

Space Exploration Timeline



1. From the information given below, draw a timeline to show the development of space exploration from the early twentieth century to the present time.
2. Devise a set of symbols to represent the types of exploration (unmanned space flight, manned space flight, flight to the Moon, space walking, space probes to planets etc.....). Use the symbols to explain each of the events on your timeline. Don't forget to include a key to show what your symbols mean.

- 1898 Konstantin Tsiolkovsky devised the formula which governs rocket propulsion.
- 1926 Robert Goddard built and launched the first liquid fuel rocket.
- 1939-45 Germany built the V2 rocket.
- 1957 USSR launched Sputnik 1, world's first artificial satellite.
- 1957 Sputnik 2 launched carrying Laika, first dog in space.
- 1958 NASA (National Aeronautics and Space Administration) set up by the USA.
- 1959 USSR launched Luna 1, 2 and 3 to investigate the Moon.
- 1961 January, NASA launched Ham, a chimpanzee, in a Mercury rocket.
- 1961 April, Yuri Gagarin, first man in space, flight 108 minutes in Vostok 1.
- 1961 May, Alan Shepard spent 15 minutes in space.
- 1962 Mariner 1 and Mariner 2 launched by NASA to study Venus.
- 1963 Valentina Tereshkova, first woman cosmonaut, launched in Vostok 6.
- 1964 Russian cosmonaut Alexei Leonov made the first space walk.
- 1964 Mariner 4 took 8 months to reach Mars and is the first robotic spacecraft to study Mars.
- 1965-66 NASA launches 10 manned Gemini flights (two astronauts).
- 1967 Apollo 1 burnt on launch pad and Soyuz 1 crashed.
- 1967 Russian Venera spacecraft dropped a capsule to the surface of Venus.
- 1968-69 Apollo 7-10 prepared for a lunar landing, orbiting the Moon, manoeuvring and docking with the lunar module.
- 1969 Soyuz 4 docked in space with Soyuz 5.
- 1969 Mariner 6 and Mariner 7 sent to Mars.
- 1969 July 20 (GMT) Apollo 11 landed on the Moon. Neil Armstrong and Buzz Aldrin first men to walk on the Moon.
- 1971 Mariner 9 orbits Mars for 1 year.
- 1971-7 USSR launched six Salyut space stations.
- 1973 Mariner 10 used the gravity of Venus to 'slingshot' to Mercury.
- 1974 NASA launched Skylab 1 and during the year three crews manned the space laboratory.
- 1975 Historic docking of Soyuz 18 with an Apollo spacecraft.

- 1977 Voyager 1 and 2 launched.
- 1979 Voyager 1 and 2 reached Jupiter and 'slingshot' to Saturn.
- 1979 Skylab 1 crashes back to Earth, landing in Western Australia.
- 1979 By now, the USSR had launched 32 Soyuz spacecraft.
- 1981 Shuttle Columbia launched from Cape Canaveral, the first of four reusable space orbiters built by NASA.
- 1981-8 26 shuttle missions flown, conducting experiments, launching satellites, telescopes, etc...
- 1983 Pioneer 10 left the Solar System for interstellar space travel.
- 1986 Shuttle Challenger, on its eleventh mission, exploded on launch killing its crew of 7.
- 1986 USSR launched MIR, a permanently manned space station.
- 1989 Voyager 2 reached Neptune.
- 1995 American astronaut working in Russian space station.
- 1996-98 American probes and rovers study surface of Mars.
- 2003 Shuttle Columbia breaks up on re-entry killing the crew of 7.
- 2003 Japan's first Mars orbiter overshoots the planet after damaged caused by solar flares.
- 2003 The British built Beagle 2 lands and is lost on the surface of Mars.
- 2004 American exploration rovers Spirit and Opportunity land on Mars.

