

**Here are ten events in science that have occurred since Roger's birth.
Can you match the events to the corresponding years?**

A supernova appears in the Large Magellanic Cloud.

1951

Fred Vine and Drum Matthews publish a paper describing how magnetic stripes are symmetrical around mid-ocean ridges.

1957

Norman Geschwind and Walter Levitsky demonstrate that there are anatomical differences between male and female brains.

1963

On his way home from a boat race, oceanographer Charles Moore stumbles upon an enormous repository of plastic waste in the middle of the North Pacific Ocean, collected by currents. This would become known as the Great Pacific Garbage Patch.

1968

Ötzi the Iceman, the well-preserved remains of a 5300 year old man, is discovered in a European glacier by tourists Helmut and Erika Simon.

1975

The European Space Agency is established.

1981

The International Union of Geological Sciences officially adds the Ediacaran period to the Earth's geologic timescale.

1987

The Scanning Tunnelling Microscope is invented by Gerd Binnig and Heinrich Rohrer.

1991

The Soviet Union launches the first satellite.

1997

Transduction, the process by which a virus transfers DNA from one bacterium to another, is discovered by Norton Zinder and Joshua Lederberg.

2004

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David Noble discovers the Wollemi Pine.

1950

Jan Hendrik Oort proposes that comets originate in a vast reservoir of bodies orbiting far beyond the planets, independently reviving an idea first suggested by Ernst Opik in 1932. This reservoir would become known as the Oort Cloud.

1956

Jo Hin Tjio and Albert Levan report that the human genome has 46 chromosomes (23 pairs), not 48 as previously believed.

1962

Johannes Bednorz and Karl Müller discover the first high-temperature superconductor.

1969

Louis and Walter Alvarez report a high concentration of iridium in a layer of clay, and tie that observation to the theory that the dinosaurs were wiped out by an asteroid.

1974

Markus Arndt and colleagues publish the results of an experiment in which an interference pattern is generated from buckminsterfullerene molecules, confirming that wave-particle duality applies to objects of that size.

1980

Probably the most famous fossil of a human ancestor, nicknamed Lucy, is discovered in Ethiopia by a team lead by Donald Johanson.

1986

Rachel Louise Carson publishes "Silent Spring", drawing attention to the dangers of pesticides.

1994

The Huygens Probe lands on the surface of Saturn's moon Titan.

1999

Using radio telescopes, Lewis Snyder and colleagues discover formaldehyde molecules in interstellar space. This was the first such organic (carbon-based) molecule found.

2005

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Donald Glaser invents the bubble chamber, a device for detecting the trails of charged particles that improves upon the earlier cloud chambers.	1952
IBM scientists publish a classic image, created with a scanning tunnelling microscope, that shows concentric standing waves of electrons bounded by a ring of iron atoms.	1959
Keith Kvenvolden reports that amino acids found in a meteorite must be extraterrestrial, because they contain the acids known on Earth and their mirror image counterparts in roughly equal proportions.	1965
Noam Chomsky writes "Aspects of the Theory of Syntax", proposing the controversial notion of Universal Grammar.	1970
Richard Dawkins publishes "The Selfish Gene", and coins the term "meme" for replicated units of culture.	1976
Scientists isolate HIV, the virus that causes AIDS.	1983
The far side of the moon is photographed by Luna 3, a Soviet spacecraft.	1988
The International Astronomical Union officially reduces the number of known planets in the solar system to eight.	1993
The Powerhouse Museum in Sydney, the Questacon National Science and Technology Centre in Canberra, and the SciTech Discovery Centre in Perth, are opened.	2000
Toshiyuki Nakagaki publishes the results of an experiment in which slime mould "solves" a maze after food has been placed at both ends by first filling the entire maze and then shrinking back to fill only the shortest route between the two food sources.	2006

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2600 metres below the surface of the Pacific Ocean, Jack Corliss observes thermal vents inhabited by many previously unknown forms of life. This would lead to a new theory for the origin of life on Earth.	1954
Astronomers announce the detection of water vapour in the atmosphere of a planet orbiting another star.	1958
Dolly the Sheep, the first mammal to be successfully cloned from an adult cell, is born.	1964
Eugene Parker coins the term "solar wind" and provides the first comprehensive explanation of how it is generated, building on earlier theories that a stream of particles from the sun must exist.	1972
José Sanz and colleagues report the discovery of a 115-million-year-old fossil of four partially digested birds, possibly regurgitated by a dinosaur. It provides the earliest known record of birds being eaten by some other creature.	1977
Murray Gell-Mann proposes that protons and neutrons are made of particles he calls quarks. In the same year, the existence of the Higgs Boson is proposed by Peter Higgs and other physicists.	1982
Retired dentist Barney Clark becomes the first person to receive an artificial device to permanently replace his entire heart. He lives for another 112 days.	1989
Stephen Jay Gould and Niles Eldredge publish the theory of punctuated equilibrium.	1996
The Australian Academy of Science is established, with Sir Mark Oliphant as its first president.	2001
The Voyager 2 spacecraft photographs Neptune.	2007

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Bryan Fry shows that the Komodo Dragon has its own venom, and doesn't rely upon bacteria in its saliva to kill its prey, as previously believed.	1953
Boneworms, marine worms that bore into the bones of dead whales, are discovered by researchers exploring the Monterey Canyon near California.	1961
Eleanor Rosch publishes the book "Cognition and Categorisation", containing early research in the field of prototype theory and basic level categories.	1967
James Watson and Francis Crick publish their paper on the double helix structure of DNA.	1971
Lynn Sagan (later Lynn Margulis) publishes microbiological evidence that mitochondria and other cell components were originally independent organisms.	1978
Martin Glaessner confirms that fossils found in the Ediacara Hills of South Australia are Precambrian in age.	1985
Michel Mayor and Didier Queloz announce the first discovery of a planet orbiting a main sequence star other than the sun.	1990
Richard Smalley and colleagues discover buckminsterfullerenes (also known as buckyballs), spherical molecules made of 60 carbon atoms.	1995
The Hubble Space Telescope is launched.	2002
The Mariner 9 spacecraft begins to map the surface of Mars from orbit, becoming the first spacecraft to orbit another planet.	2009

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Astronomers discover evidence that the expansion of the universe is accelerating.	1955
Helmut Prior and colleagues discover that European magpies can recognise themselves in a mirror, making them the first non-mammal to be recorded as doing so.	1960
Jane Goodall begins studying chimpanzees in Tanzania.	1966
On an Indonesian Island, Mike Morwood and colleagues discover a small hominid fossil that would become known as The Hobbit.	1973
Solomon Snyder and Candace Pert make what is widely credited as the first definitive discovery of specific opioid receptors in the brain.	1979
The first detection of an antimatter particle, an antiproton, by Emilio Segre and Owen Chamberlain.	1984
The Soviet space probe Venera 3 becomes the first spacecraft to crash on another planet.	1992
The term "Snowball Earth", pertaining to the theory that the Earth's surface has been mostly or entirely frozen during some periods of its history, is introduced in an article by Joseph Kirschvink.	1998
The Voyager 1 spacecraft makes the first observations of Jupiter's rings.	2003
The world's first "frozen embryo" baby, named Zoe, is born in Melbourne.	2008