

# Glossary

**abstract** [N-COUNT-U5] An **abstract** is a summary of an article, document, or other text. **streszczenie, abstrakt**

**accident** [N-COUNT-U10] An **accident** is something bad that was not meant to happen. **wypadek**

**alternative fuel** [N-COUNT-U12] An **alternative fuel** is a substance that is used for energy instead of fossil fuels. **paliwo alternatywne**

**arch** [N-COUNT-U2] An **arch** is a semicircle shape over an entrance. **łuk**

**architect** [N-COUNT-U2] An **architect** is a person whose job is to design and build structures. **architekt**

**biodegradable** [ADJ-U12] If something is **biodegradable**, it will break apart naturally. **biodegradowalny**

**biodiesel** [N-UNCOUNT-U12] **Biodiesel** is fuel that is made from vegetable oils or animal fat. **biodiesel**

**burn** [N-COUNT-U10] A **burn** is damage caused by heat or fire. **poparzenie**

**CAD** [N-UNCOUNT-U13] **CAD** (computer-aided design) refers to using computer technology to create computer models of objects. **projektowanie wspomagane komputerowo**

**CAM** [N-UNCOUNT-U13] **CAM** (computer-aided manufacturing) refers to the use of computer technology to help build the parts of a machine. **wytwarzanie wspomagane komputerowo**

**centimeter** [N-COUNT-U8] A **centimeter** is a metric measurement of distance that is equal to one one-hundredth of a meter. **centymetr**

**ceramic** [N-UNCOUNT-U3] **Ceramic** is a solid material made from clay or similar materials. **ceramika**

**CFD** [N-UNCOUNT-U13] **CFD** (computational fluid dynamics) refers to the use of mathematical formulas to study problems related to the movement of fluids and gases. **numeryczna mechanika płynów**

**chemical engineer** [N-COUNT-U12] A **chemical engineer** is someone who works in the chemical industry. **inżynier chemik**

**circuit card assembly** [N-COUNT-U14] A **circuit card assembly** is a card with all components installed that can be used to perform a variety of tasks in electrical equipment. **podzespoł na płytce obwodów drukowanych**

**civil engineer** [N-COUNT-U11] A **civil engineer** is a person who works with the design and construction of the physical environment. This includes buildings, roads, bridges, and other things. **inżynier budownictwa lądowego i wodnego**

**clip** [V-TRANS-U4] To **clip** something is to cut off part of it. **obcinac**

**coated** [ADJ-U3] If something is **coated**, it is covered by some type of material. **powlekany**

**commercial** [ADJ-U11] Something that is **commercial** is related to business or commerce. **handlowy, komercyjny**

**complicated** [ADJ-U6] If something is **complicated**, it has many details or is hard to understand. **skomplikowany**

**component** [N-COUNT-U14] A **component** is a part of something bigger. **składnik, część składowa, komponent**

**concrete** [N-UNCOUNT-U3] **Concrete** is a construction material made out of cement, crushed rocks, and other materials. **beton**

**construction** [N-UNCOUNT-U11] **Construction** is the process of building structures such as buildings, roads, and bridges. **budowa**

**control** [N-COUNT-U9] A **control** is a situation or condition that you do not change during an experiment. **warunki odniesienia, punkt odniesienia**

**convert** [V-TRANS-U12] To **convert** something is to change it from one thing to another. **przekształcić**

**cubed** [ADJ-U7] If a number is **cubed**, it is to be multiplied by itself three times. (**podniesiony**) do sześciennu

**cylinder** [N-COUNT-U2] A **cylinder** is a shape with long, straight sides and two circular ends. **walec**

**data** [N-UNCOUNT-U9] **Data** are numbers or characteristics that you collect and study. **dane**

**decelerate** [V-T-U5] To **decelerate** is to slow down. **zmniejszyć prędkość**

**design** [V-T-U1] To **design** something is to plan how it will look and how it will function. **projektować**

**develop** [V-T-U1] To **develop** something is to create it or to cause it to grow or expand. **opracować, rozwijać**

**diesel** [N-UNCOUNT-U12] **Diesel** is a fuel that is used in big engines like buses and trucks. **olej napędowy**

**discipline** [N-COUNT-U1] A **discipline** is a branch of instruction or learning. **dyscyplina, dziedzina**

**drafting** [N-UNCOUNT-U13] **Drafting** refers to the process of creating engineering drawings for machines. They illustrate how to manufacture and assemble the parts. **kreślenie**

**drill** [N-COUNT-U4] A **drill** is a tool that makes holes in surfaces like wood or inserts and removes screws. **wiertło**

**ellipse** [N-COUNT-U2] An **ellipse** is a shape like a flat circle or oval. **elipsa**

**engineer** [N-COUNT-U1] An **engineer** is a person who uses the knowledge gained by science to design and create practical applications for it. **inżynier**

**engineering** [N-UNCOUNT-U1] **Engineering** is the art of designing and creating practical applications from the knowledge gained by science. **inżynieria**

**equal** [V-T-U7] To **equal** something is to be the same as that thing. **równać się**

**experiment** [N-COUNT-U9] An **experiment** is a scientific study that you conduct to solve a problem. **doświadczenie, eksperiment**

**exponent** [N-COUNT-U7] An **exponent** is a small number written above another number and which signifies how many times the bottom number should be multiplied by itself. **wykładnik potęgi**

**fire extinguisher** [N-COUNT-U10] A **fire extinguisher** is a device used to put out fires. **gaśnica przeciwpożarowa**

**first aid** [N-UNCOUNT-U10] **First aid** is fast, basic medical treatment given right after an injury. **pierwsza pomoc**

**flyaway value** [N-COUNT-U15] The **flyaway value** of a vehicle that flies through the air is the total cost involved in making it and having it fly. **koszt eksploatacji statku powietrznego**

**foot** [N-COUNT-U8] A **foot** is an imperial measurement of distance that is equal to twelve inches. **stopa**

**force** [N-COUNT-U5] A **force** is something that causes an object to move. **siła**

**fossil fuel** [N-COUNT-U12] **Fossil fuel** is an energy source that is made from organic remains. Coal, gas and oil are fossil fuels. **paliwo kopalne**

**fuel** [N-COUNT-U12] A **fuel** is a substance that provides energy when burned. **paliwo**

**fulcrum** [N-COUNT-U6] A **fulcrum** is the pointed support that a lever's board or bar rests upon. **punkt podparcia**

**G** [N-COUNT-U5] A **G** is a unit of force that is equal to the force of gravity. It is used to show the forces on an object when it accelerates. **G - stała grawitacji**

**gallon** [N-COUNT-U8] A **gallon** is an imperial measurement of volume that is equal to approximately five liters. **galon**

**geometric** [ADJ-U2] Something that is **geometric** relates to the study of shapes and other figures. **geometryczny**

# Glossary

**glass** [N-UNCOUNT-U3] **Glass** is a solid, transparent material commonly used in windows. **szkło**

**gloves** [N-UNCOUNT-U10] **Gloves** are protective clothes worn over the hands. **rękawice**

**goggles** [N-UNCOUNT-U10] **Goggles** are eye glasses that provide protection. **okulary ochronne**

**hazard** [N-COUNT-U10] A **hazard** is something known to be dangerous. **niebezpieczeństwo, zagrożenie**

**hundredth** [N-COUNT-U7] A **hundredth** is one of one hundred equal things. **setna**

**hypothesis** [N-COUNT-U9] A **hypothesis** is an idea that attempts to explain an observation. **hipoteza**

**imperial** [ADJ-U8] Something that is **imperial** is part of the system of measurements that is uncommon in most parts of the world. It includes measurements such as the gallon, foot, and pound. **dotyczący jednostek miar i wag takich jak galon, stopa, funt itd.**

**inch** [N-COUNT-U8] An **inch** is an imperial measurement of distance that is equal to one twelfth of a foot. **cal**

**inclined plane** [N-COUNT-U6] An **inclined plane** is a smooth surface with one end that is higher than the other. **równia pochylą**

**infrastructure** [N-UNCOUNT-U11] **Infrastructure** is the physical structures needed to operate a society or an organization. **infrastruktura**

**injury** [N-COUNT-U10] An **injury** is damage to the body. **obrażenie**

**input voltage** [N-COUNT-U14] **Input voltage** is the number of volts a device needs to operate. **napięcie wejściowe**

**inspect** [V-T-U1] To **inspect** something is to examine it carefully. **zbadać, skontrolować**

**internal fuel capacity** [N-COUNT-U15] **Internal fuel capacity** is the maximum amount of fuel a vehicle can carry without externally attached fuel tanks. **pojemność (wewnętrznych) zbiorników paliwa**

**kilogram** [N-COUNT-U8] A **kilogram** is a metric measurement of weight that is equal to one thousand grams. It is also equal to approximately two pounds. **kilogram**

**kinetic energy** [N-UNCOUNT-U5] The **kinetic energy** of an object is the energy it possesses due to motion. It is gained through acceleration and stays constant unless the object's speed changes. **energia kinetyczna**

**land development** [N-UNCOUNT-U11] **Land development** is the process of making an area of land more useful by constructing buildings, roads, or bridges. **zagospodarowanie gruntów**

**launch** [V-T/I-U15] To **launch** something is to push it into the air very quickly. **wystrzelić**

**lever** [N-COUNT-U6] A **lever** is a bar that rests on a fulcrum. **dźwignia**

**leverage** [N-UNCOUNT-U6] **Leverage** is the power that comes from using a lever. **przełożenie (dźwigni)**

**licensed production** [N-UNCOUNT-U15] **Licensed production** is the practice of paying a company for the right to produce something it has designed. **produkcja na licencji**

**liter** [N-COUNT-U8] A **liter** is a metric measurement of volume that is equal to one thousand milliliters. It is also equal to approximately one fifth of a gallon. **litr**

**load** [N-COUNT-U6] A **load** is a particular amount of weight a person or machine lifts or carries. **obciążenie**

**lumber** [N-UNCOUNT-U3] **Lumber** is wood that is used as a construction material. **tarcica**

**Mach** [N-UNCOUNT-U15] **Mach** is a unit for measuring the speed of something in comparison to the speed of sound. **liczba Macha**

**machine** [N-COUNT-U1] A **machine** is an apparatus made from multiple parts. It is designed to perform some kind of work.  
**maszyna**

**mathematics** [N-UNCOUNT-U1] **Mathematics** is the study of numbers and change. **matematyka**

**mechanical engineering** [N-UNCOUNT-U13] **Mechanical engineering** is concerned with designing, making and using machines and tools. **budowa maszyn**

**mechanism** [N-COUNT-U13] A **mechanism** is a number of parts in a machine that are linked together to perform a particular task. **mechanizm**

**meter** [N-COUNT-U8] A **meter** is a metric measurement of distance that is equal to one hundred centimeters. **metr**

**methodology** [N-COUNT-U9] A **methodology** is a particular way of studying or doing something. **metodologia**

**metric** [ADJ-U8] Something that is **metric** is part of the system of measurements used throughout most of the world. It includes measurements such as the liter, meter, and gram. **(o jednostkach miar i wag) metryczny**

**municipal** [ADJ-U11] Something that is **municipal** is related to an entire city, town, or community. **miejski,**  
**municypalny**

**nontoxic** [ADJ-U12] If something is **nontoxic**, it is not poisonous. **nietoksyczny**

**observation** [N-COUNT-U9] An **observation** is a particular behavior or event that you witness. **obserwacja**

**output power** [N-COUNT-U14] **Output power** is the amount of watts a power source puts out. **moc oddawana**

**output voltage** [N-COUNT-U14] **Output voltage** is the number of volts a power source puts out. **napięcie wyjściowe**

**oval** [N-COUNT-U2] An **oval** is a round shape that is longer than it is wide. **owal**

**percent** [N-UNCOUNT-U7] A **percent** is a number out of every 100. **procent**

**petroleum** [N-UNCOUNT-U12] **Petroleum** is a type of oil found in the ground. **ropa naftowa**

**physics** [N-UNCOUNT-U1] **Physics** is a part of science that deals with the study of matter, movement, energy, and force.  
**fizyka**

**pliers** [N-UNCOUNT-U4] **Pliers** are tools that are used to pull out nails or cut wires. **kombinerki**

**porcelain** [N-UNCOUNT-U3] **Porcelain** is a solid ceramic material that is of higher quality than normal ceramic.  
**porcelana**

**potential energy** [N-UNCOUNT-U5] The **potential energy** of an object is the potential that it has due to its position. It becomes kinetic energy when the object begins moving. **energia potencjalna**

**pound** [N-COUNT-U8] A **pound** is an imperial measurement of weight that is equal to approximately 454 grams.  
**funt**

**power supply** [N-COUNT-U14] A **power supply** distributes electrical current to a device. **zasilanie**

**precaution** [N-COUNT-U10] A **precaution** is something you do to prevent something from happening. **środek ostrożności**

**pressure vessel** [N-COUNT-U13] A **pressure vessel** is a container that holds liquid or gas at a specific pressure.  
**zbiornik ciśnieniowy**

**prism** [N-COUNT-U2] A **prism** is a three-dimensional shape. **graniastosłup**

**problem** [N-COUNT-U9] A **problem** is a question that you are trying to answer. **zadanie**

# Glossary

**procedure** [N-COUNT-U9] A **procedure** is a series of steps that one takes during an experiment. **procedura**

**prohibited** [ADJ-U10] If something is **prohibited**, it is not allowed. **zabroniony**

**propellant** [N-COUNT-U15] **Propellant** is the fuel used in the engine of a vehicle that flies through the air. **materiał pędny**

**prototype** [N-COUNT-U13] A **prototype** is an initial model of a machine or system. Engineers use this to help build the actual machine. **prototyp**

**pulley** [N-COUNT-U6] A **pulley** is a machine that consists of a wheel with a rope in its groove. **krążek (linowy)**

**ramjet** [N-COUNT-U15] A **ramjet** is an engine, for a vehicle that flies through the air, that has no rotating parts. **odrzutowy silnik strumieniowy**

**rectangle** [N-COUNT-U2] A **rectangle** is a shape consisting of four straight lines and four right angles, and whose opposite sides are the same length. **prostokąt**

**reinforced** [ADJ-U3] If something is **reinforced**, it is made stronger by the addition of some type of material. **zbrojony, wzmacniony**

**renewable** [ADJ-U12] If a resource is **renewable**, it can be replaced by the natural world. **odnawialny**

**residential** [ADJ-U11] Something that is **residential** is related to where people live. **mieszkaniowy (o dzielnicy, w opozycji do „przemysłowy”, „handlowy”)**

**result** [N-COUNT-U9] A **result** is a finding or conclusion of an experiment. **wynik**

**road construction** [N-UNCOUNT-U11] **Road construction** is the process of building a road. **budowa drogi**

**scale** [N-UNCOUNT-U11] **Scale** is the size of something in comparison to another similar thing. **skala**

**screw** [N-COUNT-U4] A **screw** is a piece of metal that you turn to fasten objects together. **śruba**

**screwdriver** [N-COUNT-U4] A **screwdriver** is a tool for putting screws into surfaces. **śrubokręt**

**semi-circle** [N-COUNT-U2] A **semi-circle** is a shape that is half of a circle. **półkole**

**shock** [N-COUNT-U10] A **shock** is an injury caused by electricity. **porażenie (prądem), wstrząs**

**simple machine** [N-COUNT-U6] A **simple machine** is a basic machine with few moving parts. **maszyna prosta**

**simulation** [N-COUNT-U13] A **simulation** is an imitation of a possible event or situation. **symulacja**

**solder** [N-UNCOUNT-U4] **Solder** is a soft metal wire that is heated with a soldering iron to join two metal surfaces. **lut, stop lutowniczy**

**soldering iron** [N-COUNT-U4] A **soldering iron** is used to join pieces of metal together with solder. **lutownica**

**spacecraft** [N-COUNT-U15] A **spacecraft** is a vehicle that flies outside the Earth's atmosphere. **statek kosmiczny**

**square** [N-COUNT-U2] A **square** is a shape consisting of four right angles and four straight sides of equal length. **kwadrat**

**squared** [ADJ-U7] If a number is **squared**, it is to be multiplied by itself. **(o liczbie) podniesiony do kwadratu**

**stainless steel** [N-UNCOUNT-U3] **Stainless steel** is a type of steel that does not rust. **stal nierdzewna**

**steel** [N-UNCOUNT-U3] **Steel** is a very strong construction material that is made mostly from iron. **stal**

**stopping distance** [N-COUNT-U5] A **stopping distance** is the distance an object in motion takes to come to a complete stop. **droga zatrzymania**

**stress** [N-COUNT-U13] A **stress** is a force that presses against an object. It can cause the object to change shape. **nacisk, naprężenie**

**strip** [V-TRANS-U4] To **strip** something is to remove it from the surface of something else. **usuwać, zdzierać**

**technology** [N-UNCOUNT-U1] **Technology** is the group of new and sophisticated creations which make our lives easier. Examples include television, computers, and telephones. **technika**

**tenth** [N-COUNT-U7] A **tenth** is one of ten equal things. **dziesiąta (część)**

**textured** [ADJ-U3] If something is **textured**, it has specific qualities added to its surface. **(o powierzchni) z fakturą (w odróżnieniu od „gładki”)**

**thousandth** [N-COUNT-U7] A **thousandth** is one of one thousand equal things. **tysięczna (część)**

**thrust** [N-UNCOUNT-U15] **Thrust** is the force exerted by an engine that causes a vehicle to fly through the air. **sila ciągu**

**tile** [N-COUNT-U3] A **tile** is a construction material that is made from ceramic, porcelain, stone, and other materials. It is often used as a wall or floor covering. **płytki, kafelki**

**times** [PREP-U7] If something is **times** a number, it is multiplied by that number. **wielokrotność, razy**

**to the (-th) power** [PHRASE-U7] If something is multiplied **to the (-th) power**, it is multiplied by itself that number of times. **do n-tej potęgi**

**topographic** [ADJ-U11] Something that is **topographic** is related to the detailed mapping of terrain. **topograficzny**

**transfer** [V-I-U5] To **transfer** something is to move it from one object to another. **przenieść, przekazać**

**variable** [N-COUNT-U9] A **variable** is a situation or condition that you change during an experiment. **zmienna**

**vault** [N-COUNT-U2] A **vault** is a rounded or triangular space added to a ceiling to create space. **sklepienie**

**velocity** [N-UNCOUNT-U15] **Velocity** is a measurement of how far something travels in a set amount of time. **prędkość**

**vise** [N-COUNT-U4] A **vise** holds something tightly in place while someone works on it. **imadło**

**volt** [N-COUNT-U14] A **volt** is a measurement of electric potential. **wolt**

**water supply** [N-UNCOUNT-U11] The **water supply** is the supply of fresh water for an area or community. **instalacja wodociągowa**

**watt** [N-COUNT-U14] A **watt** is a measurement of electrical power. **wat**

**wedge** [N-COUNT-U6] A **wedge** is a tool with one wide end and one pointed end. **klin**

**wheel and axle** [N-COUNT-U6] A **wheel and axle** is a machine consisting of a wheel with a rod through it. **zestaw kołowy**

**wire stripper** [N-COUNT-U4] A **wire stripper** is a tool that is used to remove insulation from wires. **szczypce do ściągania izolacji**

**work** [N-UNCOUNT-U5] **Work** is the transfer of energy. It is measured by how far an object is moved by a force. **praca**

**work-energy principle** [N-UNCOUNT-U5] The **work-energy principle** is the idea that the change in an object's energy is equal to the total work done to the object. **zasada równoważności pracy i energii**