

Rocket Glossary

Action - A force (push or pull) acting on an object. See Reaction.

Altair - The name of NASA's future lunar landing craft.

Altitude - The height above Earth achieved by a rocket or other vehicle.

Ares I and IV - NASA's new rockets for 21st century space exploration.

Attitude Control Rockets - Small rockets that are used as active controls to change the direction (attitude) a rocket is facing in space.

Balanced Force - A force that is counterbalanced by an opposing force, resulting in no change in motion.

Canards - Small movable fins located towards the nose cone of a rocket.

Case - The body of a solid propellant rocket that holds the propellant.

Center of Mass - The point in an object about which the object's mass is centered.

Center of Pressure - The point on the surface of an object about which the object's surface area is centered.

Combustion Chamber - A cavity inside a rocket where propellants burn.

Compressed - Material that is forced into a smaller space than normal.

Drag - Friction forces in the atmosphere that "drag" on a rocket to slow its flight.

Fins - Arrow-like wings at the lower end of a rocket that stabilize the rocket in flight.

Gimbaled Nozzles - Tiltable rocket nozzles used for active flight control.

Igniter - A device that ignites a rocket's engines.

Liquid Propellant - Rocket propellants in liquid form.

Mass - The amount of matter contained in an object.

Mass Fraction - The mass of propellants in a rocket divided by the rocket's total mass.

Microgravity - An environment that imparts to an object a net acceleration that is small

compared to what is produced by Earth at its surface.

Motion - Movement of an object in relation to its surroundings.

Movable Fins - Rocket fins that can move to stabilize a rocket's flight.

Newton's Laws of Motion - Laws governing all motion and in particular rocket flight.

Nose Cone - The cone-shaped front end of a rocket.

Nozzle - A bell-shaped opening at the lower end of a rocket engine through which a stream of hot gases is directed.

Orion - The name of NASA's planned orbital spacecraft.

Oxidizer - A chemical containing oxygen compounds that permit rocket fuel to burn in the atmosphere and space.

Passive Controls - Stationary devices, such as fixed fins, that stabilize a rocket in flight.

Payload - The cargo carried by a rocket.

Propellant - A mixture of fuel and oxidizer that burns to produce rocket thrust.

Reaction - A movement in the opposite direction from the imposition of an action. See Action.

Rest - The absence of movement of an object in relation to its surroundings.

Solid Propellant - Rocket fuel and oxidizer in solid form.

Space Station - An orbital laboratory.

Stability - A measure of the smoothness of the flight of the rocket.

Stages - Two or more rockets stacked on top of each other in order to reach a higher altitude or have a greater payload capacity.

Throat - The narrow opening of a rocket nozzle.

Thrust - The force from a rocket engine that propels it.

Unbalanced Force - A force that is not countered by another force in the opposite direction.