I'm not a bot

This article has multiple issues. Please help improve it or discuss these issues on the talk page. (Learn how and when to remove these messages) This article's lead section may be too short to adequately summarize the key points. Please consider expanding the lead to provide an accessible overview of all important aspects of the article. (November 2020)This article may be too technical for most readers to understand. Please help improve it to make it understandable to non-experts, without removing the technical details. (January 2024) (Learn how and when to remove this message) (Learn how and when to remove this message)A controller area network bus (CAN bus) is a vehicle bus standard designed to enable efficient communication primarily between electronic control units (ECUs). Originally developed to reduce the complexity and cost of electrical wiring in automobiles through multiplexing,[1] the CAN bus protocol has since been adopted in various other contexts. This broadcast-based, message-oriented protocol ensures data integrity and prioritization through a process called arbitration, allowing the highest priority device to continue transmitting if multiple devices attempt to send data simultaneously, while others back off. Its reliability is enhanced by differential signaling, which mitigates electrical noise. Common versions of the CAN protocol include CAN 2.0, CAN FD, and CAN XL which vary in their data rate capabilities and maximum data payload sizes.Controller Area NetworkUnofficial logo of the CAN bus by CAN-in-Automation.TypeSerial communication busProduction historyDesignerBosch GmbHDesigned1983; 42years ago(1983)ExternalNoElectricalSignalDifferentialMax. voltage16V DCDataData signalTransceiver drivenWidth1 bit (bidirectional)BitrateCAN 2.0 up to 1Mbit/s,CAN FD up to 8Mbit/s,CAN XL up to 20Mbit/sMax. devices32, 64 or 127 (depending on standard)ProtocolSerial, half-duplex, AsynchronousPinoutCAN-HCAN High (Yellow)CAN-LCAN Low (Green)Development of the CAN bus started in 1983 at Robert Bosch GmbH.[1] The protocol was officially released in 1986 at the Society of Automotive Engineers (SAE) conference in Detroit, Michigan. The first CAN controller chips were introduced by Intel in 1987, and shortly thereafter by Philips.[1] Released in 1991, the Mercedes-Benz W140 was the first production vehicle to feature a CAN-based multiplex wiring system.[2][3]Bosch published several versions of the CAN specification. The latest is CAN 2.0, published in 1991. This specification has two parts. Part A is for the standard format with an 11-bit identifier, and part B is for the extended format with a 29-bit identifier. A CAN device that uses 11-bit identifiers is commonly called CAN 2.0A, and a CAN device that uses 29-bit identifiers is commonly called CAN 2.0B. These standards are freely available from Bosch along with other specifications and white papers.[4]In 1993, the International Organization for Standardization (ISO) released CAN standard ISO 11898, which was later restructured into two parts: ISO 11898-1 which covers the data link layer, and ISO 11898-2 which covers the CAN physical layer for high-speed CAN. ISO 11898-3 was released later and covers the CAN physical layer for low-speed, fault-tolerant CAN. The physical layer standards ISO 11898-2 and ISO 11898-3 are not part of the Bosch CAN 2.0 specification.In 2012, Bosch released CAN FD 1.0, or CAN with Flexible Data-Rate. This specification uses a different frame format that allows a different data length as well as optionally switching to a faster bit rate after the arbitration is decided. CAN FD is compatible with existing CAN 2.0 networks so new CAN FD devices can coexist on the same network with existing CAN devices, using the same CAN 2.0 communication parameters. As of 2018[update], Bosch was active in extending CAN standards.The CAN bus is one of five protocols used in the on-board diagnostics (OBD)-II vehicle diagnostics standard. The OBD-II standard has been mandatory for all cars and light trucks sold in the United States since model year 1996. The EOBD standard has been mandatory for all petrol vehicles sold in the European Union since 2001 and all diesel vehicles since 2004.[5]Passenger vehicles, motorcycles, trucks, buses (combustion vehicles and electric vehicles)Agricultural equipmentElectronic equipment for aviation and navigationElectric generatorsIndustrial automation and mechanical controlElevators, escalatorsBuilding automationMedical instruments and equipmentPedelecsModel railways/railroadsShips and other maritime applicationsLighting control systems3D printersRobotics/AutomationSatellitesThe modern automobile may have as many as 70 electronic control units (ECUs) for various subsystems.[6] Usually the biggest processor is the engine control unit. Others are used for autonomous driving, advanced driver assistance system (ADAS), transmission, airbags, antilock braking/ABS, cruise control, electric power steering, audio systems, power windows, doors, mirror adjustment, battery and recharging systems for hybrid/electric cars, etc. Some of these form independent subsystems, but communication among others is essential. A subsystem may need to control actuators or receive feedback from sensors. The CAN standard was devised to fill this need. One key advantage is that interconnection between different vehicle systems can allow a wide range of safety, economy and convenience features to be implemented using software alone - functionality which would add cost and complexity if such features were hard wired using traditional automotive electrics. Examples include:Auto start/stop: Various sensor inputs from around the vehicle (speed sensors, steering angle, air conditioning on/off, engine temperature) are collated via the CAN bus to determine whether the engine can be shut down when stationary for improved fuel economy and emissions.Electric park brakes: The hill hold functionality takes input from the vehicle's tilt sensor (also used by the burglar alarm) and the road speed sensors (also used by the ABS, engine control and traction control) via the CAN bus to determine if the vehicle is stopped on an incline. Similarly, inputs from seat belt sensors (part of the airbag controls) are fed from the CAN bus to determine if the seat belts are fastened, so that the parking brake will automatically release upon moving off.Parking assist systems: when the driver engages reverse gear, the transmission control unit can send a signal via the CAN bus to activate both the parking sensor system and the door control module for the passenger side door mirror to tilt downward to show the position of the curb. The CAN bus also takes inputs from the rain sensor to trigger the rear windscreen wiper when reversing.Auto lane assist/collision avoidance systems: The inputs from the parking sensors are also used by the CAN bus to feed outside proximity data to driver assist systems such as Lane Departure warning, and more recently, these signals travel through the CAN bus to actuate brake by wire in active collision avoidance systems.Auto brake wiping: Input is taken from the rain sensor (used primarily for the automatic windscreen wipers) via the CAN bus to the ABS module to initiate an imperceptible application of the brakes while driving to clear moisture from the brake rotors. Some high-performance Audi and BMW models incorporate this feature.Sensors can be placed at the most suitable place, and their data used by several ECUs. For example, outdoor temperature sensors (conventionally placed in the front) can be placed in the outside mirrors, avoiding heating by the engine, and data used by the engine, the climate control, and the driver display.In recent years, the LIN bus (Local Interconnect Network) standard has been introduced to complement CAN for non-critical subsystems such as air-conditioning and infotainment, where data transmission speed and reliability are less critical.The CAN bus protocol has been used on the Shimano DI2 electronic gear shift system for road bicycles since 2009, and is also used by the Ansmann and BionX systems in their direct drive motor.The CAN bus is also used as a fieldbus in general automation environments, primarily due to the low cost of some CAN controllers and processors.Manufacturers including NISMO aim to use CAN bus data to recreate real-life racing laps in the videogame Gran Turismo 6 using the game's GPS Data Logger function, which would then allow players to race against real laps.[7]Johns Hopkins University's Applied Physics Laboratory's Modular Prosthetic Limb (MPL) uses a local CAN bus to facilitate communication between servos and microcontrollers in the prosthetic arm.Teams in the FIRST Robotics Competition widely use CAN bus to communicate between the roboRIO and other robot control modules.The CueScript teleprompter range uses CAN bus protocol over coaxial cable, to connect its CSSC Desktop Scroll Control to the main unitThe CAN bus protocol is widely implemented due to its fault tolerance in electrically noisy environments such as model railroad sensor feedback systems by major commercial Digital Command Control system manufacturers and various open-source digital model railroad control projects.Shearwater Research have implemented the protocol as DiveCAN[8] to use integrating their dive computers into diving rebreathers from various manufacturers.Due to its legacy, CAN 2.0 is the most widely used protocol with a maximum payload size of eight bytes and a typical baud rate of 500kbit/s. Classical CAN, which includes CAN 2.0A (Standard CAN) and CAN 2.0B (Extended CAN), primarily differs in identifier field lengths: CAN 2.0A uses an 11-bit identifier, while CAN 2.0B employs a 29-bit identifier. The longer identifier in CAN 2.0B allows for a greater number of unique message identifiers, which is beneficial in complex systems with many nodes and data types. However, this increase in unique message identifiers also increases frame length, which in turn reduces the maximum data rate. Additionally, the extended identifier provides finer control over message prioritization due to more available identifier values. This, however, may introduce compatibility issues; CAN 2.0A devices can generally communicate with CAN 2.0B devices, but not vice versa, due to potential errors in handling longer identifiers. High-speed CAN 2.0 supports bit rates from 40kbit/s to 1Mbit/s and is the basis for higher-layer protocols. In contrast, low-speed CAN 2.0 supports bit rates from 40kbit/s to 125kbit/s and offers fault tolerance by allowing communication to continue despite a fault in one of the two wires, with each node maintaining its own termination.[4][9][10][11]CAN FD (Flexible Data-Rate), standardized as ISO 11898-1, was developed by Bosch and released in 2012 to meet the need for increased data transfer in modern high-performance vehicles. It offers variable data rates during the transmission of a single frame, allowing the arbitration phase to occur at a lower data rate for robust communication, while the data payload is transmitted at a higher data rate to improve throughput, which is particularly useful in electrically noisy environments for better noise immunity. CAN FD also introduces a flexible data field size, increasing the maximum size from 8 bytes to 64 bytes. This flexibility allows for more efficient data transmission by reducing the number of frames needed for large data transfers, which is beneficial for applications like high-resolution sensor data or software updates.CAN FD maintains backward compatibility with CAN 2.0 devices by using the same frame format as CAN 2.0B, with the addition of a new control field to indicate whether the frame is a CAN FD frame or a standard CAN 2.0 frame. This allows CAN FD devices to coexist with CAN 2.0 devices on the same bus, while higher data rates and larger data payloads are available only when communicating with other CAN FD devices.[11][10][12]CAN XL, specified by CiA 610-1 and standardized as part of ISO11898-1, supports up to 2,048-byte payloads and data rates up to 20Mbit/s. It bridges the gap between CAN FD and Ethernet (100BASE-T1) while maintaining CAN's collision-resolution benefits. CAN XL controllers can also handle Classical CAN and CAN FD communication, ensuring compatibility in mixed networks. Its large data fields allow for higher layer protocols like IP (Internet Protocol) and the tunneling of Ethernet frames.[4][13][14]This article may require cleanup to meet Wikipedia's quality standards. The specific problem is: This largely overlaps with the Layers section. Please help improve this article if you can. (August 2018) (Learn how and when to remove this message)The CAN protocol, like many networking protocols, can be decomposed into the following abstraction layers:Application layerApplication-specific logicObject layerMessage filtering (mailboxes)Message and status handlingTransfer layerMost of the CAN standard applies to the transfer layer. The transfer layer receives messages from the physical layer and transmits those messages to the object layer. The transfer layer is responsible for bit timing and synchronization, message framing, arbitration, acknowledgment, error detection and signaling, and fault confinement. It performs:Fault confinementError detectionMessage validationAcknowledgementArbitrationMessage framingTransfer rate and timingInformation routingPhysical layerCAN bus electrical sample topology with terminator resistorsCAN bus (ISO 11898-1:2003) originally specified the link layer protocol with only abstract requirements for the physical layer, e.g., asserting the use of a medium with multiple-access at the bit level through the use of dominant and recessive states. The electrical aspects of the physical layer (voltage, current, number of conductors) were specified in ISO 11898-2:2003, which is now widely accepted. However, the mechanical aspects of the physical layer (connector type and number, colors, labels, pin-outs) have yet to be formally specified. As a result, an automotive ECU will typically have a particularoften customconnector with various sorts of cables, of which two are the CAN bus lines. Nonetheless, several de facto standards for mechanical implementation have emerged, the most common being the 9-pin D-sub type male connector with the following pin-out:pin 2: CAN-Low (CAN)pin 3: GND (ground)pin 7: CAN-High (CAN+)pin 9: CAN V+ (power)A male DE-9 connector (plug)This de facto mechanical standard for CAN could be implemented with the node having both male and female 9-pin D-sub connectors electrically wired to each other in parallel within the node. Bus power is fed to a node's male connector and the bus draws power from the node's female connector. This follows the electrical engineering convention that power sources are terminated at female connectors. Adoption of this standard avoids the need to fabricate custom splitters to connect two sets of bus wires to a single D connector at each node. Such nonstandard (custom) wire harnesses (splitters) that join conductors outside the node reduce bus reliability, eliminate cable interchangeability, reduce compatibility of wiring harnesses, and increase cost.The absence of a complete physical layer specification (mechanical in addition to electrical) freed the CAN bus specification from the constraints and complexity of physical implementation. However, it left CAN bus implementations open to interoperability issues due to mechanical incompatibility. In order to improve interoperability, many vehicle makers have generated specifications describing a set of allowed CAN transceivers in combination with requirements on the parasitic capacitance on the line. The allowed parasitic capacitance includes both capacitors as well as ESD protection (ESD[15] against ISO 7637-3). In addition to parasitic capacitance, 12V and 24V systems do not have the same requirements in terms of line maximum voltage. Indeed, during jump start events light vehicle lines can go up to 24V while truck systems can go as high as 36V. New solutions are emerging, allowing the same component to be used for CAN as well as CAN FD (see [16]).Noise immunity on ISO 11898-2:2003 is achieved by maintaining the differential impedance of the bus at a low level with low-value resistors (120 ohms) at each end of the bus. However, when dormant, a low-impedance bus such as CAN draws more current (and power) than other voltage-based signaling buses. On CAN bus systems, balanced line operation, where current in one signal line is exactly balanced by current in the opposite direction in the other signal provides an independent, stable 0V reference for the receivers. Best practice determines that CAN bus balanced pair signals be carried in twisted pair wires in a shielded cable to minimize RF emission and reduce interference susceptibility in the already noisy RF environment of an automobile.ISO 11898-2 provides some immunity to common mode voltage between transmitter and receiver by having a 0V rail running along the bus to maintain a high degree of voltage association between the nodes. Also, in the de facto mechanical configuration mentioned above, a supply rail is included to distribute power to each of the transceiver nodes. The design provides a common supply for all the transceivers. The actual voltage to be applied by the bus and which nodes apply to it are application-specific and not formally specified. Common practice node design provides each node with transceivers that are optically isolated from their node host and derive a 5V linearly regulated supply voltage for the transceivers from the universal supply rail provided by the bus. This usually allows operating margin on the supply rail sufficient to allow interoperability across many node types. Typical values of supply voltage on such networks are 7 to 30 V. However, the lack of a formal standard means that system designers are responsible for supply rail compatibility.ISO 11898-2 describes the electrical implementation formed from a multi-dropped single-ended balanced line configuration with resistor termination at each end of the bus.In this configuration a dominant state is asserted by one or more transmitters switching the CAN to supply 0V and (simultaneously) switching CAN+ to the +5V bus voltage thereby forming a current path through the resistors that terminate the bus. As such the terminating resistors form an essential component of the signaling system, and are included, not just to limit wave reflection at high frequency.During a recessive state, the signal lines and resistor(s) remain in a high-impedance state with respect to both rails. Voltages on both CAN+ and CAN tend (weakly) towards a voltage midway between the rails. A recessive state is present on the bus only when none of the transmitters on the bus is asserting a dominant state.During a dominant state, the signal lines and resistor(s) move to a low-impedance state with respect to the rails so that current flows through the resistor. CAN+ voltage tends to +5V and CAN tends to 0V.Irrespective of signal state the signal lines are always in a low-impedance state with respect to one another by virtue of the terminating resistors at the end of the bus.This signaling strategy differs significantly from other balanced line transmission technologies such as RS-422/3, RS-485, etc. which employ differential line drivers/ receivers and use a signaling system based on the differential mode voltage of the balanced line crossing a notional 0V. Multiple access on such systems normally relies on the media supporting three states (active high, active low and inactive tri-state) and is dealt with in the time domain. Multiple access on CAN bus is achieved by the electrical logic of the system supporting just two states that are conceptually analogous to a wired AND network.CAN is a multi-master serial bus standard for connecting electronic control units (ECUs) also known as nodes (automotive electronics is a major application domain). Two or more nodes are required on the CAN bus to communicate. A node may interface to devices from simple digital logic e.g. PLD, via FPGA up to an embedded computer running extensive software. Such a computer may also be a gateway allowing a general-purpose computer (like a laptop) to communicate over a USB or Ethernet port to the devices on a CAN bus.All nodes are connected to each other through a physically conventional two-wire bus. The wires are a twisted pair with a 120 (nominal) characteristic impedance.This bus uses differential wired-AND signals. Two signals, CAN high (CANH) and CAN low (CANL) are either driven to a "dominant" state with CANH > CANL, or not driven and pulled by passive resistors to a "recessive" state with CANH CANL. A 0 data bit encodes a dominant state, while a 1 data bit encodes a recessive state, supporting a wired-AND convention, which gives nodes with lower ID numbers priority on the bus.High-speed CAN bus. ISO 11898-2.ISO 11898-2, also called high-speed CAN (bit speeds up to 1Mbit/s on CAN, 5Mbit/s on CAN-FD), uses a linear bus terminated at each end with a 120 resistor.High-speed CAN signaling. ISO 11898-2.High-speed CAN signaling drives the CANH wire towards 3.5 V and the CANL wire towards 1.5V when any device is transmitting a dominant (0), while if no device is transmitting a dominant, the terminating resistors passively return the two wires to the recessive (1) state with a nominal differential voltage of 0V. (Receivers consider any differential voltage of less than 0.5V to be recessive.) The dominant differential voltage is a nominal 2V. The dominant common mode voltage (CANH+CANL)/2 must be within 1.5 to 3.5V of common, while the recessive common mode voltage must be within 12 of common.Low-speed fault-tolerant CAN bus. ISO 11898-3.ISO 11898-3, also called low-speed or fault-tolerant CAN (up to 125kbit/s), uses a linear bus, star bus or multiple star buses connected by a linear bus and is terminated at each node by a fraction of the overall termination resistance. The overall termination resistance should be close to, but not less than, 100.Low-speed CAN signaling. ISO 11898-3.Low-speed fault-tolerant CAN signaling operates similarly to high-speed CAN, but with larger voltage swings. The dominant state is transmitted by driving CANH towards the device power supply voltage (5V or 3.3V), and CANL towards 0V when transmitting a dominant (0), while the termination resistors pull the bus to a recessive state with CANH at 0V and CANL at 5V. This allows a simpler receiver that just considers the sign of CANHCANL. Both wires must be able to handle 27 to +40V without damage.With both high-speed and low-speed CAN, the speed of the transition is faster when a recessive-to-dominant transition occurs since the CAN wires are being actively driven. The speed of the dominant-to-recessive transition depends primarily on the length of the CAN network and the capacitance of the wire used.High-speed CAN is usually used in automotive and industrial applications where the bus runs from one end of the environment to the other. Fault-tolerant CAN is often used where groups of nodes need to be connected together.The specifications require the bus be kept within a minimum and maximum common mode bus voltage but do not define how to keep the bus within this range.The CAN bus must be terminated. The termination resistors are needed to suppress reflections as well as return the bus to its recessive or idle state.High-speed CAN uses a 120 resistor at each end of a linear bus. Low-speed CAN uses resistors at each node. Other types of terminations may be used such as the Terminating Bias Circuit defined in ISO11783.[9]A terminating bias circuit provides power and ground in addition to the CAN signaling on a four-wire cable. This provides automatic electrical bias and termination at each end of each bus segment. An ISO11783 network is designed for hot plug-in and removal of bus segments and ECUs.CAN bus nodeEach node requires aCentral processing unit, microprocessor, or host processorThe host processor decides what the received messages mean and what messages it wants to transmit.Sensors, actuators and control devices can be connected to the host processor.CAN controller- often an integral part of the microcontrollerReceiving: the CAN controller stores the received serial bits from the bus until an entire message is available, which can then be fetched by the host processor (usually by the CAN controller triggering an interrupt).Sending: the host processor sends the transmit message(s) to a CAN controller, which transmits the bits serially onto the bus when the bus is free.Transceiver Defined by ISO 11898-2/3 Medium Access Unit [MAU] standardsReceiving: it converts the data stream from CAN bus levels to levels that the CAN controller uses. It usually has protective circuitry to protect the CAN controller.Transmitting: it converts the data stream from the CAN controller to CAN bus levels.Each node is able to send and receive messages, but not simultaneously. A message or Frame consists primarily of the ID (identifier), which represents the priority of the message, and up to eight data bytes. A CRC, acknowledge slot [ACK] and other overhead are also part of the message. The improved CAN FD extends the length of the data section to up to 64 bytes per frame. The message is transmitted serially onto the bus using a non-return-to-zero (NRZ) format and may be received by all nodes.The devices that are connected by a CAN network are typically sensors, actuators, and other control devices. These devices are connected to the bus through a host processor, a CAN controller, and a CAN transceiver.CAN data transmission uses a lossless bitwise arbitration method of contention resolution. This arbitration method requires all nodes on the CAN network to be synchronized to sample every bit on the CAN network at the same time. This is why some call CAN synchronous. Unfortunately the term synchronous is imprecise since the data is transmitted in an asynchronous format, namely without a clock signal.The CAN specifications use the terms dominant bits and recessive bits, where dominant is a logical 0 (actively driven to a voltage by the transmitter) and recessive is a logical 1 (passively returned to a voltage by a resistor). The idle state is represented by the recessive level (Logical 1). If one node transmits a dominant bit and another node transmits a recessive bit then there is a collision and the dominant bit wins. This means there is no delay to the higher-priority message, and the node transmitting the lower-priority message automatically attempts to re-transmit six-bit clocks after the end of the dominant message. This makes CAN very suitable as a real-time prioritized communications system.The exact voltages for a logical 0 or 1 depend on the physical layer used, but the basic principle of CAN requires that each node listen to the data on the CAN network including the transmitting node(s) itself (themselves). If a logical 1 is transmitted by all transmitting nodes at the same time, then a logical 1 is seen by all of the nodes, including both the transmitting node(s) and receiving node(s). If a logical 0 is transmitted by all transmitting node(s) at the same time, then a logical 0 is seen by all nodes. If a logical 0 is being transmitted by one or more nodes, and a logical 1 is being transmitted by one or more nodes, then a logical 0 is seen by all nodes including the node(s) transmitting the logical 1. When a node transmits a logical 1 but sees a logical 0, it realizes that there is a contention and it quits transmitting. By using this process, any node that transmits a logical 1, when another node transmits a logical 0, loses the arbitration and drops out. A node that loses arbitration re-queues its message for later transmission and the CAN frame bit-stream continues without error until only one node is left transmitting. This means that the node that transmits the first 1 loses arbitration. Since the 11 (or 29 for CAN 2.0B) bit identifier is transmitted by all nodes at the start of the CAN frame, the node with the lowest identifier transmits more zeros at the start of the frame, and that is the node that wins the arbitration or has the highest priority.For example, consider an 11-bit ID CAN network, with two nodes with IDs of 15 (binary representation, 00000001111) and 16 (binary representation, 00000010000). If these two nodes transmit at the same time, each will first transmit the start bit then transmit the first six zeros of their ID with no arbitration decision being made.Start bitID bitsThe rest of the frame109876543210Node 15000000001111Node 1600000001Stopped TransmittingCAN data000000001111When ID bit 4 is transmitted, the node with the ID of 16 transmits a 1 (recessive) for its ID, and the node with the ID of 15 transmits a 0 (dominant) for its ID. When this happens, the node with the ID of 16 knows it transmitted a 1, but sees a 0 and realizes that there is a collision and it lost arbitration. Node 16 stops transmitting which allows the node with ID of 15 to continue its transmission without any loss of data. The node with the lowest ID will always win the arbitration and therefore has the highest priority.Bit rates up to 1Mbit/s are possible at network lengths below 40m. Decreasing the bit rate allows longer network distances (e.g. 500m at 125kbit/s). The improved CAN FD standard allows increasing the bit rate after arbitration and can increase the speed of the data section by a factor of up to ten or more of the arbitration bit rate.All nodes on the CAN network must operate at the same nominal bit rate, but noise, phase shifts, oscillator tolerance and oscillator drift mean that the actual bit rate might not be the nominal bit rate.[17] Since a separate clock signal is not used, a means of synchronizing the nodes is necessary. Synchronization is important during arbitration since the nodes in arbitration must be able to see both their transmitted data and the other nodes' transmitted data at the same time. Synchronization is also important to ensure that variations in oscillator timing between nodes do not cause errors.Synchronization starts with a hard synchronization on the first recessive to dominant transition after a period of bus idle (the start bit). Resynchronization occurs on every recessive to dominant transition during the frame. The CAN controller expects the transition to occur at a multiple of the nominal bit time. If the transition does not occur at the exact time the controller expects it, the controller adjusts the nominal bit time accordingly.The adjustment is accomplished by dividing each bit into a number of time slices called quanta, and assigning some number of quanta to each of the four segments within the bit: synchronization, propagation, phase segment 1 and phase segment 2.An example CAN bit timing with 10 time quanta per bitThe number of quanta the bit is divided into can vary by controller, and the number of quanta assigned to each segment can be varied depending on bit rate and network conditions.A transition that occurs before or after it is expected causes the controller to calculate the time difference and lengthen phase segment 1 or shorten phase segment 2 by this time. This effectively adjusts the timing of the receiver to the transmitter to synchronize them. This resynchronization process is done continuously at every recessive to dominant transition to ensure the transmitter and receiver stay in sync. Continuously resynchronizing reduces errors induced by noise, and allows a receiving node that was synchronized to a node that lost arbitration to resynchronize to the node which won arbitration.Message IDs must be unique[10] on a single CAN bus, otherwise two nodes would continue transmission beyond the end of the arbitration field (ID) causing an error.In the early 1990s, the choice of IDs for messages was done simply on the basis of identifying the type of data and the sending node; however, as the ID is also used as the message priority, this led to poor real-time performance. In those scenarios, a low CAN bus use of around 30% was commonly required to ensure that all messages would meet their deadlines. However, if IDs are instead determined based on the deadline of the message, the lower the numerical ID and hence the higher the message priority, then bus use of 70 to 80% can typically be achieved before any message deadlines are missed.[18]Data frames and remote frames are separated from preceding frames by a bit field called interframe space. Interframe space consists of at least three consecutive recessive (1) bits. Following that, if a dominant bit is detected, it will be regarded as the Start of frame bit of the next frame. Overload frames and error frames are not preceded by an interframe space and multiple overload frames are not separated by an interframe space. Interframe space contains the bit fields intermission and bus idle, and suspend transmission for error passive stations, which have been transmitter of the previous message.[19]A CAN network can be configured to work with two different message (or frame) formats: the standard or base frame format (described in CAN 2.0 A and CAN 2.0 B), and the extended frame format (described only by CAN 2.0 B). The only difference between the two formats is that the CAN base frame supports a length of 11 bits for the identifier, and the CAN extended frame supports a length of 29 bits for the identifier, made up of the 11-bit identifier (base identifier) and an 18-bit extension (identifier extension). The distinction between CAN base frame format and CAN extended frame format is made by using the IDE bit, which is transmitted as dominant in case of an 11-bit frame, and transmitted as recessive in case of a 29-bit frame. CAN controllers that support extended frame format messages are also able to send and receive messages in CAN base frame format. All frames begin with a start-of-frame (SOF) bit that denotes the start of the frame transmission.CAN has four frame types:Data frame: a frame containing node data for transmissionRemote frame: a frame requesting the transmission of a specific identifierError frame: a frame transmitted by any node detecting an errorOverload frame: a frame to inject a delay between data or remote frameThe data frame is the only frame for actual data transmission. There are two message formats:Base frame format: with 11 identifier bitsExtended frame format: with 29 identifier bitsThe CAN standard requires that the implementation must accept the base frame format and may accept the extended frame format, but must tolerate the extended frame format.A complete CAN bus frame, including stuff bits, a correct CRC, and inter-frame spacingThe frame format is as follows: The bit values are described for CAN-LO signal.Field nameLength (bits)PurposeStart-of-frame1Denotes the start of frame transmissionIdentifier (green)11A (unique) identifier which also represents the message priorityRemote transmission request (RTR) (blue)1Must be dominant (0) for data frames and recessive (1) for remote request frames (see Remote Frame, below)Identifier extension bit (IDE)1Must be dominant (0) for base frame format with 11-bit identifiersReserved bit (r0)1Reserved bit. Must be dominant (0), but accepted as either dominant or recessive.Data length code (DLC) (yellow)4Number of bytes of data (08 bytes)[a]Data field (red)064 (0-8 bytes)Data to be transmitted (length in bytes dictated by DLC field)CRC15Cyclic redundancy checkCRC delimiter1Must be recessive (1)ACK slot1Transmitter sends recessive (1) and any receiver can assert a dominant (0)ACK delimiter1Must be recessive (1)End-of-frame (EOF)7Must be recessive (1)Inter-frame spacing (IFS)3Must be recessive (1)^ It is physically possible for a value between 915 to be transmitted in the 4-bit DLC, although the data is still limited to eight bytes. Certain controllers allow the transmission or reception of a DLC greater than eight, but the actual data length is always limited to eight bytes.A CAN bus frame transmitted with a 1Mbit/s bitrate spans 47sec between the SOF and ACK bits, as captured by a digital oscilloscope with a CAN serial decoding functionality.The frame format is as follows on from here in the table below:Field nameLength (bits)PurposeStart-of-frame1Denotes the start of frame transmissionIdentifier A (green)11First part of the (unique) identifier which also represents the message prioritySubstitute remote request (SRR)1Must be recessive (1)Identifier extension bit (IDE)1Must be recessive (1) for extended frame format with 29-bit identifiersIdentifier B (green)18Second part of the (unique) identifier which also represents the message priorityRemote transmission request (RTR) (blue)1Must be dominant (0) for data frames and recessive (1) for remote request frames (see Remote Frame, below)Reserved bits (r1, r0)2Reserved bits which must be set dominant (0), but accepted as either dominant or recessiveData length code (DLC) (yellow)4Number of bytes of data (08 bytes)[a]Data field (red)064 (0-8 bytes)Data to be transmitted (length dictated by DLC field)CRC15Cyclic redundancy checkCRC delimiter1Must be recessive (1)ACK slot1Transmitter sends recessive (1) and any receiver can assert a dominant (0)ACK delimiter1Must be recessive (1)End-of-frame (EOF)7Must be recessive (1)Inter-frame spacing (IFS)3Must be recessive (1)^ It is physically possible for a value between 915 to be transmitted in the 4-bit DLC, although the data is still limited to eight bytes. Certain controllers allow the transmission or reception of a DLC greater than eight, but the actual data length is always limited to eight bytes.The two identifier fields (A & B) combine to form a 29-bit identifier.Generally data transmission is performed on an autonomous basis with the data source node (e.g., a sensor) sending out a data frame. It is also possible, however, for a destination node to request the data from the source by sending a remote frame.There are two differences between a data frame and a remote frame. Firstly the RTR-bit is transmitted as a dominant bit in the data frame and secondly in the remote frame there is no data field. The DLC field indicates the data length of the requested message (not the transmitted one). I.e.,RTR = 0; DOMINANT in data frameRTR = 1; RECESSIVE in remote frameIn the event of a data frame and a remote frame with the same identifier being transmitted at the same time, the data frame wins arbitration due to the dominant RTR bit following the identifier.The error frame consists of two different fields:The first field is given by the superposition of ERROR FLAGS (612 dominant/recessive bits) contributed from different stations.The following second field is the ERROR DELIMITER (8 recessive bits).There are two types of error flags:Active Error Flagsix dominant bits Transmitted by a node detecting an error on the network that is in error state error active.Passive Error Flagsix recessive bits Transmitted by a node detecting an active error frame on the network that is in error state error passive.There are two error counters in CAN:Transmit error counter (TEC)Receive error counter (REC)When TEC or REC is greater than 127 and less than 255, a Passive Error frame will be transmitted on the bus.When TEC and REC is less than 128, an Active Error frame will be transmitted on the bus.When TEC is greater than 255, then the node enters into Bus Off state, where no frames will be transmitted.The overload frame contains the two bit fields: Overload Flag and Overload Delimiter. There are two kinds of overload conditions that can lead to the transmission of an overload flag:The internal conditions of a receiver, which requires a delay of the next data frame or remote frame.Detection of a dominant bit during intermission.The start of an overload frame due to case 1 is only allowed to be started at the first bit time of an expected intermission, whereas overload frames due to case 2 start one bit after detecting the dominant bit. Overload Flag consists of six dominant bits. The overall form corresponds to that of the active error flag. The overload flag's form destroys the fixed form of the intermission field. As a consequence, all other stations also detect an overload condition and on their part start transmission of an overload flag. Overload Delimiter consists of eight recessive bits. The overload delimiter is of the same form as the error delimiter.The acknowledge slot is used to acknowledge the receipt of a valid CAN frame. Each node that receives the frame, without finding an error, transmits a dominant level in the ACK slot and thus overrides the recessive level of the transmitter. If a transmitter detects a recessive level in the ACK slot, it knows that no receiver found a valid frame. A receiving node may transmit a recessive to indicate that it did not receive a valid frame, but another node that did receive a valid frame may override this with a dominant. The transmitting node cannot know that the message has been received by all of the nodes on the CAN network.Often, the mode of operation of the device is to re-transmit unacknowledged frames over and over. This may lead to eventually entering the error passive state.Main article: Bit stuffingCAN frame before and after the addition of stuff bits (in purple). An incorrect CRC is used for bit stuffing illustration purposes.To ensure enough transitions to maintain synchronization, a bit of opposite polarity is inserted after five consecutive bits of the same polarity. This practice is called bit stuffing, and is necessary due to the non-return-to-zero (NRZ) coding used with CAN. The stuffed data frames are destuffed by the receiver.All fields in the frame are stuffed with the exception of the CRC delimiter, ACK field and end of frame which are a fixed size and are not stuffed. In the fields where bit stuffing is used, six consecutive bits of the same polarity (111111 or 000000) are considered an error. An active error flag can be transmitted by a node when an error has been detected. The active error flag consists of six consecutive dominant bits and violates the rule of bit stuffing.Bit stuffing means that data frames may be larger than one would expect by simply enumerating the bits shown in the tables above. The maximum increase in size of a CAN frame (base format) after bit stuffing is in the case11111000011110000...which is stuffed as (stuffing bits in bold):111110000011111000001...The stuffing bit itself may be the first of the five consecutive identical bits, so in the worst case there is one stuffing bit per four original bits.The size of a base frame is bounded by 8 n + 44 + 34 + 8 n 1 4 {\displaystyle 8n+44+\left\lfloor {\frac {34+8n-1}{4}}\right\rfloor } where n is the number of data bytes, a maximum of 8.Since 8 n + 44 {\displaystyle 8n+44} is the size of the frame before stuffing, in the worst case one bit will be added every four original bits after the first one (hence the 1 at the numerator) and, because of the layout of the bits of the header, only 34 out of 44 of them can be subject to bit stuffing.frame typebefore stuffingafter stuffingstuffing bitstotal frame lengthbase frame 8 n + 44 {\displaystyle 8n+44} 8 n + 44 + 34 + 8 n 1 4 {\displaystyle 8n+44+\left\lfloor {\frac {34+8n-1}{4}}\right\rfloor } 24 {\displaystyle \leq 24} 132 {\displaystyle \leq 132} extended frame 8 n + 64 {\displaystyle 8n+64} 8 n + 64 + 54 + 8 n 1 4 {\displaystyle 8n+64+\left\lfloor {\frac {54+8n-1}{4}}\right\rfloor } 29 {\displaystyle \leq 29} 157 {\displaystyle \leq 157} An undesirable side effect of the bit stuffing scheme is that a small number of bit errors in a received message may corrupt the destuffing process, causing a larger number of errors to propagate through the destuffed message. This reduces the level of protection that would otherwise be offered by the CRC against the original errors. This deficiency of the protocol has been addressed in CAN FD frames by the use of a combination of fixed stuff bits and a counter that records the number of stuff bits inserted.ISO 11898 series specifies physical and data link layer (levels 1 and 2 of the ISO/OSI model) of serial communication category called controller area network that supports distributed real-time control and multiplexing for use within road vehicles.[20]There are several CAN physical layer and other standards:ISO 11898-1:2015 specifies the data link layer (DLL) and physical signalling of the controller area network (CAN).[13] This document describes the general architecture of CAN in terms of hierarchical layers according to the ISO reference model for open systems interconnection (OSI) established in ISO/IEC 7498-1 and provides the characteristics for setting up an interchange of digital information between modules implementing the CAN DLL with detailed specification of the logical link control (LLC) sublayer and medium access control (MAC) sublayer.ISO 11898-2:2016 specifies the high-speed (transmission rates of up to 1Mbit/s) medium access unit (MAU), and some medium-dependent interface (MDI) features (according to ISO 8802-3), which comprise the physical layer of the controller area network. ISO 11898-2 uses a two-wire balanced signaling scheme. It is the most used physical layer in vehicle powertrain applications and industrial control networks.ISO 11898-3:2006 specifies low-speed, fault-tolerant, medium-dependent interface for setting up an interchange of digital information between electronic control units of road vehicles equipped with the CAN at transmission rates above 40kbit/s up to 125kbit/s.ISO 11898-4:2004 specifies time-triggered communication in the CAN (TTCAN). It is applicable to setting up a time-triggered interchange of digital information between electronic control units (ECU) of road vehicles equipped with CAN, and specifies the frame synchronization entity that coordinates the operation of both logical link and media access controls in accordance with ISO 11898-1, to provide the time-triggered communication schedule.ISO 11898-5:2007 specifies the CAN physical layer for transmission rates up to 1Mbit/s for use within road vehicles. It describes the medium access unit functions as well as some medium-dependent interface features according to ISO 8802-2. This represents an extension of ISO 11898-2, dealing with new functionality for systems requiring low-power consumption features while there is no active bus communication.ISO 11898-6:2013 specifies the CAN physical layer for transmission rates up to 1Mbit/s for use within road vehicles. It describes the medium access unit functions as well as some medium-dependent interface features according to ISO 8802-2. This represents an extension of ISO 11898-2 and ISO 11898-5, specifying a selective wake-up mechanism using configurable CAN frames.ISO 16845-1:2016 provides the methodology and abstract test suite necessary for checking the conformance of any CAN implementation of the CAN specified in ISO 11898-1.ISO 16845-2:2018 establishes test cases and test requirements to realize a test plan verifying if the CAN transceiver with implemented selective wake-up functions conform to the specified functionalities. The kind of testing defined in ISO 16845-2:2018 is named as conformance testing.As the CAN standard does not include common communication features, such as flow control, device addressing, and transportation of data blocks larger than

called a tin: a drinking-mug.v.t. to put up for preservation in cans.n.pl. Canned-goods, meat, fruit, &c. so prepared for preservation.n. Cannery, a place where meat, fish, fruit, &c. are canned. [A.S. canne; cf. L. canna, a reed, Gr. kann, a reed.]Dictionary of Nautical Terms0.0 / 0 votescanA tin vessel used by sailors to drink out of.Editors Contribution0.0 / 0 votescanBe able.We can do easily what is vital, necessary and just.Submitted by MaryC on January 25, 2020Suggested Resources0.0 / 0 votescanSong lyrics by can -- Explore a large variety of song lyrics performed by can on the Lyrics.com website.CANWhat does CAN stand for? -- Explore the various meanings for the CAN acronym on the Abbreviations.com website.CanCan vs. May -- In this Grammar.com article you will learn the differences between the words Can and May.Surnames Frequency by Census Records0.0 / 0 votesCANAccording to the U.S. Census Bureau, Can is ranked #23750 in terms of the most common surnames in America.The Can surname appeared 1,065 times in the 2010 census and if you were to sample 100,000 people in the United States, approximately 0 would have the surname Can.37.6% or 401 total occurrences were of Hispanic origin.34.1% or 364 total occurrences were White.21.9% or 234 total occurrences were Asian.3.1% or 33 total occurrences were Black.Matched CategoriesBody PartBuoyContainerfulPlumbing FixtureRemoveBritish National CorpusSpoken Corpus FrequencyRank popularity for the word 'CAN' in Spoken Corpus Frequency: #48Written Corpus FrequencyRank popularity for the word 'CAN' in Written Corpus Frequency: #50Nouns FrequencyRank popularity for the word 'CAN' in Nouns Frequency: #2360Verbs FrequencyRank popularity for the word 'CAN' in Verbs Frequency: #7Usage in printed sourcesFrom:Anagrams for CAN How to pronounce CAN?How to say CAN in sign language?NumerologyChaldean NumerologyThe numerical value of CAN in Chaldean Numerology is: 9Pythagorean NumerologyThe numerical value of CAN in Pythagorean Numerology is: 9Pete ButtigiegPete Buttigieg:I had an opportunity to work on those things at a place known for being very strong at it and for the kind of training that helps educate for that, and it felt like the missing piece of my education, i wasn't sure consulting was going to be for me for the long term. But I knew that I could grow and do that, and I do think it's, it could be distinguishing relative to people have no business experience at a time where we got to demonstrate that you can be progressive, pro-labor and reasonably knowledgeable about business too.Russ Feingold:My desire to serve is stronger than ever, i know that working together, we can make great things possible again.Bill Maher:I'm Bill Maher, now, I'm Team Dave but that doesn't mean I'm anti-trans. We can have two thoughts in our head at the same time.The Emmy-winner:And then I thought well, if Im doing she/her, why dont I add that to the name? Because Ive got Edward on my passport, its quite wooden and big and I dont call myself that. So, I just thought Ill add Suzy there, and then Eddie, and people can choose what they want and no one can go wrong.Said Thompson:We need assistance from our [local] congressman and our senators to help get visas processed for [orphaned] children displaced, with quick visa issuance, these children can get settled here and not have to live their lives in shelters for months. References poderAragonese, , , Arabic, , , Belarusian , , , , , , , , Bulgarianllauna, poder, enllaunarCatalan, Valencianplechovka, konev, konzerva, smt, umt, moci, konzervovatCzechcan, medru, gallu, caelWelshbalder, kande, toilet, dse, vandkande, kunne, m, konservere, holde mund, fyre, afskedige, smide ud, henkogeDanishDose, Pobacken, Kanister, Toilette, Arschbacken, Konservendose, Giekanne, WC, Klo, knnen, drfen, kndigen, einmachen, den Mund halten, die Klappe halten, rausschmeien, abbrechen, feuernGerman, , , Greekladskatolo, necesejo, pugo, pispoto, rajti, povi, silenti, silentigi, enladigi, maldungiEsperantoregadera, lata, poder, enlatar, echar, cerrar, descartarSpanishvima, osataEstonian, , , Persiansilyketlkki, kastelukannu, takamus, purkki, vessa, voida, saada, osata, pysty, purkittaaFinnishfesses, chiottes, canette, arrosoir, miches, WC, bidon, bote de conserve, boule, pouvoir, taire, jeter, conserverFrenchin ann, is fidir le, b, fad, tig IeIrishcana, faod, 's urrainn doScottish GaelicjargManx , , , , , , Hebrew, Hindikab, kapab, kaHaitian Creolekonzerv, kanna, doboz, kloty, -hat, tud, -hetHungarian, Armeniankaleng, bisa, bolehIndonesiands, geta, megaIcelandiclattina, latrina, cesso, scatoletta, annaffiatoio, chiappe, sapere, potere, essere capace, riuscire, inscatolare, licenziare, chiudere, scartare, tacereItalian, , , Japanese, Georgian Korean, Kurdishscio, possum, posse, simLatinDous, Biddong, Bchs, Gisskan, derfen, knnen, duerfen, dierfenLuxembourgish, LetzeburgeschLaokna, tini, kneMori, , , , , , Macedoniantandas, tin, bisa, boleh, dapat, pecat, mengetinkanMalayforsi, sataMalteseconservenblik, toilet, blik, kan, pot, mogen, kunnen, afvoeren, conserveren, stil houden, inblikkenDutchkanne, do, toalett, boks, rompe, hermetikkboks, bak, kunneNorwegianyadiiznNavajo, Navahopodre, pderOccitanubikacja, konewka, kanister, klop, puszka, dupa, polewaczka, kanka, sracz, kibel, poladki, mc, potrafi, umie, konserwowa, wyla (z pracy)Polishbunda, lata, vaso, regador, traseiro, conseguir, capaz, poder, ser, calar, jogar fora, enlatar, mandar embora, descartar, demitirPortuguesepuder, pudair, pudeirRomanshputeaRomanian , , , , , , , , , , , , , , , Russianpodi, porrere, podere, potere, pori, podiriSardinian, moi, , smjeti, umjeti, , , umetiSerbo-Croatianmc, umtSlovakkonzerva, ploevinka, kropilnica, smeti, moi, zavrei, odvrei, konzervirati, odpustiti, utihnitiSloveneburk, konservburk, konserv, kanna, vattenkanna, kunna, knipa igen, stnga igen, lgga in, sparka, konservera, kickaSwedish, Tamil, , , , , , , , , Thaikutu, konserve, -abilmek, -ebilmek, yapabilmekTurkish, , , , UkrainianUrdulon, c th, c l, cVietnamesepoleurWalloonChinese - Select - (Chinese - Simplified) (Chinese - Traditional) Espaol (Spanish) Esperanto (Esperanto) (Japanese) Portugus (Portuguese) Deutsch (German) (Arabic) Franais (French) (Russian) (Kannada) (Korean) (Hebrew) Gaeilge (Irish) (Ukrainian) (Urdu) Magyar (Hungarian) (Hindi) Indonesia (Indonesian) Italiano (Italian) (Tamil) Trke (Turkish) (Telugu) (Thai) Ting Vit (Vietnamese) etina (Czech) Polski (Polish) Bahasa Indonesia (Indonesian) Romnete (Romanian) Nederlands (Dutch) (Greek) Latinum (Latin) Svenska (Swedish) Dansk (Danish) Suomi (Finnish) (Persian) (Yiddish) (Armenian) Norsk (Norwegian) English (English) 1 : to be able to (do something) I don't need any help. I can do it myself. I can't decide what to do. All we can do [=the only thing we can do] now is wait. : to know how to (do something) : to have the power or skill to (do something) A weight lifter can lift a very heavy weight. Only Congress can do that. : to be designed to (do something) a car that can hold five people [=a car that has enough room for five people] How fast can [=does, will] the car go? sometimes used without a following verb I visit her whenever I can. I don't know if I'll be able to fix the problem, but I'll do what I can. Please help us if you can. 2 used to describe what someone sees, feels, thinks, etc. Can you see him yet? Yes, I can see him clearly. Can [=do] you remember/understand how to do it? 3 a used to say that something is or is not possible Do you think he can still be alive? [=do you think it is possible that he is still alive?] I don't think he can still be alive. [=I think he must be dead] These problems can be dealt with more easily at the local level. You can't always get what you want in life. At this time of year many birds can be found on the island. [=there are many birds on the island at this time of year] If you don't tell me what the problem is, I can't help you. You can't be very smart [=you aren't very smart] if you believe that! He was supposed to be here an hour ago. Where can he (possibly) be? [=where is he?] [+] more examples [-] hide examples [+] Example sentences [-] Hide examples sometimes used in the emphatic phrase asas can be I want a cake as big as can be! [=I want the biggest cake possible] They seemed as happy as can be [=they seemed extremely happy] when I last saw them. b used in speech to express surprise or disbelief You must be joking! You can't/cannot (possibly) be serious! He can't really have meant that. [=I don't believe that he meant that] You can't (possibly) believe that! The price is $50? That can't be right. [=that must be wrong] 4 a : to have permission to (do something) You can do it tomorrow if you like. Can I leave now? No, you can't. You can't leave until you finish washing the dishes. compare may 4 5 a used to say what should or should not be done You can't leave now! The party is just getting started! Why can't you be more polite? [=you should be more polite; why aren't you more polite?] b used in angry speech to tell someone to do something If you don't like it here, you can just leave! 6 a used to describe the way a person sometimes behaves She can be very rude at times. [=she is sometimes very rude] b used to describe something that sometimes or often happens In this part of the country the weather can change quickly. [=the weather often changes quickly] Usage Could is used as the past tense of can to describe an ability that someone had in the past or to say that something was possible in the past. I could run fast when I was young, but I can't run fast now. It used to be that you could drive for miles here without seeing another person, but now there are houses and people everywhere. To describe a specific occurrence in the past, use was/were able to instead of could. By working long hours, we were able to finish the project on time. In the future tense, will be able to is used. If you keep practicing, you'll be able to play the piano someday. She believes that someday people will be able to vote at home on their computers. Can can be used to suggest something that might happen in the future. If we save enough money, we can go to Hawaii for our vacation next year. no can do informal + humorous used in speech to say that you cannot do something that you have been asked or told to do Can you give me a ride to work tomorrow? Sorryno can do. My car is in the shop. to be able to; have the ability, power, or skill to.She can solve the problem easily, I'm sure.to know how to.He can play chess, although he's not particularly good at it.to have the power or means to.A dictator can impose his will on the people.to have the right or qualifications to.He can change whatever he wishes in the script.may; have permission to.Can I speak to you for a moment?to have the possibility.A coin can land on either side. can, can, canst, can, can, could, could, couldst, could, could, can, can, could, cunning.a sealed container for food, beverages, etc., as of aluminum, sheet iron coated with tin, or other metal.a receptacle for garbage, ashes, etc..a bucket, pail, or other container for holding or carrying liquids.a drinking cup; tankard.a metal or plastic container for holding film on cores or reels.Slang: Usually Vulgar.toilet; bathroom.Slang.jail.He's been in the can for a week.Slang: Sometimes Vulgar.buttocks.Slang.cans, a set of headphones designed to cover the ears.Military Slang.a depth charge.a destroyer.to preserve by sealing in a can, jar, etc.Slang.to dismiss; fire.Slang.to throw (something) away.Slang.to put a stop to.to record, as on film or tape.a container, esp for liquids, usually of thin sheet metalanother name (esp US) for tinAlso called: canful.the contents of a can or the amount a can will holda slang word for prisona slang word for toilet or buttocks See toiletnavy a slang word for destroyerslangnavy a depth chargea shallow cylindrical metal container of varying size used for storing and handling filminformala complicated problemSee carry(of a film, piece of music, etc) having been recorded, processed, edited, etcinformalarranged or agreedthe contract is almost in the canCollins English Dictionary Complete & Unabridged 2012 Digital Edition William Collins Sons & Co. Ltd. 1979, 1986 HarperCollins Publishers 1998, 2000, 2003, 2005, 2006, 2007, 2009, 2012to put (food, etc) into a can or cans; preserve in a canslang(tr) to dismiss from a jobinformal(tr) to stop (doing something annoying or making an annoying noise) (esp in the phrase can it!)informal(tr) to reject or discardCollins English Dictionary Complete & Unabridged 2012 Digital Edition William Collins Sons & Co. Ltd. 1979, 1986 HarperCollins Publishers 1998, 2000, 2003, 2005, 2006, 2007, 2009, 2012used as an auxiliary to indicate ability, skill, or fitness to perform a taskI can run a mile in under four minutesused as an auxiliary to indicate permission or the right to somethingused as an auxiliary to indicate knowledge of how to do somethinghe can speak three languages fluentlyused as an auxiliary to indicate the possibility, opportunity, or likelihoodmy trainer says I can win the race if I really work hardCollins English Dictionary Complete & Unabridged 2012 Digital Edition William Collins Sons & Co. Ltd. 1979, 1986 HarperCollins Publishers 1998, 2000, 2003, 2005, 2006, 2007, 2009, 2012Can but and cannot but are formal and now somewhat old-fashioned expressions suggesting that there is no possible alternative to doing something. Can but is equivalent to can only: We can but do our best. Cannot but is the equivalent of cannot help but: We cannot but protest against these injustices. See also help.Can1 and may1 are frequently but not always interchangeable in senses indicating possibility: A power failure can (or may) occur at any time. Despite the insistence by some, that can means only to be able and may means to be permitted, both are regularly used in seeking or granting permission: Can (or May) I borrow your glue gun? You can (or may) use it tomorrow. Sentences using can occur chiefly in spoken English. May in this sense occurs more frequently in formal contexts: May I address the court, Your Honor? In negative constructions, can't or cannot is more common than may not : You can't have it today. I need it myself. The contraction mayn't is rare.Origin of can1First recorded before 900; Middle English, Old English, present indicative singular 1st, 3rd person of cunnan to know, know how; cognate with German, Old Norse, Gothic kann; ken, know 1Origin of can2First recorded before 1000; Middle English canne, can(e), Old English canne, cognate with German Kanne, Old Norse kanna, all perhaps from West Germanic; compare Late Latin canna small vesselOrigin of can1Old English canne; related to Old Norse, Old High German kanna, Irish gann, Swedish kana sledOrigin of can2Old English cunnan; related to Old Norse kunna, Old High German kunnan, Latin cognscere to know, Sanskrit jnti he knows; see ken , uncouthExamples have not been reviewed.Tuberville went on to warn U.S. citizens that hanging around undocumented immigrants could lead to them being detained or arrested by association.Burns has often maintained that he could earn a lot more money by making documentaries for production companies or streaming services.The doctors did not admit the charges and can appeal against their convictions.There is no impartial institution where we can plead our case if and when the government decides to continue to persecute us and our staff, Bullock said.Health and Social Care Secretary, Wes Streeting, said: "Sunlight is the best disinfectant. Only by being upfront and shining a light on inequalities can we begin to tackle the problem."bottlebucketcanisterjarpackageDefinitions and idiom definitions from Dictionary.com Unabridged, based on the Random House Unabridged Dictionary, Random House, Inc. 2023Idioms from The American Heritage Idioms Dictionary copyright 2002, 2001, 1995 by Houghton Mifflin Harcourt Publishing Company. Published by Houghton Mifflin Harcourt Publishing Company.camwoodCanaBrowse#aabbccddeeffgghhiijjkkllmmnnooppqqrrsttuuvvwwxxyyzzAboutCareersContact usCookies, terms, & privacyHelpFollow usGet the Word of the Day every day! 2025 Dictionary.com, LLC Also found in: Thesaurus, Medical, Financial, Acronyms, Idioms, Encyclopedia, Wikipedia. to be able to, have the power or skill to: I can take a bus to the airport. She can paint very well.Not to be confused with:may to have permission to: you may go in now; to express possibility: The storm may turn into a hurricane.Abused, Confused, & Misused Words by Mary Embree Copyright 2007, 2013 by Mary Embree (kn; kn when unstressed)aux.v. past tense could (kood) 1. a. Used to indicate physical or mental ability: I can carry both suitcases. Can you remember the war?b. Used to indicate possession of a specified power, right, or privilege: The president can veto congressional bills.c. Used to indicate possession of a specified capability or skill: I can tune the harpsichord as well as play it.2. a. Used to indicate possibility or probability: I wonder if my long lost neighbor can still be alive. Such things can and do happen.b. Used to indicate that which is permitted, as by conscience or feelings: One can hardly blame you for being upset.c. Used to indicate probability or possibility under the specified circumstances: They can hardly have intended to do that.3. Usage Problem Used to request or grant permission: Can I be excused?[Middle English, first and third person sing. present tense of connen, to know how, from Old English cunnan; see gn- in Indo-European roots.]Usage Note: Generations of grammarians and teachers have insisted that can should be used only to express the capacity to do something, and that may must be used to express permission. But children do not use can to ask permission out of a desire to be stubbornly perverse. They have learned it as an idiomatic expression from adults: After you clean your room, you can go outside and play. As part of the spoken language, this use of can is perfectly acceptable. This is especially true for negative questions, such as Can't I have the car tonight? probably because using mayn't instead of can't sounds unnatural. While the distinction between can and may still has its adherents in formal usage, the number appears to be falling. In our 2009 survey, 37 percent of the Usage Panel rejected can instead of may in the sentence Can I take another week to submit the application? But more than half of these said can was only "somewhat (rather than completely) unacceptable" in this use, and the overall percentage of disapproval fell from more than 50 percent in an earlier survey. The heightened formality of may sometimes highlights the speaker's role in giving permission. You may leave the room when you are finished implies that permission is given by the speaker. You can leave the room when you are finished implies that permission is part of a rule or policy rather than a decision on the speaker's part. For this reason, may sees considerable use in official announcements: Students may pick up the application forms tomorrow. Like may, can is also used to indicate what is possible: It may rain this afternoon. Bone spurs can be very painful. In this use, both can and may often have personal subjects: You may see him at the concert. Even an experienced driver can get lost in this town. (kn)n.1. A usually cylindrical metal container.2. a. An airtight container, usually made of tin-coated iron, in which foods or beverages are preserved.b. The contents of such a container: ate a can of beans.3. Slang A jail or prison.4. Slang A toilet or restroom.6. Slang A naval destroyer.v. canned, canning, cans v.tr.1. To seal in an airtight container for future use; preserve: canning peaches.2. Slang To make a recording of: can the audience's applause for a TV comedy show.3. Slang a. To end the employment of; fire. See Synonyms at dismiss.b. To put an end or stop to: canned the TV show after one season; told the students to can the chatter.v.intr. To solicit cash donations for a charity or other organization such as a club or amateur sports team by holding out a can or other container in a public place.Idioms: can of corn Sports Something that is easily accomplished, especially a routine catch of a fly ball in baseball. can of worms A complex or difficult problem. in the can Completed and ready for release, as a film or scene of a film.[Middle English canne, a water container, from Old English.]American Heritage Dictionary of the English Language, Fifth Edition. Copyright 2016 by Houghton Mifflin Harcourt Publishing Company. Published by Houghton Mifflin Harcourt Publishing Company. All rights reserved. (kn; unstressed kn) vb (intr) , past could1. used as an auxiliary to indicate ability, skill, or fitness to perform a task: I can run a mile in under four minutes. 2. used as an auxiliary to indicate permission or the right to something: can I have a drink?. 3. used as an auxiliary to indicate knowledge of how to do something: he can speak three languages fluently. 4. used as an auxiliary to indicate possibility, opportunity, or likelihood: my trainer says I can win the race if I really work hard. [Old English cunnan; related to Old Norse kunna, Old High German kunnan, Latin cognscere to know, Sanskrit jnti he knows; see ken, uncouth] (kn) n1. a container, esp for liquids, usually of thin sheet metal: a petrol can; a beer can. 2. another name (esp US) for tin23. Also called: canful the contents of a can or the amount a can will hold4. a slang word for prison5. US and Canadian a slang word for toilet or buttocks. See toilet6. (Military) navy US a slang word for destroyer7. (Military) navy US a slang word for storing and handling film9. can of worms informal a complicated problem10. carry the can See carry3711. (Film) (of a film, piece of music, etc) having been recorded, processed, edited, etc12. informal arranged or agreed: the contract is almost in the can. vb, cans, canning or canned13. to put (food, etc) into a can or cans; preserve in a can14. (tr) slang US to dismiss from a job15. (tr) informal US to stop (doing something annoying or making an annoying noise) (esp in the phrase can it!)16. (tr) informal to reject or discard[Old English canne; related to Old Norse, Old High German kanna, Irish gann, Swedish kana sled]Collins English Dictionary Complete and Unabridged, 12th Edition 2014 HarperCollins Publishers 1991, 1994, 1998, 2000, 2003, 2006, 2007, 2009, 2011, 2014 (kn; unstressed kn) auxiliary verb. 1. to be able to; have the ability, power, or skill to: She can solve the problem easily. 2. to know how to: I can play chess, but not very well. 3. to have the power or means to: a dictator who can impose his will on the people. 4. to have the right or qualifications to: He can change whatever he wishes in the script. 5. may; have permission to: Can I speak to you for a moment? 6. to have the possibility: A coin can land on either side. v.t., v.i. Idioms: can but, to be able to do nothing else except; can only: We can but try. [before 900; Middle English, Old English, present indic. singular 1st, 3rd person of cunnan to know, know how] usage: can and may are often interchangeable in the sense of possibility: A power failure can (or may) occur at any time. Despite the traditional insistence that only may conveys permission, both words are regularly used in this sense: Can (or May) I borrow your tape recorder? can occurs this way chiefly in spoken English; may occurs more frequently in formal speech and writing. In negative constructions, can't or cannot is more common than may not; the contraction mayn't is rare: You can't park in the driveway. can but and cannot but are somewhat formal expressions suggesting that there is no alternative to doing something. See also cannot, help. (kn) n., v. canned, canning. n. 1. a sealed container for food, beverages, etc., as of aluminum, sheet iron coated with tin, or other metal. 2. a receptacle for garbage, ashes, etc. 3. a bucket or other container for holding or carrying liquids. 4. a metal or plastic container for holding film on cores or reels. 5. Slang: Sometimes Vulgar. toilet; bathroom. 7. Slang: Sometimes Vulgar. buttocks. 8. Mil. Slang. v.t. 9. to preserve by sealing in a can, jar, etc. 10. Slang. to dismiss; fire. 11. Slang. to put a stop to: Can that noise! 12. to record, as on film or tape. Idioms: in the can, (of a commercial film, scene, etc.) completed. [before 1000; Middle English, Old English canne, c. Old High German channa, Old Norse kanna] Can. can. Random House Kernerman Webster's College Dictionary, 2010 K Dictionaries Ltd. Copyright 2005, 1997, 1991 by Random House, Inc. All rights reserved. could be able toThese words are used to talk about ability, awareness, and possibility. They are also used to say that someone has permission to do something. These uses are dealt with separately in this entry. Can and could are called modals.Both can and could are followed by an infinitive without to.I envy people who can sing.I could work for twelve hours a day.1. negative formsThe negative form of can is cannot or can't. Cannot is never written 'can not'. The negative form of could is could not or couldn't. To form the negative of be able to, you either put not or another negative word in front of able, or you use the expression be unable to.Many elderly people cannot afford telephones.It was so dark you could not see anything.We were not able to give any answers.We were unable to afford the entrance fee.2. ability: the presentCan, could, and be able to are all used to talk about a person's ability to do something. You use can or be able to to talk about ability in the present. Be able to is more formal than can.You can all read and write.The animals are able to move around, and they can all lie down.Lisa nodded, unable to speak.Could is also used to talk about ability in the present, but it has a special meaning. If you say that someone could do something, you mean that they have the ability to do it, but they don't in fact do it.We could do much more in this country to educate people.3. ability: the pastYou use could or a past form of be able to to talk about ability in the past.He could run faster than anyone else.A lot of them couldn't read or write.I wasn't able to answer their questions.If you say that someone was able to do something, you usually mean that they had the ability to do it and they did it. Could does not have this meaning.After two weeks in bed, he was able to return to work.The farmers were able to pay their employees' wages.If you want to say that someone had the ability to do something but did not in fact do it, you say that they could have done it.You could have given it all to me.You could have been a little bit more careful.If you want to say that someone did not do something because they did not have the ability to do it, you say that they could not have done it.I couldn't have gone with you, because I was in London at the time.If you want to say that someone had the ability to do something in the past, although they don't now have this ability, you say that they used to be able to do it.I used to be able to sleep anywhere.You used to be able to see the house from here.4. ability: the futureYou use a future form of be able to to talk about ability in the future.I shall be able to answer that question tomorrow.5. ability: reporting structuresCould is often used in reporting structures. For example, if a woman says 'I can speak Arabic', you usually report this as 'She said she could speak Arabic'.She said I could bring it back later.6. ability: 'be able to' after other verbsBe able to is sometimes used after modals such as might or should, and after verbs such as want, hope, or expect.I might be able to help you.You may be able to get extra money.You should be able to see that from here.She would not be able to go out alone.Do you really expect to be able to do that?Don't use can or could after any other verbs.7. 'being able to'You can use an -ing form of be able to.He liked being able to discuss politics with Veronica.There is no -ing form of can or could.8. awarenessCan and could are used with verbs such as see, hear, and smell to say that someone is or was aware of something through one of their senses.I could see a few stars in the sky.9. possibility: the present and the futureCould and can are used to talk about possibility in the present or future.You use could to say that there is a possibility that something is or will be true.Don't eat it. It could be a toadstool.He was jailed in February, and could be released next year.Might and may can be used in a similar way.Kathy's career may be ruined.Be Careful!Don't use 'could not' to say that there is a possibility that something is not true. Instead you use might not or may not.It might not be possible.If you want to say that it is impossible that something is true, you use cannot or could not.You cannot possibly know what damage you caused.It couldn't possibly be true.You use can to say that something is sometimes possible.Sudden changes can sometimes have a negative effect.10. possibility: the pastYou use could have to say that there is a possibility that something was true in the past.He could have been in the house on his own.Might have and may have can be used in a similar way.She might have found the information online.It may have been a dead bird.You also use could have to say that there was a possibility of something being true in the past, although it was not in fact true.It could have been worse.He could have made a fortune as a lawyer.Be Careful!Don't use 'could not have' to say that there is a possibility that something was not true. Instead you use might not have or may not have.She might not have known the password.If you want to say that it is impossible that something was true, you use could not have.The decision couldn't have been easy.The man couldn't have seen us at all.11. permissionCan and could are used to say that someone is allowed to do something.You can take out money at any branch of your own bank.He could come and use my computer.Cannot and could not are used to say that someone is or was forbidden to do something.You can't bring strangers in here.Her dad said she couldn't go out during the week.Collins COBUILD English Usage HarperCollins Publishers 1992, 2004, 2011, 2012Past participle: cannedGerund: canningImperativePresentPreteritePresent ContinuousPresent PerfectPast ContinuousPast PerfectFutureFuture PerfectFuture ContinuousPresent Perfect ContinuousFuture Perfect ContinuousPast Perfect ContinuousConditionalPast ConditionalCollins English Verb Tables HarperCollins Publishers 2011 Noun1.can - airtight sealed metal container for food or drink or paint etc.beer can - a can that holds beercaddy, tea caddy - a can for storing teacoffee can - a can for storing ground coffeecontainer - any object that can be used to hold things (especially a large metal boxlike object of standardized dimensions that can be loaded from one form of transport to another)milk can - large can for transporting milkoilcan - a can with a long nozzle to apply oil to machinerysoda can - a can for holding soft drinks2.can - the quantity contained in a cancontainerful - the quantity that a container will hold3.can - a buoy with a round bottom and conical topbuoy - bright-colored; a float attached by rope to the seabed to mark channels in a harbor or underwater hazards4.can - the fleshy part of the human body that you sit on; "he deserves a good kick in the butt"; "are you going to sit on your fanny and do nothing?"arse, ass, behind, buttocks, derriere, fanny, hind end, hindquarters, keister, nates, posterior, prat, buns, rear end, tooshie, tush, seat, fundament, backside, bottom, rump, stern, tail end, tail, butt, rear, bumbody part - any part of an organism such as an organ or extremitytorso, trunk, body - the body excluding the head and neck and limbs; "they moved their arms and legs and bodies"5.can - a plumbing fixture for defecation and urinationcommode, crapper, potty, pot, throne, toilet, stoolbathroom, bath - a room (as in a residence) containing a bathtub or shower and usually a washbasin and toiletflushless toilet - a toilet that relies on bacteria to break down waste matter (instead of using water)plumbing fixture - a fixture for the distribution and use of water in a buildingtoilet bowl - the bowl of a toilet that can be flushed with watertoilet seat - the hinged seat on a toilet6.can - a room or building equipped with one or more toiletsjohn, lav, lavatory, privy, toilet, bathroomhead - (nautical) a toilet on board a boat or shiproom - an area within a building enclosed by walls and floor and ceiling; "the rooms were very small but they had a nice view"washroom - a lavatory (particularly a lavatory in a public place)loo, W.C., water closet, closet - a toilet in BritainVerb1.can - preserve in a can or tin; "tinned foods are not very tasty"cookery, cooking, preparation - the act of preparing something (as food) by the application of heat; "cooking can be a great art"; "people are needed who have experience in cookery"; "he left the preparation of meals to his wife"preserve, keep - prevent (food) from rotting; "preserved meats"; "keep potatoes fresh"2.can - terminate the employment of; discharge from an office or position; "The boss fired his secretary today"; "The company terminated 25% of its workers"retire - make (someone) retire; "The director was retired after the scandal"pension off - let go from employment with an attractive pension; "The director was pensioned off when he got senile"clean out - force out; "The new boss cleaned out the lazy workers"furlough, lay off - dismiss, usually for economic reasons; "She was laid off together with hundreds of other workers when the company downsized"squeeze out - force out; "Some employees were squeezed out by the recent budget cuts"remove - remove from a position or an officeBased on WordNet 3.0, Farlex clipart collection. 2003-2012 Princeton University, Farlex Inc.nounSlang. A place for the confinement of persons in lawful detention:brig, house of correction, jail, keep, penitentiary, prison.Chiefly Regional: calaboose.verb1. To prepare (food) for storage and future use:conserve, preserve, put up.2. Slang. To end the employment or service of:cashier, discharge, dismiss, drop, release, terminate.Informal: ax, fire, pink-slip.Slang: boot, bounce, sack.The American Heritage Roget's Thesaurus. Copyright 2013, 2014 by Houghton Mifflin Harcourt Publishing Company. Published by Houghton Mifflin Harcourt Publishing Company. All rights reserved.
plechovkamocismtumtkonevDoseknnenknnteKonserveKonservenbchseenladigiladskatolomaldunginecesejopispotopoderlatasaberenlatarboteosatapurkittaapurkkipystysaadapouvoirbidonbote de conservecanettecannette dsgetakunnamega, getaniursjalattinapoterebarattolosaperescatolettadrksttkannakonservtkonservu krbaprastblikkunnenmogenstil houdentoiletbokshermetikkbokskannekonserverekunnemcpuszkaumiewiadropotrafi burkkunnalgga insparkastnga igen-e bilmek-ebilirconserve yapmakkutukutulamak1 [kn] MODAL AUX VB (cannot (can't (neg)) (could (condit, pt)))1. (= be able to) poderhe can do it if he tries hard puede hacerlo si se esfuerzaI can't or cannot go any further no puedo seguirI'll tell you all I can te dir todo lo que puedahe will do all he can to help you har lo posible por ayudarteyou can but ask con preguntar no se pierde nadathey couldn't help it ellos no tienen la culpa"have another helping" - "I really couldn't" -otra racin? -no puedo2. (= know how to) saberhe can't swim no sabe nadarcan you speak Italian? sabes (hablar) italiano?3. (= may) podercan I use your telephone? puedo usar su telfono?can I have your name? me dice su nombre?could I have a word with you? podra hablar contigo un momento?can't I come too? puedo ir tambin?5. (expressing disbelief, puzzlement) that cannot be! eso no puede ser!, es imposible!he can't have said that no puede haber dicho esothey can't have left already! no es posible que ya se han ido!how could you lie to me! cmo pudiste mentirme?how can you say that? cmo te atreves a decir eso?you can't be serious! lo dices en serio?it can't be true! no puede ser!what can he want? qu querr?where on earth can she be? dnde demonios puede estar?6. (expressing possibility, suggestion etc) he could be in the library puede que est en la bibliotecayou could try telephoning his office por qu no le llamas a su despacho?they could have forgotten puede (ser) que se hayan olvidadoyou could have told me! podas habrmelo dicho!it could have been a wolf poda ser un loboI reckon you could have got a job last year creo que podas obtener un trabajo el ao pasado2 [kn]C. CPD can opener N abrelatas m invCollins Spanish Dictionary - Complete and Unabridged 8th Edition 2005 William Collins Sons & Co. Ltd. 1971, 1988 HarperCollins Publishers 1992, 1993, 1996, 1997, 2000, 2003, 20051 [kn] vt [+ food] mettre en conserve2 [kn](STRONG) [kn] [cannot, can't] (negative) [could] (conditional and pt) modal aux vb (= be able to) pouvoirYou can do it if you try Vous pouvez le faire si vous essayez.I can't come Je ne peux pas venir.I can't hear youBUT Je ne t'entends pas.I can't rememberBUT Je ne m'en souviens pas. (= know how to) savoirI can swim Je sais nager.He can't drive Il ne sait pas conduire.I can play tennis Je sais jouer au tennis.Can you speak French?BUT Parlez-vous franais?. (expressing disbelief, puzzlement)That can't be true! Ce n'est pas possible!What CAN he want? Qu'est-ce qu'il peut bien vouloir?see also couldCollins English/French Electronic Resource. HarperCollins Publishers 2005 in cpds Bchsen-, Dosen-1 pret modal aux vb (defective parts supplied by to be able to) (= be able to) knnen; can you come tomorrow? kannst du morgen kommen?; I cant or cannot go to the theatre tomorrow ich kann morgen nicht ins Theater (gehen); Ill do it if I can wenn ich kann(, tue ich es); hell help you all he can er wird sein Mglichstes tun, er wird tun, was in seinen Krften steht; as soon as it can be arranged sobald es sich machen lsst; could you tell me knnen or knnten Sie mir sagen, ; can you speak German? knnen or sprechen Sie Deutsch?; we can but hope that, we can only hope that wir knnen nur hoffen, dass ; they could not (help) but condemn it sie konnten nicht anders, als das zu verurteilen (= may) drfen, knnen; can I come too? kann ich mitkommen?; can or could I take some more? darf ich mir noch etwas or noch einmal nehmen?; you can go now Sie knnen jetzt gehen; can I help? darf or kann ich Ihnen helfen?; could I possibly go with you? knnte or drfte ich vielleicht mitkommen?; Id like to go, can I? no, you cant ich wrde gerne gehen, darf ich? nein, du darfst nicht; can I use your car? no, you cant kann or darf ich dein Auto nehmen? nein (expressing surprise etc) knnen; how can/could you say such a thing! wie knnen/konnten Sie nur or blo so etwas sagen!; where can it be? wo kann das blo sein?; where can they have gone? wo knnen sie denn nur hingegangen sein?; you cant be serious das kann doch wohl nicht dein Ernst sein (expressing possibility) knnen; it could be that hes got lost vielleicht hat er sich verlaufen, (es ist) mglich, dass er sich verlaufen hat; could he have got lost? ob er sich wohl or vielleicht verlaufen hat?; he could be on the next train er knnte im nchsten Zug sein; and it could have been such a good party! und es htte so eine gute Party sein knnen!; to think he could have become a doctor wenn man bedenkt, dass er htte Arzt werden knnen (with verbs of perception) knnen; can you hear me? hren Sie mich?, knnen Sie mich hren? (= be capable of occasionally) knnen; she can be very nice when she wants to wenn sie will, kann sie sehr nett sein (indicating suggestion) knnen; you could try telephoning him Sie knnten ihn ja mal anrufen; you could have been a little more polite Sie htten etwas hflicher sein knnen; you could have told me das htten Sie mir auch sagen knnen (= feel inclined to) knnen; I could have murdered her ich htte sie umbringen knnen 2 vt foodstuffs einmachen, eindosen ? canned (inf) can it! Klappe! (inf)Collins German Dictionary Complete and Unabridged 7th Edition 2005. William Collins Sons & Co. Ltd. 1980 HarperCollins Publishers 1991, 1997, 1999, 2004, 2005, 2007Collins Italian Dictionary 1st Edition HarperCollins Publishers 1995 (kn) negative can't (kant) cannot (knt) verb1. to be able to. You can do it if you try hard. kan conseguir moci knnen kunne poder vima, suutma voida pouvoir moi tud, -hat, -het mampu geta potere, essere capace* (~) galti vart boleh kunnenkunnemc conseguir a putea, a i se permite mc moi moi kan ...-ebilir kh nng 2. to know how to. Can you drive a car? kan saber umt knnen kunne () saber oskama osata savoir - znati, umjeti tud bisa kunna sapere (~) mokti prast boleh kunnenkunnepotrafi saber a ti vedie znati umeti kan ...-ebilir ch kh nng 3. (usually may) to have permission to. You can go if you behave yourself. kan poder smt drfen f lov ( ) poder, estar permitido vima saada pouvoir smjeti szabad, -hat, -het boleh mega, geta potere (~) galti drkstt dibenarkan mogen f lov til, kunnemc, mie zezwolenie poder a putea smie lahko moi kan f, fr ...-ebilir , ch s cho php 4. used in questions to indicate surprise, disbelief etc. What can he be doing all this time? kan poder moci knnen gide vide ...( ) poder vima voida, olla (epusko, yllttyminen) pouvoir moi -hat, -het bisa geta potere (~) ? ( ) galt vartu boleh videorecorder mon tro, gadd vite mc poder a putea mc neki uopte kan ...-e bilmek () , , , ' s dng trong cu hi m ch s ngc nhin (kn) noun a metal container for liquids and many types of food. oil-can; beer-can; six cans of beer. blik, blikkie lata plechovka, ndoba die Kanne, die Dose kande; dse , lata, bote kann, purk, kanister tlkki bidon, bote de conserve limenka, konzerva kanna kaleng ds bidone; barattolo; lattina skardin kanna; skrda trauks; konservu krba tin blikboks; kannepuszka lata cutie (de conserve/de rcoritoare/ de bere) plechovica konzerva, ploevinka konzerva burk, kanna teneke kutu ci hp verb past tense, past participle canned to put (especially food) into cans, usually to preserve it. a factory for canning raspberries. blik enlatar naloit eindosen fylde i kande; komme p dse enlatar konservima sil mettre en conserve konzervirati konzervl mengalengkan niursja (dsir ea krukkur) mettere in scatola*, inscatolare konservuoti konservt mengetin inblikkenhermetisere, konservere puszkowa enlatar a conserva da do pl