The National Aeronautics and Space Administration (NASA is an independent agency of the U.S. federal government responsible for the civilian space program, as well as aeronautics and space research.

NASA was established in , succeeding the National Advisory Committee for Aeronautics . The new agency was to have a distinctly civilian orientation, encouraging peaceful applications in space science. Since its establishment, most US space exploration efforts have been led by NASA, including the Apollo Moon landing missions, the Skylab space station, and later the Space Shuttle. NASA is supporting the International Space Station and is overseeing the development of the Orion spacecraft, the Space Launch System, and Commercial Crew vehicles. The agency is also responsible for the Launch Services Program, which provides oversight of launch operations and countdown management for uncrewed NASA launches.

Space is the boundless three-dimensional extent in which objects and events have relative position and direction.In classical physics, physical space is often conceived in three linear dimensions, although modern physicists usually consider it, with time, to be part of a boundless four-dimensional continuum known as spacetime. The concept of space is considered to be of fundamental importance to an understanding of the physical universe. However, disagreement continues between philosophers over whether it is itself an entity, a relationship between entities, or part of a conceptual framework

NASA's science is focused on better understanding Earth through the Earth Observing System; advancing heliophysics through the efforts of the Science Mission Directorate's Heliophysics Research Program;exploring bodies throughout the Solar System with advanced robotic spacecraft such as New Horizons;and researching astrophysics topics, such as the Big Bang, through the Great Observatories and associated programs.