J 2024 • Researchers in Barcelona discovered a new phase of matter, called a "light-matter hybrid".
- 10 V 2024 • Scientists have announced that the extinction of Gigantopithecus blacki, the largest known primate, was due to an inability to adapt to a new diet.
- 11 S 2013 • Scientists have created a test similar to a breathalyzer, which can be used to diagnose lung infections.
- 12 D 2024 • A new study has shown that caterpillars can detect their predators by the static electricity they emit.
- 13 L 2015 • A Duke University team has created the first artificial human muscle capable of contraction.
- 14 M 1997 • Greece confirmed the discovery of the Lyceum founded by Aristotle 2500 years ago.
- 15 M 2020 • Researchers at the University of Colorado Boulder have developed "living concrete" made from sand, hydrogel, and bacteria. It can heal cracks, absorb toxins, and even become luminous on command.
- 16 J 1932 • The zoologist Dian Fossey was born, who studied the life of mountain gorillas in Central Africa for 18 years.
- 17 V 1560 • Gaspard Bauhin, botanist who introduced the practice of binary nomenclature, was born.
- 18 S 2024 • Researchers at Washington State University have unveiled two insect-like robots, believed to be the smallest and fastest fully functional micro-robots.

- 19 D 2006 • NASA launched the New Horizons spacecraft, which reached Pluto in 2015.
- 20 L 1910 • Joy Adamson, biologist and wildlife campaigner, was born.
- 21 M 1912 • Konrad Block was born, a biochemist who discovered the human body's ability to produce cholesterol.
- 22 M 1561 • The philosopher Francis Bacon was born, who formulated the principles of the scientific method.
- 23 J 2017 • Researchers have unveiled a 3D printer prototype that can print fully functional human skin.
- 24 V 1986 • The Voyager 2 space ship flies over the planet Uranus for its first overflight, at about 81,500 km distance.
- 25 S 2023 • A team of engineers from Hong Kong has designed millimeter-sized robots that can quickly transition between liquid and solid states, useful for repairing electronics or removing foreign objects from the body.
- 26 D 1884 • Roy Chapman Andrews, explorer who discovered many important fossils, including a Velociraptor, was born.
- 27 L 2020 • A new species of dinosaur has been discovered in the genus Allosaurus, called Allosaurus jimadseni.
- 28 M 2013 • Researchers have developed a skin-friendly polymer patch that can be used to inject DNA vaccines without using a conventional needle and increases the initial efficacy of the delivered vaccine.
- 29 M 2024 • Yale researchers have shown that too much or too little sleep is associated with brain changes that increase the risk of stroke and dementia.
- 30 J 1820 • Edward Bransfield, an Irish naval officer, discovered Antarctica.
- 31 V 2013 • British researchers have made significant progress in synthetic biology, developing microscopic biological factories for drugs, biofuels and underground minerals.





02

FEBRUARY



	M	T	W	T	F	S	S
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5	27	28	29	30	31	1	2
6	3	4	5	6	7	8	9
7	10	11	12	13	14	15	16
8	17	18	19	20	21	22	23
9	24	25	26	27	28	1	2

6 Biologists have discovered a new species of jellyfish called *Santipordia pagesi*. (2024)

12 Charles Darwin was born, the biologist who formulated the theory of evolution through natural selection. (1809)

17 Dmitri Mendeleev first sketched the systematic arrangement of the elements, which would become known as the "periodic system of elements" or "Mendeleev's table." (1869)

19 The astronomer Nicolas Copernicus was born, who proposed the theory that the Earth and other planets revolve around the Sun. (1473)

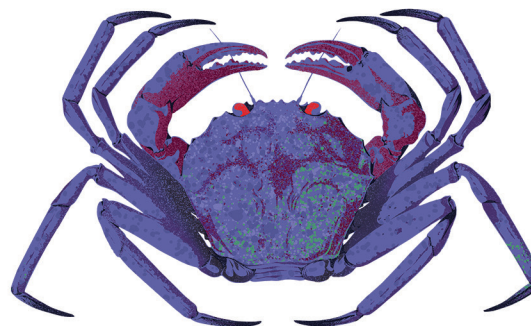
25 Scientists at Tel Aviv University have discovered the first non-oxygen-breathing animal, *Heneguya salminicola*, a parasite that lives in the salmon's muscle mass. (2020)

FEBRUARY



- 1 S 1949 • The Hale telescope was used for the first time. It was the largest in the world at the time.
- 2 D 2021 • Was discovered that Tabby's Star, observed to fluctuate in unusual ways, is actually a binary star system.
- 3 L 2015 • Researchers used biodegradable nanoparticles for the first time to kill cancer cells in animals' brains, thus prolonging their lives.
- 4 M 2013 • Australian engineers have built a "quantum microscope" that provides an unprecedented level of accuracy in measuring living biological systems.
- 5 M 2020 • Scientists have developed a CRISPR-like gene editing system that can control multiple genes simultaneously.
- 6 J 2024 • Biologists have discovered a new species of jellyfish called *Santjordia pagesi*.
- 7 V 1824 • The astronomer William Huggins was born, the first man to determine the chemical composition of stars by analyzing spectra.
- 8 S 1881 • Mary Walton received the patent for a device that reduced smoke by deflecting it into water tanks for disposal in the city's sewage system.
- 9 D 2017 • Researchers in Japan have unveiled an bee drone capable of pollinating flowers.
- 10 L 1835 • The oceanographer Victor Hensen was born, the inventor of the word "plankton".
- 11 M 2014 • Researchers at King's College London have identified a gene linking brain structure and intelligence.
- 12 M 1809 • Charles Darwin was born, the biologist who formulated the theory of evolution through natural selection.
- 13 J 2013 • Scientists cure dogs' type 1 diabetes, using gene therapy.
- 14 V 1961 • Lawrencium, the Z=103 element, was synthesized at the University of California.
- 15 S 1564 • Galileo Galilei was born, the first person to look at the sky through a telescope.
- 16 D 1994 • Dr. Ruben Quintero of Wayne State University, USA, performed the first intrauterine surgery on a fetus.
- 17 L 1869 • Dmitry Mendeleev first sketched the systematic arrangement of the elements, which would become known as the "periodic system of elements" or "Mendeleev's table".
- 18 M 1930 • Astronomer Clyde Tombaugh discovered Pluto.
- 19 M 1473 • The astronomer Nicolas Copernicus was born, who proposed the theory that the Earth and other planets revolve around the Sun.

- 20 J 2006 • Law-Racovița was inaugurated, the first Romanian station in Antarctica.
- 21 V 2013 • Researchers at Cornell University have created a living artificial ear using 3D-printed collagen cell cultures.
- 22 S 1857 • Heinrich Hertz is born, physicist and the first to produce and detect radio waves.
- 23 D 1455 • The date traditionally accepted for the first publication of the Gutenberg Bible, the first book printed with the movable-letter printing press.
- 24 L 2013 • Scientists have announced that they have found fragments of Rodinia, an ancient supercontinent lost in what is now the Indian Ocean.
- 25 M 2020 • Scientists at Tel Aviv University have discovered the first non-oxygen-breathing animal, *Henneguya salminicola*, a parasite that lives in the salmon's muscle mass.
- 26 M 1958 • Astronaut Susan Helms was born, the person who made the longest walk through space, 8 hours and 56 minutes.
- 27 J 1940 • Martin Kamen and Sam Ruben discovered the 14th isotope of carbon.
- 28 V 2013 • Researchers have identified adult stem cells from bone marrow that could be used to treat inflammatory bowel diseases.





14 The physicist Albert Einstein was born, who developed the theory of relativity. (1879)

16 A new species of bacteria, tentatively named *Methylobacterium ajmalii*, was discovered on the International Space Station. (2021)

18 Traian Vuia made the first self-propelled flight in Romania. He flew 20 meters at an altitude of 1 meter, with a heavier-than-air flying machine. (1906)

24 One study found that the Cuvier's beaked whale can dive to a depth of 3.2 km and stay underwater for 137 minutes. (2014)

28 Entomologist Oliver Zompro has discovered a new insect order, the first in 87 years. (2002)

03

MARCH



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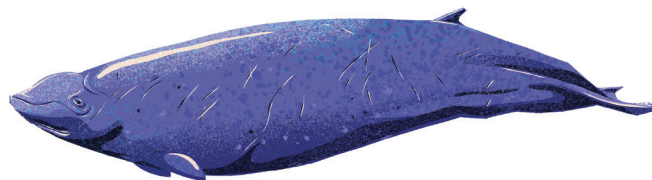
9	24	25	26	27	28	1	2
10	3	4	5	6	7	8	9
11	10	11	12	13	14	15	16
12	17	18	19	20	21	22	23
13	24	25	26	27	28	29	30
14	31	1	2	3	4	5	6

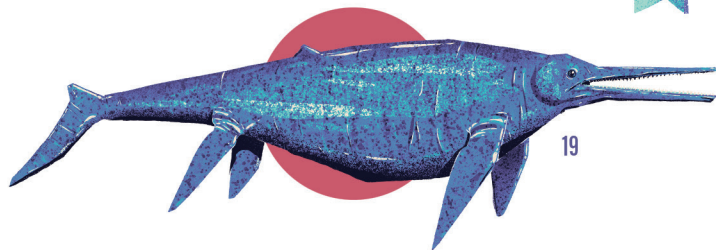
MARCH



SCIENTIFIC
CALENDAR

- 1 S 1717 • Catharina Helena Dörrien was born, a botanist and teacher, recognized as "the most famous German-speaking naturalist of the period".
- 2 D 1716 • Dimitrie Cantemir's "Descriptio Moldaviae", the first Romanian geographical monograph, was published.
- 3 L 2013 • A baby was cured of HIV by antiretroviral treatment administered immediately after birth.
- 4 M 2020 • NASA has published the highest-resolution photograph ever taken on Mars by the Curiosity rover.
- 5 M 1512 • Gerardus Mercator, cartographer and mathematician, was born.
- 6 J 2014 • A new 28 km² living coral reef was discovered in Iraq's territorial waters.
- 7 V 2024 • The first amphibian that feeds its young on milk was discovered.
- 8 S 2023 • A new carbon capture method that converts the gas into sodium bicarbonate and stores it in seawater has been unveiled, making it three times more efficient than existing methods.
- 9 D 1934 • Astronaut Yuri Gagarin was born, the first man to reach space.
- 10 L 1876 • Alexander Graham Bell successfully made the first phone call in history.
- 11 M 2024 • Researchers from the University of "Dunărea de Jos" in Galati, Romania, have received a patent for a protein bread with steak flavor.
- 12 M 2013 • Japan became the first country to extract natural gas from marine deposits of methane hydrate.
- 13 J 2013 • The largest radio telescope in the world, at that time, Atacama Large Millimeter Array, becomes fully operational.
- 14 V 1879 • The physicist Albert Einstein was born, who developed the theory of relativity.
- 15 S 1854 • Bacteriologist Emil von Behring, who created vaccines against diphtheria and tetanus, is born.
- 16 D 2021 • A new species of bacteria, tentatively named *Methylobacterium ajmalii*, was discovered on the International Space Station.
- 17 L 2013 • Shams 1, the world's largest concentrated solar power plant, has become operational in Abu Dhabi, United Arab Emirates.
- 18 M 1906 • Traian Vuia made the first self-propelled flight in Romania. He flew 20 meters at an altitude of 1 meter, with a heavier-than-air flying machine.
- 19 M 2019 • Karen Uhlenbeck became the first woman to receive the prestigious Abel Prize for mathematics.
- 20 J 2024 • A team from the University of Amsterdam has successfully eliminated HIV from infected cells using the CRISPR technique.
- 21 V 1768 • Jean Baptiste Joseph Fourier was born, French mathematician who made contributions to the theory of differential equations, trigonometric series and physics.
- 22 S 1895 • Auguste and Louis Lumière made the first cinema demonstration in Paris, using a celluloid film.
- 23 D 1882 • Emmy Noether was born, a mathematician known for her contributions to the field of algebra and theoretical physics.
- 24 L 2014 • One study found that the Cuvier's beaked whale can dive to a depth of 3.2 km and stay underwater for 137 minutes.
- 25 M 1914 • Norman Borlaug was born, agronomist, scientific researcher and Nobel Prize winner, named the Father of the Green Revolution.
- 26 M 1516 • The naturalist Conrad Gesner, one of the founders of modern zoology, was born.
- 27 J 2019 • Scientists report that Earth based life forms survived for 18 months in space, outside of the International Space Station, implying life could theoretically be viable on Mars planet.
- 28 V 2002 • Entomologist Oliver Zompro has discovered a new insect order, the first in 87 years.
- 29 S 2013 • A robotic colony of insects has been created. The insects could be programmed to avoid obstacles and quickly find the fastest route within a network or labyrinth.
- 30 D 2023 • Botanists have reported that plants under stress emit ultrasonic sounds, which can be interpreted and used in agriculture.
- 31 L 1596 • René Descartes was born, French philosopher and mathematician, author of the concept "Cogito ergo sum" - "I think, therefore I am".





1 Biochemists report that they have completed the complete sequencing of the human genome. (2022)

2 The birthdate of Maria Sibylla Merian, a German-born Swiss naturalist and scientific illustrator. She was one of the earliest European naturalists to observe insects directly. (1647)

16 Researchers have announced for the first time the identification of pheromones in primates. Male maki lemurs secrete a floral scent on their wrists during rutting that attracts females. (2020)

19 Fossil remains of Ichthyotitan, the largest known marine reptile, have been found in England, ranging between 22 and 26 meters in length. (2024)

04

APRIL



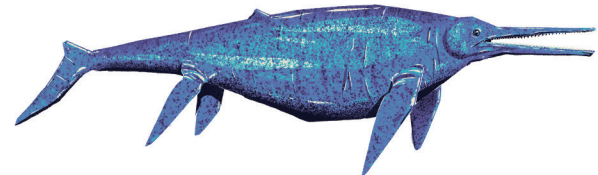
	M	T	W	T	F	S	S
14	31	1	2	3	4	5	6
15	7	8	9	10	11	12	13
16	14	15	16	17	18	19	20
17	21	22	23	24	25	26	27
18	28	29	30	1	2	3	4

APRIL



SCIENTIFIC
CALENDAR

- 1 M 2022 • Biochemists report that they have completed the complete sequencing of the human genome.
- 2 M 1647 • The birthdate of Maria Sibylla Merian, a German-born Swiss naturalist and scientific illustrator. She was one of the earliest European naturalists to observe insects directly.
- 3 J 2017 • Researchers at the University of Manchester have unveiled a graphene-based sieve capable of filtering salt water from seas and oceans.
- 4 V 2024 • Researchers at the Dark Energy Spectroscopic Instrument in Arizona have released the largest 3D map of the Universe, with over 6 million galaxies.
- 5 S 2018 • Researchers at the University of Illinois, Chicago, have described a new type of antibiotic, produced in nature and called Odilorhabdins.
- 6 D 2020 • An Australian marine expedition discovered and filmed one of the longest organisms in the world - the 50 m long Apolemia hydrozoan (relative to jellyfish and corals) arranged in a 15 m diameter spiral.
- 7 L 1923 • At Beth Israel Hospital in New York, the first brain operation was performed under local anesthesia to remove a brain tumor.
- 8 M 2020 • Swedish researchers have restored mobility in rats affected by stroke by transforming cells in human skin into neurons, which are then transplanted into the brains of rats.
- 9 M 2013 • Chinese researchers have developed a carbon-based aerogel, thought to be the lightest material ever made, with a density only slightly higher than air.
- 10 J 1944 • Quinine, the well-known antimalarial drug, was first synthesized by Robert Burns Woodward and William von Eggers Doering at Harvard University.
- 11 V 2013 • An international team of researchers has discovered key similarities between the brains of arthropods and vertebrates, offering a potential aid in the scientific understanding of the causes of human neuronal diseases.
- 12 S 2013 • The first building to be powered entirely by energy produced by algae was built in Hamburg.
- 13 D 2017 • Researchers at the University of California at Berkeley have created a device that extracts water from dry air using only solar energy.
- 14 L 1452 • Physicist Gordon Kidd Teal built the first transistor made of silicone.
- 15 M 1452 • Leonardo da Vinci, painter, sculptor, inventor, engineer and Italian Renaissance architect, was born.
- 16 M 2020 • Researchers have announced for the first time the identification of pheromones in primates. Male maki lemurs secrete a floral scent on their wrists during rutting that attracts females.
- 17 J 2020 • One study reported that local agricultural production can meet the demand for less than a third of the Earth's population. The rest depend on food sources more than 100 km away.
- 18 V 2024 • For the first time in a billion years, two life forms have merged to form a single organism.
- 19 S 2024 • Fossil remains of Ichthyotitan, the largest known marine reptile, have been found in England, ranging between 22 and 26 meters in length.
- 20 D 1862 • Louis Pasteur and Claude Bernard completed the first test of the preservation process later called 'pasteurization'.
- 21 L 1995 • The explorer Teodor Gh. Negoitã became the first Romanian to reach the North Pole.
- 22 M 1969 • The first human eye transplant was performed.
- 23 M 2024 • The world's largest 3D printer was unveiled by the University of Maine, USA. Using thermoplastic polymers, it can print objects up to 29m (80ft) long at a speed of 230 kg (500 lbs) per hour.
- 24 J 2020 • Japanese researchers have reported the discovery of nitrogenous organics in a Martian meteorite found in Antarctica. This suggests that Mars may have had water and organics.
- 25 V 1920 • Sofia Ionescu-Ogrezeanu is born, the first woman neurosurgeon in South-Eastern Europe.
- 26 S 2024 • The first personalized mRNA-based melanoma vaccine has entered the final stage of a Phase III trial.
- 27 D 1791 • Samuel Morse, the inventor of the Morse code, was born.
- 28 L 1932 • The discovery of a vaccine to immunize man against yellow fever was announced.
- 29 M 2024 • Elise Mekkaoui founded Matricis.ai, an AI software designed to help diagnose endometriosis.
- 30 M 2018 • The researchers reported identifying 6,331 groups of genes that are common to all living animals and may have originated from a single common ancestor that lived 650 million years ago.





3 A study was published confirming the identification in Pogana, Romania, of mammalian remains of the Upper Miocene subfamilies Schizotheriinae and Chalicotheriinae in the same stratigraphic layer, a rare case of co-occurrence of the two subfamilies in the same fossiliferous site. (2023)

14 Doctor Edward Jenner administered the first vaccine against smallpox. (1796)

23 Botanist Carolus Linnaeus, who invented the modern system of classifying living organisms, was born. (1707)

31 Biologists have reported that *Tmesipteris oblancoelata*, a fern allied plant, contains the largest known genome. (2024)

05

MAY



	M	T	W	T	F	S	S
18	28	27	30	1	2	3	4
19	5	6	7	8	9	10	11
20	12	13	14	15	16	17	18
21	19	20	21	22	23	24	25
22	26	27	28	29	30	31	1

MAY



SCIENTIFIC CALENDAR

- 1 J 2024 • A new brain circuit that could act as a "master regulator" of the immune system has been reported by scientists at Columbia University.
- 2 V 2020 • The first sighting of a brown bear in Spain's El Invernadero National Park has been reported for the first time in 150 years.
- 3 S 2023 • A study was published confirming the identification in Pogana, Romania, of mammalian remains of the Upper Miocene subfamilies Schizotheriinae and Chalicotheriinae in the same stratigraphic layer, a rare case of co-occurrence of the two subfamilies in the same fossiliferous site.
- 4 D 1825 • Biologist Thomas Huxley was born, the first to suggest that birds descended from dinosaurs.
- 5 L 2018 • The InSight spacecraft has been successfully launched to study the interior and surface of Mars.
- 6 M 1871 • Victor Grignard was born, a French chemist who discovered small organomagnesium compounds with numerous uses in organic synthesis.
- 7 M 2014 • The first realistic "virtual universe" was created, simulating 13 billion years of cosmic evolution.
- 8 J 2019 • An 18-year-old patient in England has become the first person to receive genetically modified bean therapy to treat a drug-resistant infection.
- 9 V 2003 • In a medical world first, a man in Cluj-Napoca underwent surgery on both the left and right side of his body at the same time, using a single access route.
- 10 S 1946 • The birth date of Birutė Galdikas - anthropologist, primatologist, conservationist, ethologist, and author. She is recognized as a leading authority on orangutans.
- 11 D 1918 • Richard Feynman, an American Nobel Prize-winning physicist, was born, one of the people who greatly expanded the theory of quantum electrodynamics.
- 12 L 1820 • Florence Nightingale, the first modern nurse and an important statistician, was born.
- 13 M 2020 • The world's oldest arthropod and oldest land animal has been identified: a myriapod, Kampecaris obanensis, which lived 425 million years ago.
- 14 M 1796 • Doctor Edward Jenner administered the first vaccine against smallpox.
- 15 J 2024 • SPECULOOS-3 b was discovered, an exoplanet nearly the size of Earth orbiting an ultra-cool dwarf star 55 light-years from Earth.
- 16 V 1718 • Maria Gaetana Agnesi was born, the first woman to write a mathematics textbook and the first woman named a university professor of mathematics.
- 17 S 1836 • Astronomer Joseph Lockyer was born, who identified a new element in the solar spectrum, which he named helium.
- 18 D 2020 • An objective Bayesian analysis was published estimating that the emergence of life is likely to be a rapid process rather than a slow and rare scenario, and that the emergence of intelligence is more likely to be rare.
- 19 L 2014 • Researchers have announced that many microbes could be resistant to the usual methods used to assemble clean rooms in spacecraft, and as a consequence, spacecraft could be unintentionally contaminated.
- 20 M 1570 • The cartographer Abraham Ortelius published the first modern geographical atlas.
- 21 M 2020 • Researchers have reported the creation of a sensor of just 11 atoms capable of picking up magnetic waves.
- 22 J 2013 • Researchers at Purdue University in West Lafayette, US, reported that the Earth is pushing the Moon faster than it has in the past 50 million years.
- 23 V 1707 • Botanist Carolus Linnaeus, who invented the modern system of classifying living organisms, was born.
- 24 S 1844 • Samuel Morse sent the first telegraphic message.
- 25 D 2022 • Northwestern University presented the world's smallest remote-controlled walking robot. Measuring just half a millimeter, it can be used for clearing blocked arteries.
- 26 L 2013 • Using new algorithms, researchers generated accurate images of subcellular structures in milliseconds, instead of minutes.
- 27 M 1907 • Rachel Louise Carson, an American biologist, zoologist and journalist, was born, the author of the book "Silent Spring", one of the main works used by members of organizations to protect nature and the environment.
- 28 M 585 BC • A solar eclipse occurred on the date predicted by the Greek philosopher Thales of Miletus. It is one of the crucial dates in history, against which other exact dates of events in the ancient world can be calculated.
- 29 J 1922 • Iannis Xenakis, Greek-born French mathematician, architect, construction engineer and composer of Greek descent, best known for his application of mathematical and technical knowledge to music, was born.
- 30 V 2013 • Researchers at Nanyang Technological University have invented a graphite-based sensor that is 1,000 times more sensitive to light than traditional sensors.
- 31 S 2024 • Biologists have reported that Tmesipteris obanceolata, a fern allied plant, contains the largest known genome.



15 Researchers at the Natural History Museum in London have discovered fossils of a species of herbivorous dinosaur called Vectipelta barretti on the Isle of Wight. (2023)

29 The Atlantis spacecraft (USA) and the Mir spacecraft (Russia) merged to form the largest artificial satellite to orbit the Earth. (1995)

06

JUNE

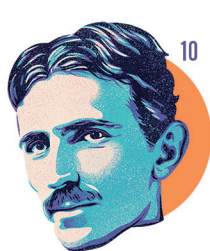


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22	26	27	28	29	30	31	1
23	2	3	4	5	6	7	8
24	9	10	11	12	13	14	15
25	16	17	18	19	20	21	22
26	23	24	25	26	27	28	29
27	30	1	2	3	4	5	6

JUNE



- 1 D 2024 • Chang'e 6 successfully landed on the far side of the Moon.
- 2 L 1922 • Geochemist Clair Patterson was born, who made the first accurate estimate of the age of the Earth.
- 3 M 2020 • The oldest and largest structure in the Maya region, a 3,000-year-old pyramid platform, was discovered using LiDAR technology.
- 4 M 2024 • Researchers have discovered that the fungus Parengyodontium album, which lives on ocean plastic waste, can break down polyethylene particles
- 5 J 2023 • Researchers at the University of Cambridge developed a robot "chef" that was trained to watch and learn from cooking videos and recreate the dishes.
- 6 V 2013 • In the US, an artificially created blood vessel was transplanted into the arm of a patient, who was part of a clinical trial for lab-grown veins.
- 7 S 2021 • Researchers have discovered a microscopic animal called Rotifera bdelloidea in Siberian permafrost that has come to life after being frozen for 24,000 years.
- 8 D 1637 • René Descartes published Discourse on Method, considered one of the fundamental works in the development of science and mathematics.
- 9 L 2017 • Researchers at the University of Zurich announced that they have created the largest simulated virtual universe, made up of 25 billion galaxies generated from 2 trillion digital particles.
- 10 M 2013 • A new skyscraper lift has been presented that uses carbon fiber cables to reach heights of more than 1,000 meters in a single trip.
- 11 M 2013 • Researchers at the University of Nottingham have discovered a previously undetected layer in the human cornea called Dua's layer.
- 12 J 2013 • A new study has suggested that altitude plays a role in the evolution of language, explaining why ejective sounds are more popular in languages originating from high-altitude regions.
- 13 V 1983 • The Pioneer 10 probe became the first man-made object to leave the solar system.
- 14 S 2023 • Researchers at the University of Cambridge and Caltech report the creation of the first synthetic human embryo from stem cells, without the need for sperm or eggs.
- 15 D 2023 • Researchers at the Natural History Museum in London have discovered fossils of a species of herbivorous dinosaur called Vectipelta barretti on the Isle of Wight.
- 16 L 1963 • Cosmonaut Valentina Tereshkova became the first woman in the world to travel in space.
- 17 M 1950 • Dr. Richard H. Lawler performed the first kidney transplant in Chicago.
- 18 M 2013 • Google launched a fleet of high-altitude balloons to provide wireless internet in remote locations.
- 19 J 2019 • Researchers at Carnegie Mellon University demonstrate the first non-invasive robotic arm controlled by the mind.
- 20 V 2013 • American engineers have created a functional, rechargeable, nanoscale wooden battery.
- 21 S 2023 • The University of Minnesota reported the first successful transplantation of a functional cryopreserved mammalian kidney.
- 22 D 2017 • A study of snail neurons was published, suggesting that memories that lead to anxiety and PTSD could be "erased" without affecting individuals' memory.
- 23 L 1912 • Alan Turing was born, a mathematician, logician, cryptanalyst and computer scientist, considered to be the father of modern computer science.
- 24 M 2024 • The University of St Andrews has reported the discovery of three super-Earths around a dwarf star 55 light-years away.
- 25 M 1924 • Albert Calmette and Alphonse Guérin developed the first vaccine against tuberculosis.
- 26 J 1824 • The Irish physicist William Thomson, later known as Lord Kelvin, who conceived the theory of absolute temperature, is born.
- 27 V 2013 • Scientists have developed a new simple and effective method for desalinating seawater, using a small electric field to separate salt from water, without the need for complex filtration membranes.
- 28 S 1992 • At the University of Pittsburgh Medical Center, the first successful baboon liver transplant in humans was performed.
- 29 D 1995 • The Atlantis spacecraft (USA) and the Mir spacecraft (Russia) merged to form the largest artificial satellite to orbit the Earth.
- 30 L 1905 • Albert Einstein published in Annalen der Physik the article "On the Electrodynamics of Moving Bodies", in which he introduced special/special relativity.



10



30



5

15

5 Dolly the sheep became the first mammal cloned from an adult cell. (1996)

10 The physicist Nikola Tesla was born, who laid the foundations of modern knowledge about alternating current, electric power, alternating current systems, including power distribution systems and alternating current motor. (1856)

15 During Napoleon's campaign in Egypt, the Rosetta Stone was discovered, a star inscribed in three different scripts (Greek, hieroglyphic and demotic), which later proved to be the key to deciphering Egyptian hieroglyphics. (1799)

30 Françoise Barré-Sinoussi was born, a French virologist who was awarded the Nobel Prize for her fundamental work in the identification of the human immunodeficiency virus (HIV) as the cause of AIDS. (1947)

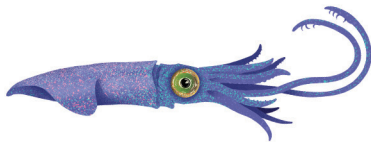
07 JULY

M T W T F S S

27	30	1	2	3	4	5	6
28	7	8	9	10	11	12	13
29	14	15	16	17	18	19	20
30	21	22	23	24	25	26	27
31	28	29	30	31	1	2	3



JULY



SCIENTIFIC
CALENDAR

- 1 M 2023 • ESA's Euclid space telescope is launched, beginning a six-year mission to study dark energy and dark matter.
- 2 M 2014 • Fabien Cousteau and his crew surfaced after 31 days in Aquarius, the world's only underwater habitat, where they collected scientific data.
- 3 J 2019 • Researchers have identified more than a million square kilometers of deforested rainforest in the Americas, Africa and Southeast Asia with high potential for restoration.
- 4 V 1854 • Victor Babeș, a Romanian bacteriologist and morphopathologist, founder of the Romanian school of microbiology, was born.
- 5 S 1996 • Dolly the sheep became the first mammal cloned from an adult cell.
- 6 D 2013 • Researchers have discovered a wide variety of microbial life in Antarctica's subglacial Lake Vostok, buried in ice for about 15 million years, with water problems containing DNA from more than 3,000 tiny organisms.
- 7 L 2017 • Researchers in Queensland have announced that they have created a genetically modified banana that contains high levels of vitamin A and could improve the nutritional content of bananas.
- 8 M 2013 • A study has been published showing that rust nanoparticles could be used to efficiently generate hydrogen fuel from sunlight and water.
- 9 M 1902 • German scientists have isolated barbituric acid, the substance that will form the basis of sleeping pills.
- 10 J 1856 • The physicist Nikola Tesla was born, who laid the foundations of modern knowledge about alternating current, electric power, alternating current systems, including power distribution systems and alternating current motor.
- 11 V 2013 • DARPA and Boston Dynamics unveil the humanoid robot Atlas, an autonomous machine capable of a wide variety of military and disaster response operations.
- 12 S 2022 • NASA releases the first suite of images from the now fully operational James Webb Space Telescope.
- 13 D 1923 • A team led by naturalist explorer Roy Chapman Andrews first discovered dinosaur eggs in the Gobi Desert.
- 14 L 2021 • The researchers used a brain-computer interface to allow a paralyzed person to produce intelligible words and sentences by decoding signals from electrodes placed in the speech areas of his brain.
- 15 M 1799 • During Napoleon's campaign in Egypt, the Rosetta Stone was discovered, a star inscribed in three different scripts (Greek, hieroglyphic and demotic), which later proved to be the key to deciphering Egyptian hieroglyphics.
- 16 M 1888 • Frits Zernike was born, the physicist who invented the phase-contrast microscope, an instrument that allows the structure of living cells to be studied without the need to kill them.
- 17 J 2017 • Researchers in California have presented a method that could "sequester" carbon from the ocean 500 times faster by simply adding a common enzyme to the carbon capture process.
- 18 V 1963 • Dr. E. Stanley Crawford performed the first intrathoracic implantation of an artificial ventricle at Baylor University College of Medicine in Houston, Texas, USA.
- 19 S 2013 • NASA has released images of Earth and the Moon taken by the Cassini spacecraft orbiting Saturn.
- 20 D 1969 • The lunar module of the Apollo 11 mission, called the Eagle, successfully landed, bringing the first humans to the moon.
- 21 L 2013 • US researchers have developed a sensitive, flexible electronic skin that mimics real human skin by sensing and responding to different levels of pressure.
- 22 M 1822 • The botanist Gregor Mendel, the one who discovered the laws of heredity, was born.
- 23 M 1928 • Astronomer Vera Rubin was born, who discovered that galaxies are made up mainly of dark matter.
- 24 J 1892 • Alice Ball was born, an American chemist who developed the "Ball Method", the most effective treatment for leprosy during the early 20th century.
- 25 V 1920 • Rosalind Franklin was born, a biophysicist who made important contributions to understanding the fine molecular structures of DNA, RNA, viruses, coal and graphite.
- 26 S 1741 • The Alaska Peninsula was discovered by Russian explorers; it was later bought by the USA.
- 27 D 1740 • Jeanne Baret, the first woman to complete a circumnavigation of the globe by sea, was born.
- 28 L 2022 • The discovery of an animal that helps algae reproduce was reported, six years after pollination at sea was first reported.
- 29 M 2005 • The discovery of the dwarf planet Eris was announced.
- 30 M 1947 • Françoise Barré-Sinoussi was born, a French virologist who was awarded the Nobel Prize for her fundamental work in the identification of the human immunodeficiency virus (HIV) as the cause of AIDS.
- 31 J 2013 • An artificial human ear was raised in a laboratory, using a flexible wire frame to support tissue cultures from cows and sheep.



1 Scientists have presented a detailed description and 3D model of the first flower, which is nearly 140 million years old. (2017)

7 Biologists have reported the discovery of the fossil of a giant parrot called *Heracles inexpectatus* in New Zealand. It stood up to 1m tall, weighed about 7kg and lived 19 million years ago. (2019)

24 Amelia Earhart became the first woman to fly across the United States, flying from Los Angeles to Newark, New Jersey. (1932)

08

AUGUST

	M	T	W	T	F	S	S
31	28	29	30	31	1	2	3
32	4	5	6	7	8	9	10
33	11	12	13	14	15	16	17
34	18	19	20	21	22	23	24
35	25	26	27	28	29	30	31



AUGUST



- 1 V 2017 • Scientists have presented a detailed description and 3D model of the first flower, which is nearly 140 million years old.
- 2 S 2013 • A new super-glass coating produced by researchers at Harvard University could lead to windows and other surfaces with self-cleaning and scratch resistance.
- 3 D 1915 • Biologist Donald Griffin was born, who discovered that bats use high-frequency sounds for echolocation.
- 4 L 2022 • A team of researchers has unveiled a lab-made cartilage gel that has greater wear resistance than natural cartilage, which could allow damaged joints to be permanently restored.
- 5 M 2013 • A Japanese company has developed a reusable skin patch that can treat chronic high blood pressure by constantly releasing bisoprolol into the bloodstream.
- 6 M 1991 • Tim Berners-Lee, working for CERN, Geneva, published files describing his idea of the World Wide Web, marking the beginning of WWW Internet service.
- 7 J 2019 • Biologists have reported the discovery of the fossil of a giant parrot called *Heracles inexpectatus* in New Zealand. It stood up to 1m tall, weighed about 7kg and lived 19 million years ago.
- 8 V 1786 • Jacques Balmat and Michel-Gabriel Paccard made the first ascent of Mont Blanc, the highest peak in Europe.
- 9 S 2023 • A study of genomic data from human remains from Poland, Romania and Ukraine before and after the Neolithic Revolution was published, showing a mixture of genetic traits between pre-Neolithic groups in central Europe and Siberia and stronger genetic continuity after the Neolithic.
- 10 D 1897 • Felix Hoffman first succeeded in purifying acetylsalicylic acid, which becomes the best-known drug for more than 100 years as aspirin.
- 11 L 2022 • A bioengineered cornea made from pig's skin is shown to restore vision to blind people. It can be mass-produced and stored for up to two years.
- 12 M 1865 • Dr. Joseph Lister, influenced by Pasteur's germ theory, became the first surgeon to use disinfectant during an operation.
- 13 M 1903 • William Ramsay and Frederick Soddy published in Nature the discovery that the nuclear decay of radium produces helium, one of the key discoveries in establishing the structure of the atom.
- 14 J 2023 • Researchers report first-ever image of quantum inseparability.
- 15 V 2013 • Biologists at Tel Aviv University have published the first study of homosexual behavior among insect species.
- 16 S 2018 • Researchers at Sandia National Laboratories have unveiled an alloy of platinum and gold that is considered the world's strongest metal, 100 times more durable than high-strength steel.
- 17 D 1970 • Venus 7 was launched, the first spacecraft that successfully managed to transmit data from the surface of another planet - Venus in this case.
- 18 L 1868 • French astronomer Pierre Jules César Janssen discovered helium in the spectrum of the Sun during an eclipse.
- 19 M 1839 • Louis Daguerre announced the invention of the photographic process called daguerreotype, the first process that allows the permanent fixation of an image.
- 20 M 1779 • Chemist Joens Jakob Berzelius is born, inventor of the system of chemical symbols we still use today.
- 21 J 1789 • Baron Augustin-Louis Cauchy was born, French mathematician and physicist, one of the pioneers of mathematical analysis.
- 22 V 1770 • James Cook's expedition reached the east coast of Australia.
- 23 S 2023 • The complete sequencing of a human Y chromosome, with the discovery of 41 additional genes, has been announced in Nature.
- 24 D 1932 • Amelia Earhart became the first woman to fly across the United States, flying from Los Angeles to Newark, New Jersey.
- 25 L 1973 • The first scan of the human brain was performed by computer-assisted tomography (CAT-scan).
- 26 M 1743 • Antoine Laurent Lavoisier was born, the chemist who issued the first version of the law of conservation of mass, recognized oxygen and hydrogen, helped construct the metric system, wrote the first extensive list of chemical elements and helped reform chemical nomenclature.
- 27 M 2013 • At the University of Washington, researchers have created the first non-invasive human-to-human neural interface. This gave a researcher the ability to send a signal over the internet to control a colleague's hand movements.
- 28 J 2019 • Scientists have reported the discovery of a nearly intact skull of *Australopithecus anamensis* in Ethiopia, dated to be 3.8 million years old.
- 29 V 2013 • A NASA mission has discovered a canyon 750 km long and up to 800 m deep that is hidden under the Greenland ice sheet. This is longer than the Grand Canyon.
- 30 S 1919 • Maurice Hilleman is born, microbiologist, who developed a record 40 vaccines and is considered by some to be the medical specialist who saved the most lives.
- 31 D 1870 • Maria Montessori was born, an Italian doctor and pedagogue, who created a special method of educating very young children, the Montessori Method.



09

SEPTEMBER

	M	T	W	T	F	S	S
36	1	2	3	4	5	6	7
37	8	9	10	11	12	13	14
38	15	16	17	18	19	20	21
39	22	23	24	25	26	27	28
40	29	30	1	2	3	4	5

6 The site of Grăunceanu, jud. Vâlcea, was declared one of the richest assemblages of early Pleistocene carnivores in Europe, both in number of species and specimens. (2023)

23 Scientists report the discovery of *Gnathomantis stadmani*, a very large lizard that lived about 80 million years ago. (2020)

SEPTEMBER



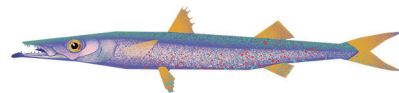
- 1 L 2020 • The University of Tokyo has reported a new infrared spectroscopy method capable of 80 million spectra per second, nearly 100 times faster than previous techniques.
- 2 M 2011 • The smallest electric motor made from a single molecule, about one nanometer in diameter, has been created.
- 3 M 2015 • A team of researchers from MIT have demonstrated a 3D printing technique that can be used to create transparent glass objects.
- 4 J 1913 • Stanford Moore, Nobel Prize-winning American chemist who made important discoveries on protein structure, was born.
- 5 V 1725 • Jean-Étienne Montucla, French mathematician who wrote the first history of mathematics, was born.
- 6 S 2023 • The site of Grăunceanu, jud. Vâlcea, was declared one of the richest assemblages of early Pleistocene carnivores in Europe, both in number of species and specimens.
- 7 D 2022 • A new malaria vaccine developed by the University of Oxford has been shown to be 80% effective in preventing the disease.
- 8 L 1954 • American Jonas Edward Salk developed the first polio vaccine.
- 9 M 1839 • John Herschel took the first surviving photograph on glass plate.
- 10 M 2019 • Based on 260 CT scans, a team of paleontologists have determined the skull shape of the last common ancestor of modern humans and suggest that it arose through the fusion of populations in East and Southern Africa around 300,000 years ago.
- 11 J 2019 • Google reported the creation of a deep learning system, trained on 50,000 different diagnoses, capable of detecting 26 skin conditions as accurately as dermatologists.
- 12 V 2018 • Researchers have reported the discovery of the oldest known drawing made by Homo sapiens, estimated at 73,000 years old, much older than artifacts previously considered the earliest modern human drawings.
- 13 S 1860 • Thoma Ionescu was born, a doctor, the founder of the Romanian school of surgery and topographic anatomy.
- 14 D 1769 • Alexander von Humboldt, a German naturalist, archaeologist, explorer and geographer, was born and contributed to the formation of geography as a scientific discipline.
- 15 L 1917 • Dr. Félix d'Hérelle first used the term "bacteriophage", which he coined, in a note to the French Academy of Sciences.
- 16 M 1853 • German physician Albrecht Kossel was born, who discovered and named the four nucleotides of DNA: adenine, cytosine, guanine and thymine.
- 17 M 1683 • Antonie van Leeuwenhoek first described the observation of bacteria in a letter to the English Royal Society.
- 18 J 1819 • The physicist Jean Foucault, who invented the pendulum that bears his name and the gyroscope, was born.
- 19 V 1991 • The mummified remains of a Paleolithic inhabitant, nicknamed "Ötzi, the Ice Man" were discovered in the Similaun Glacier in the Alps.
- 20 S 2018 • Researchers at Cincinnati Children's Hospital Medical Center report the first human oesophageal tissue grown entirely from pluripotent stem cells.
- 21 D 2022 • Engineers report development of 3D-printed construction and repair drones.
- 22 L 1791 • Michael Faraday, a physicist and chemist, was born who built the first electric motor, the first generator and the first transformer.
- 23 M 2020 • Scientists report the discovery of *Gnathomortis stadtmani*, a very large lizard that lived about 80 million years ago.
- 24 M 2013 • The first evidence that non-human primates whisper has been observed.
- 25 J 1644 • Astronomer Ole Roemer, the first person to measure the speed of light, was born.
- 26 V 2018 • Researchers have provided evidence that phosphorus compounds, key building blocks for life, are made in interstellar space and distributed to outer space, including early Earth.
- 27 S 1905 • Albert Einstein published his study "Does the inertia of a body depend on its energy content?", which contains the famous relation $E = mc^2$.
- 28 D 1928 • Alexandre Fleming announced the discovery of penicillin.
- 29 L 1954 • The convention establishing the European Organization for Nuclear Research, CERN, was signed.
- 30 M 1882 • Physicist Hans Geiger, who invented the radiation detector, was born.



10

OCTOBER

	M	T	W	T	F	S	S
40	29	30	1	2	3	4	5
41	6	7	8	9	10	11	12
42	13	14	15	16	17	18	19
43	20	21	22	23	24	25	26
44	27	28	29	30	31	1	2

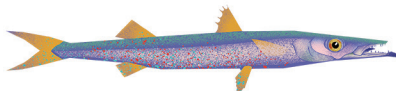


11 Paleontologist Paul Sereno, who discovered the oldest known dinosaur, Eoraptor, was born. (1957)

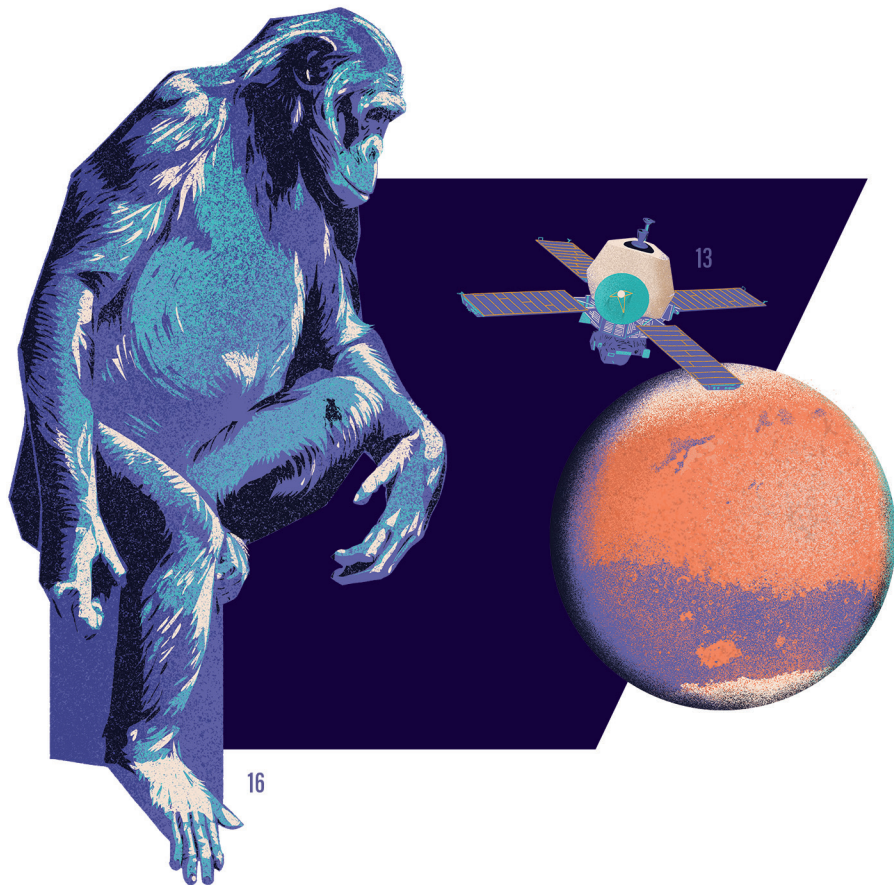
17 Using data accumulated over more than 10 years, researchers have estimated that there are 390 billion trees in the Amazon rainforest, from 16,000 different species. (2013)

23 A new way to locate metal deposits, including gold, has been discovered by researchers in Australia. The presence of small particles in eucalyptus leaves may indicate that these resources are present underground. (2013)

OCTOBER



- 1 M 1958 • NASA (The National Aeronautics and Space Administration) has begun operations.
- 2 J 1852 • The chemist William Ramsay was born, who discovered argon, krypton, neon and xenon.
- 3 V 2013 • Using genetic engineering, researchers at the University of California, Los Angeles, increased biofuel ethanol production by 50%.
- 4 S 1934 • Enrico Fermi determined the speed of a neutron.
- 5 D 1713 • Denis Diderot, French philosopher and encyclopedist, was born.
- 6 L 2013 • Under Antarctica, giant canals have been discovered, up to 250m high and stretching for hundreds of kilometers.
- 7 M 1959 • The dark side of the Moon was photographed for the first time by the Luna 3 spacecraft.
- 8 M 1958 • Dr. Åke Senning implanted the first internal cardiac pacemaker, invented by Rune Emlquist.
- 9 J 1852 • Hermann Emil Fischer, Nobel Prize-winning chemist who carried out the first research to decipher the structure of proteins, was born.
- 10 V 1796 • The traditional date of birth of the metric system of units. The date was chosen to symbolize the base 10 on which the system is built: it is the 10th day of the 10th month.
- 11 S 1957 • Paleontologist Paul Sereno, who discovered the oldest known dinosaur, Eoraptor, was born.
- 12 D 1928 • An iron lung, built to allow polio victims to breathe despite respiratory muscle paralysis, is being used for the first time at a pediatric hospital in Boston.
- 13 L 1976 • F. A. Murphy obtained the first electromicroscopic image of the Ebola virus.
- 14 M 2020 • University of Rochester researchers have demonstrated the first high-pressure superconductor capable of operating at room temperature of 15 °C.
- 15 M 1951 • Chemist Luis E. Miramontes completed the synthesis of norgestrel, the progestogen that was later used to make the first oral contraceptives.
- 16 J 2023 • Scientists have proposed a new law of evolution that extends Darwin's law of evolution, described as the "law of increasing functional information".
- 17 V 2013 • Using data accumulated over more than 10 years, researchers have estimated that there are 390 billion trees in the Amazon rainforest, from 16,000 different species.
- 18 S 2016 • Researchers at the University of Warwick have discovered the physical location of depression in the human brain.
- 19 D 2023 • The NorthPole, a computer processor capable of running artificial intelligence-based image recognition applications 22 times faster than today's existing chips, was unveiled.
- 20 L 1906 • Lee DeForest, one of the "fathers of radio", announced the discovery of the three-element electron tube, now known as the "triode".
- 21 M 1833 • Chemist Alfred Nobel, founder of the Nobel Prize, was born.
- 22 M 1981 • The high-speed train from Paris to Lyon was inaugurated, the first of its kind in Europe.
- 23 J 2013 • A new way to locate metal deposits, including gold, has been discovered by researchers in Australia. The presence of small particles in eucalyptus leaves may indicate that these resources are present underground.
- 24 V 1632 • Dutch biologist Antonie van Leeuwenhoek, who discovered red blood cells and bacteria, was born.
- 25 S 2023 • Using data from the Mars InSight lander, scientists announced that Mars has an ocean of radioactive magma beneath its crust.
- 26 D 1994 • Andrew Wiles, an English mathematician, announced the solution to Fermat's Great Theorem.
- 27 L 1904 • Philip Downing invented the mailbox, which is still in use today.
- 28 M 2020 • Researchers have discovered a 500-meter-high coral reef at the northern tip of Australia's Great Barrier Reef, the first such discovery in 120 years.
- 29 M 1711 • Laura Bassi was born, an Italian physicist and academic, the first woman to have a doctorate in science, the first salaried female teacher in a university and the first female member of any scientific establishment, when she was elected to the Academy of Sciences of the Institute of Bologna.
- 30 J 2018 • Scientists have announced the 3D virtual reconstruction, for the first time, of a Neanderthal chest, which can help us better understand how it moves and how it breathes.
- 31 V 2019 • Researchers at the KTH Royal Institute of Technology, Sweden, have developed a film that applies to solar cells and captures infrared light, which can increase the efficiency of solar energy conversion by 10% or more.



13 The Mariner 9 spacecraft became the first artificial satellite of another planet when it entered Mars orbit. (1971)

16 Researchers have found evidence that primate groups, especially bonobos, cooperate with each other. (2023)

11



NOVEMBER

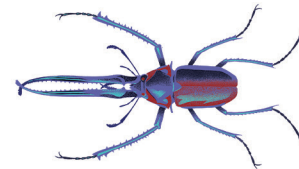
	M	T	W	T	F	S	S
44	27	28	29	30	31	1	2
45	3	4	5	6	7	8	9
46	10	11	12	13	14	15	16
47	17	18	19	20	21	22	23
48	24	25	26	27	28	29	30

NOVEMBER



SCIENTIFIC
CALENDAR

- 1 S 2018 • BioGenome Earth project launched to sequence the genomes of 1.5 million species.
- 2 D 1955 • Carlton Schwerdt and F. L. Schaffer crystallized poliovirus, the first crystallized animal virus.
- 3 L 1957 • The Soviet Union launched Sputnik 2, carrying the first animal to reach space, the puppy Laika.
- 4 M 2020 • Study published showing prehistoric women hunted large animals.
- 5 M 2019 • 11,000 scientists from around the world have published a study in the journal BioScience, warning "clearly and unequivocally that planet Earth is facing a climate emergency".
- 6 J 2019 • Scientists at the University of Rochester have demonstrated a new technique for creating superhydrophobic metals floating on water.
- 7 V 1867 • Marie Curie, a chemist and physicist, who discovered radium and coined the word "radioactivity" was born.
- 8 S 2021 • Researchers have shown that the brain (insular cortex) 'remembers' past infections and can shape the immune response.
- 9 D 1934 • Carl Sagan was born, an American astronomer, astrophysicist and writer, who made a great contribution to the promotion and popularization of science.
- 10 L 2023 • Researchers at the University of California have developed an innovative material for water purification.
- 11 M 1675 • Gottfried Leibnitz made the first demonstration of the integral calculus.
- 12 M 2015 • MIT has invented an efficient shock-wave-based water desalination process.
- 13 J 1971 • The Mariner 9 spacecraft became the first artificial satellite of another planet when it entered Mars orbit.
- 14 V 1666 • Doctor Samuel Pepys noted in his diary the description of the first documented blood transfusion by Richard Lower.
- 15 S 1868 • Emil Racoviță was born, biologist, member of the Romanian Academy, founder of biospeleology, explorer of Antarctica.
- 16 D 2023 • Researchers have found evidence that primate groups, especially bonobos, cooperate with each other.
- 17 L 1884 • Count Hilaire de Chardonnet produced artificial silk from cellulose.
- 18 M 1963 • The first push-button telephone was introduced to the US commercial circuit.
- 19 M 1912 • George Emil Palade was born, Romanian biochemist, winner of the Nobel Prize for medicine.
- 20 J 1889 • Astronomer Edwin Hubble was born.
- 21 V 2020 • Sentinel-6 Michael Freilich is launched into orbit to monitor sea levels in more detail than ever before.
- 22 S 2013 • Researchers have identified a human immune gene from Neanderthals.
- 23 D 1964 • Dr. Michael E. DeBakey successfully performed the first coronary artery bypass graft surgery.
- 24 L 1859 • Charles Darwin published The Origin of Species. The anniversary is sometimes called "Evolution Day".
- 25 M 1814 • Julius Robert von Mayer, a German naturalist and physician, was born.
- 26 M 1894 • Norbert Wiener, American mathematician considered the founder of cybernetics as a new science, was born.
- 27 J 2019 • Researchers discover Caveasphaera, a 609-million-year-old multicellular organism.
- 28 V 1814 • The London newspaper "The Times" became the first to be printed with steam-powered presses, paving the way for a wide availability of newspapers.
- 29 S 2021 • Researchers have published a new form of biological reproduction in xenobots.
- 30 D 1974 • In Ethiopia, paleontologists Donald Johanson and Tom Gray have found the 3.2 million-year-old skeleton of a woman, whom they named Lucy.





8 Oldest DNA, two million years old, found in Greenland. (2022)

15 Astronomer Simon Marius first observed the Andromeda galaxy through a telescope, describing it as "like the flame of a candle seen through a horn." (1612)

25 The English physicist and mathematician Sir Isaac Newton was born, who invented the integral calculus, discovered the three principles of mechanics and the law of gravity. (1642)

12



25

DECEMBER

	M	T	W	T	F	S	S
49	1	2	3	4	5	6	7
50	8	9	10	11	12	13	14
51	15	16	17	18	19	20	21
52	22	23	24	25	26	27	28
1	29	30	31	1	2	3	4

DECEMBER



- | | |
|---|---|
| <p>1 L 1743 • Chemist Martin Heinrich Klaproth, who discovered uranium, is born.</p> <p>2 M 2021 • Georgia Tech Research Institute announced a method of storing DNA data with 100 times the density of previous techniques.</p> <p>3 M 2019 • Researchers at the University of Bath have created artificial neurons on semiconductor chips.</p> <p>4 J 2013 • Scientists have reported the oldest human DNA, obtained from a 400,000-year-old femur.</p> <p>5 V 2022 • Construction has begun on the Square Kilometer Array, the largest telescope in history.</p> <p>6 S 1877 • Thomas Edison made the first recording on a phonograph cylinder.</p> <p>7 D 2023 • Princeton University researchers have realized for the first time the quantum inseparability of molecules.</p> <p>8 L 2022 • Oldest DNA, two million years old, found in Greenland.</p> <p>9 M 1906 • Grace Murray Hopper was born, one of the first programmers of the Harvard Mark I computer, she was a pioneer of computer programming who invented one of the first linkers.</p> <p>10 M 1815 • English mathematician, Ada Lovelace, considered the world's first computer programmer, was born.</p> <p>11 J 1863 • Astronomer Annie Jump Cannon, on whose work modern star cataloging is based, was born.</p> <p>12 V 2023 • The Perseverance rover found evidence that a river delta on Mars once hosted a lake.</p> <p>13 S 2022 • The UK government announced a research program to detect rare genetic diseases in newborns.</p> <p>14 D 2023 • Scientists have announced that genes inherited from Neanderthals and Denisovans could influence modern humans' daily routines.</p> <p>15 L 1612 • Astronomer Simon Marius first observed the Andromeda galaxy through a telescope, describing it as "like the flame of a candle seen through a horn."</p> <p>16 M 1954 • H. Tracy Hall obtained synthetic diamonds for the first time.</p> <p>17 M 1903 • Orville and Wilbur Wright recorded the first flight of an airplane, a distance of about 40 meters, in about 12 seconds.</p> <p>18 J 1826 • G. N. Lewis first used the word photon to describe light.</p> <p>19 V 1813 • Thomas Andrews was born, who proved that ozone is a form of oxygen.</p> <p>20 S 2023 • MIT used deep learning to identify a new class of antibiotics capable of killing methicillin-resistant Staphylococcus aureus.</p> | <p>21 D 1773 • Botanist Robert Brown was born, who discovered that tiny particles suspended in liquid are in a continuous motion, today called the "Brownian motion."</p> <p>22 L 2020 • A new dark green mineral called kernowit has been discovered in Cornwall, UK.</p> <p>23 M 1947 • Physicists Walter Brattain and John Bardeen designed the first transistor.</p> <p>24 M 1906 • Canadian engineer Reginald Fessenden made the first radio broadcast, which included music and a poetry recital.</p> <p>25 J 1642 • The English physicist and mathematician Sir Isaac Newton was born, who invented the integral calculus, discovered the three principles of mechanics and the law of gravity.</p> <p>26 V 1791 • The mathematician Charles Babbage was born, who designed the first programmable calculating machine; never built, it is today considered the predecessor of the computer.</p> <p>27 S 1571 • German astronomer Johannes Kepler was born, who discovered the three laws of planetary motion.</p> <p>28 D 2019 • Christina Koch spent 289 days on the International Space Station, setting a record for a female astronaut.</p> <p>29 L 1800 • Charles Goodyear, the inventor of the vulcanization process, was born.</p> <p>30 M 1930 • Tu Youyou was born, a pharmaceutical chemist and malariologist. She discovered artemisinin and dihydroartemisinin, used to treat malaria, a breakthrough in twentieth-century tropical medicine, saving millions of lives.</p> <p>31 M 1879 • Thomas Edison made the first public demonstration of the incandescent light bulb in Menlo Park, New Jersey, USA.</p> |
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