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Labeled parts of an airplane

What are the 5 basic parts of an airplane. What are the parts of an airplane. What are the parts of plane. Parts of a plane and their functions. What are the parts of a plane called. Labelled aeroplane. Labelled parts of a plane.

Have you ever wondered how many components make up an Airbus? Rest assured, there are millions! To gain a basic understanding of aircraft design, we'll explore the main parts of a Cessna Skyhawk. Whether flying a jet or single-engine model, commonalities exist among aircraft parts for every type of plane. Every pilot and mechanic learns through hands-on training what each part does. Proper aircraft maintenance is crucial, starting with knowing the parts. The following diagrams will introduce you to the basic structure and design as an overview of an airplane's components. Knowing these parts is essential for all pilots, whether flying a Cessna 172 or Boeing 747. Airplanes have fundamental sections: fuselage, wings, cockpit, engine, propeller, tail assembly, and landing gear. Understanding how these interact is the first step to grasping aerodynamics' principles. The fuselage is the main body of the plane, where passengers, cargo, and crew are found. This section serves as the aircraft's foundation. The tail number often sits at the rear near the tail. Wings serve the same purpose as a bird's, providing lift for flight. They include ailerons (French for "little wing" or "fin") and flaps that reduce stalling speed. High-wing aircraft have fixed wings above the fuselage, while low-wing aircraft install them lower down. The cockpit, also known as the flight deck, is where pilots control the plane. It includes seating for the crew, instruments, avionics, communication systems, and controls. Electronic instruments like MFDs (multi-function displays) provide heading, speed, altitude, and more. Traffic Control, or ATC, is situated in the cockpit of an Epic aircraft, which features electronic flight instrument displays instead of traditional analog dials and gauges. This setup allows pilots to become proficient in glass cockpits, a requirement for all airlines. You'll find dual controls in Epic's fleet, accessible to both instructors and students. An aircraft engine, or aero engine, is the power source behind every plane. Most are either piston engines or gas turbines, while some drones utilize electric motors. Each manufacturer offers various models, designed specifically for particular aircraft, whether large or small. Manufacturers recommend regular overhauls after an engine has flown a certain number of hours. A propeller converts rotational energy into thrust, propelling the airplane forward. It consists of two or more blades spaced evenly around the hub, available in fixed pitch or variable pitch configurations. The empennage, also known as the tail or tail assembly, provides stability during flight, much like feathers on an arrow. Located at the rear of an aircraft, it comprises the vertical stabilizer, rudder, elevator, horizontal stabilizer, and static wicks. Landing gear is the undercarriage of an airplane, used for both takeoff and landing. It supports the plane when stationary and allows safe takeoff, landing, and taxiing without damage. Most have wheels, while some aircraft use skis or floats to operate on snow, ice, or water. Retractable landing gear is common in faster aircraft like twin-engine or jet planes. To learn more about airplane anatomy, watch our comprehensive 25-minute video! Pilots, aircraft mechanics, and enthusiasts will benefit from understanding the parts and their functions. Take a virtual tour with Captain Judy Rice to explore an Epic hangar and discover all the components of an aircraft.