

### The Space Race

The Cold War saw a **competition** between the world's two great powers: the **democratic**, capitalist United States and the communist Soviet Union.

Both sides would fight to have best technology in space and who could **achieve** the first. As World War Two was coming to an end, the Americans and the Soviets **captured** Germany's rocket **engineers** and the rocket technology including V2s.

One **recruitment** of particular value for the Americans was the rocket **engineer** Wernher von Braun who would **lead** the US program. The Soviets, meanwhile, would **recruit** Ukraine born Sergei Korolev to **lead** the Soviet space program.

In 1955, both countries **announced** that they would be **launching satellites** into **orbit**. The Soviet Russians took the **lead** by becoming the first to put a successful **satellite** into **orbit** when they **launched** Sputnik 1 on October 4th, 1957. Unfortunately for the Americans, their **successful launch** of their first satellite Explorer 1 would come a whole four months later.

Next would come another **remarkable achievement**, and it would go again to the Soviets: the first man in space. In April 1961, cosmonaut Yuri Gagarin became the first person to **orbit** the earth, traveling in the spacecraft Vostok 1. When he came back to earth, Gagarin became a **hero** in the Soviet Union and a **celebrity** worldwide. The **lagging** US launched the Freedom 7 three weeks later, and astronaut Alan Shepard became the first American in space.

The Americans were **embarrassed** at being behind the Soviet Union, and on May 25th, 1961, President John F Kennedy made a bold claim to Congress that America would be the first to land a man on the moon, and they would do it before the end of the **decade**. The Apollo program was **launched**. Meanwhile, in February 1962, John Glenn became the first American to **orbit** Earth, and on June 16th, 1963, Soviet cosmonaut Valentina Tereshkova became the first woman to travel in space.

NASA now had an increase in its **budget to achieve** its **daunting** goal of putting America on the moon first and by the end of the **decade**. As well as the Apollo program, it **launched** the Gemini program which would develop the technology needed for the **former**. Gemini would see the first American Ed White to walk in space although the Soviets **achieve** the first when Alexi Leonov achieved a spacewalk for 12 minutes and nine seconds a few months before. Gemini would also see the first docking of two spacecraft together in Earth's **orbit**. After many test flights, training and experiments, the Apollo 11 spacecraft was **launched** into space on July 16th, 1969.

Onboard were US astronauts Neil Armstrong, Edwin Buzz Aldrin, and Michael Collins. It was not smooth sailing.

**Malfunctions** came up and the lunar module named the Eagle had to be landed **manually**. On July 20th, 1969, the Eagle had landed on the moon **surface**. Neil Armstrong stepped outside, becoming the first man to walk on the moon. He would say those famous words: that's one small step for man, one giant leap for mankind. By landing on the moon first, and with Soviet lunar landing attempts failing between 1969 and 1972, America had won the space race, and now that it had been achieved, interest in the lunar missions was dying down.

By the 70s, US-Soviet relations improved and in 1975 a joint program between the two powers called the apollo-soyuz mission would send three US astronauts aboard an Apollo spacecraft and dock in **orbit** with the Soviet Soyuz vehicle. The first joint US Soviet space flight and the handshake between the commanders of both crafts symbolize the improvements of US-Soviet relations in the late Cold War.

## **Vocabulary bank**

**competition** - *noun* the act of competing as for profit or a prize; a business relation in which two parties compete to gain customers; an occasion on which a winner is selected from among two or more contestants; the contestant you hope to defeat

**democratic** - *adj.* representing or appealing to or adapted for the benefit of the people at large; characterized by or advocating or based upon the principles of democracy or social equality; belong to or relating to the Democratic Party

**achieve** - *verb* to gain with effort

**capture** - *noun* the act of forcibly dispossessing an owner of property; the removal of an opponent's piece from the chess board; the act of taking of a person by force; any process in which an atomic or nuclear system acquires an additional particle; a process whereby a star or planet holds an object in its gravitational field; *verb* capture as if by hunting, snaring, or trapping; succeed in representing or expressing something intangible; attract; cause to be enamored; bring about the capture of an elementary particle or celestial body and causing it enter a new orbit; succeed in catching or seizing, especially after a chase; take possession of by force, as after an invasion

**lead** - *noun* the playing of a card to start a trick in bridge; a position of leadership (especially in the phrase 'take the lead'); mixture of graphite with clay in different degrees of hardness; the marking substance in a pencil; thin strip of metal used to separate lines of type in printing; an advantage held by a competitor in a race; evidence pointing to a possible solution; the introductory section of a story; a news story of major importance; (baseball) the position taken by a base runner preparing to advance to the next base; (sports) the score by which a team or individual is winning; the angle between the direction a gun is aimed and the position of a moving target (correcting for the flight time of the missile); a soft heavy toxic malleable metallic element; bluish white when freshly cut but tarnishes readily to dull grey; a jumper that consists of a short piece of wire; restraint consisting of a rope (or light chain) used to restrain an animal; the timing of ignition relative to the position of the piston in an internal-combustion engine; an indication of potential opportunity; an actor who plays a principal role; *verb* cause to undertake a certain action; travel in front of; go in advance of others; take somebody somewhere; tend to or result in; be ahead of others; be the first; pass or spend; preside over; lead, as in the performance of a composition; move ahead (of others) in time or space; be in charge of; be conducive to; have as a result or residue; stretch out over a distance, space, time, or scope; run or extend between two points or beyond a certain point; lead, extend, or afford access; cause something to pass or lead somewhere

**engineer** - *noun* a person who uses scientific knowledge to solve practical problems; the operator of a railway locomotive; *verb* design as an engineer; plan and direct (a complex undertaking)

**recruit** - *noun* any new member or supporter (as in the armed forces); a recently enlisted soldier; *verb* cause to assemble or enlist in the military; seek to employ; register formally as a participant or member

**announce** - *verb* announce publicly or officially; foreshadow or presage; make known; make an announcement; give the names of

**satellite** - *adj.* surrounding and dominated by a central authority or power; *noun* man-made equipment that orbits around the earth or the moon; any celestial body orbiting around a planet or star; a person who follows or serves another; *verb* broadcast or disseminate via satellite.

**launch** - *noun* a motorboat with an open deck or a half deck; the act of propelling with force; *verb* smoothen the surface of; propel with force; get going; give impetus to; launch for the first time; launch on a maiden voyage; begin with vigor; set up or found

**orbit** - *noun* the (usually elliptical) path described by one celestial body in its revolution about another; the path of an electron around the nucleus of an atom; an area in which something acts or operates or has power or control: "the range of a supersonic jet"; the bony cavity in the skull containing the eyeball; a particular environment or walk of life; *verb* move in an orbit

**successful** - *adj.* having succeeded or being marked by a favorable outcome

**remarkable** - *adj.* unusual or striking; worthy of notice

**achievement** - *noun* the action of accomplishing something

**hero** - *noun* the principal character in a play or movie or novel or poem; (Greek mythology) priestess of Aphrodite who killed herself when her lover Leander drowned while trying to swim the Hellespont to see her; (classical mythology) a being of great strength and courage celebrated for bold exploits; often the offspring of a mortal and a god; a man distinguished by exceptional courage and nobility and strength; Greek mathematician and inventor who devised a way to determine the area of a triangle and who described various mechanical devices (first century); a large sandwich made of a long crusty roll split lengthwise and filled with meats and cheese (and tomato and onion and lettuce and condiments); different names are used in different sections of the United States; someone who fights for a cause

**celebrity** - *noun* a widely known person; the state or quality of being widely honored and acclaimed

**lag** - *noun* the act of slowing down or falling behind; one of several thin slats of wood forming the sides of a barrel or bucket; the time between one event, process, or period and another; *verb* cover with lagging to prevent heat loss; throw or pitch at a mark, as with coins; hang (back) or fall (behind) in movement, progress, development, etc.; lock up or confine, in or as in a jail

**embarrass** - *verb* cause to be embarrassed; cause to feel self-conscious; hinder or prevent the progress or accomplishment of

**decade** - *noun* a period of 10 years

**budget** - *noun* a summary of intended expenditures along with proposals for how to meet them; a sum of money allocated for a particular purpose; *verb* make a budget

**daunting** - *adj.* discouraging through fear

**former** - *adj.* referring to the first of two things or persons mentioned (or the earlier one or ones of several); (used especially of persons) of the immediate past; belonging to the distant past; belonging to some prior time; *noun* the first of two or the first mentioned of two

**Malfunction** - *noun* a failure to function normally; *verb* fail to function or function improperly

**manual** - *adj.* requiring human effort; doing or requiring physical work; of or relating to the hands; *noun* a small handbook; (military) a prescribed drill in handling a rifle

**surface** - *adj.* on the surface; involving a surface only; *noun* the outer boundary of an artifact or a material layer constituting or resembling such a boundary; a superficial aspect as opposed to the real nature of something; the extended two-dimensional outer boundary of a three-dimensional object; the outermost level of the land or sea; a device that provides reactive force when in motion relative to the surrounding air; can lift or control a plane in flight; information that has become public; *verb* come to the surface; appear or become visible; make a showing; put a coat on; cover the surface of; furnish with a surface