

# Flight and Rocketry

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## Glossary

**aerodynamics** study of how air pushes and pulls on objects

**aeronautics** science of flight

**airfoil** object, such as a wing, whose shape and tilt, or angle, help lift an aircraft

**airship** aircraft that is lighter than air, has an engine, and can be steered

**Bernoulli's principle** scientific idea that states that the faster air flows, the less pressure it pushes with

**controls** instruments and devices used to operate and control the movement of an aircraft

**drag** force acting on a moving object in the opposite direction of the object's movement, slowing the object down

**friction** force caused by objects rubbing together that makes them slow down or stop

**glider** aircraft without an engine that is carried along by air currents

**gliding flight** flight that does not use any kind of power

**gravity** force that pulls objects toward Earth

**helicopter** aircraft without wings that is lifted and kept in the air by rotors

**hot-air balloon** aircraft that uses a burner to heat air inside a large balloon, making the aircraft rise

**jet engine** engine that pulls air in the front and pushes it out at a high speed through a back vent to produce thrust

**lift** upward force caused by the flow of air above and below an airfoil

**parachute** device usually made of nylon or silk used to control the speed or direction of a person or object dropping from a height

**pressure** amount of force applied per unit of area; for example, pounds per square inch

**propeller** device made of blades that spin around a shaft, used to produce thrust for an airplane

**propulsion** act of pushing an object forward

**rocket** engine that burns fuel in a chamber with an open end, making hot gases that produce thrust when they rush out of the chamber

**rocketry** science of building and using rockets

**rotor** device made of blades that spin around a shaft, used to produce lift for a helicopter

**stability** ability of an aircraft to stay on course

**thrust** force that moves an object forward

**true flight** flight that requires some kind of power

**weight** force caused by gravity pulling down on an object