Glossary

abductive reasoning [N-UNCOUNT-U13] **Abductive reasoning** is a process that uses reliable inferences and data to hypothesize the best, but not the only, explanation for a situation. rozumowanie abdukcyjne, abdukcja (proces wyjaśniania tego, co jest nam już wiadome)

abstract algebra [N-UNCOUNT-U11] **Abstract algebra** is an advanced branch of mathematics that focuses on theoretical structures. algebra abstrakcyjna

academia [N-UNCOUNT-U14] **Academia** is the community of students and scholars engaged in higher education and research. środowisko akademickie

activated sludge [N-UNCOUNT-U6] **Activated sludge** is sewage or wastewater to which air and microorganisms are added to break down organic pollutants. osad czynny

administrator [N-COUNT-U14] An **administrator** is someone who manages a business or a department, and is typically responsible for organizing operations and making major decisions. tu: kierownik

advisor [N-COUNT-U14] An **advisor** is an individual who gives advice or guidance to someone else, usually in a professional environment. doradca

application [N-COUNT-U15] An **application** is the act of applying something to a particular purpose or use. stosowanie, zastosowanie, użycie (np. leku)

applied mathematics [N-UNCOUNT-U11] **Applied mathematics** is any branch of mathematics that serves a direct, practical purpose. matematytka stosowana

arithmetic [N-UNCOUNT-U11] **Arithmetic** is a branch of mathematics that includes basic number forms and fundamental operations such as addition, subtraction, multiplication, and division. arytmetyka

assemble [V-T-U12] To **assemble** something is to put its parts together. montować, składać

atom [N-COUNT-U1] An **atom** is the smallest unit of matter that can exist by itself. atom

atomic number [N-COUNT-U1] An **atomic number** is a measure of the number of protons in an atom, and is used to identify atoms from different elements. liczba atomowa

atomic radius [N-COUNT-U3] An **atomic radius** is a measurement of distance between the outer boundary of an atom's electron cloud and its nucleus. promień atomu

batch reactor [N-COUNT-U6] A **batch reactor** is a type of reactor that remains completely sealed while reactions are occurring inside it. reaktor okresowy

bioreactor [N-COUNT-U6] A **bioreactor** is a device in which a reaction or process occurs that involves living organisms. bioreaktor

block [N-COUNT-U3] A **block** is a set of neighboring groups on the periodic table. blok (w układzie okresowym pierwiastków)

calculus [N-UNCOUNT-U11] **Calculus** is a complex branch of mathematics that deals with rates of change and advanced measurements of physical properties. rachunek różniczkowo-całkowy; rachunek różniczkowy i całkowy

catalyst [N-COUNT-U5] A **catalyst** is a substance that starts or increases the rate of a chemical reaction, but is not affected by the reaction. katalizator

central tendency [N-UNCOUNT-U9] **Central tendency** is the inclination of samples in a particular set of data to gather near a central value. tendencja centralna (pozycja skali pomiarowej, wokół której skupiają się zaobserwowane wartości zmiennej)

chemical energy [N-UNCOUNT-U2] **Chemical energy** is the energy that is released by the interaction of chemical substances. energia chemiczna

closed system [N-COUNT-U10] A **closed system** is a system that does not gain or lose mass. (termod.) układ zamknięty (brak możliwości wymiany materii)

commercial interest [N-COUNT-U15] **Commercial interest** is something beneficial based on potential profits. **interes handlowy**

compound [N-COUNT-U1] A **compound** is combination of two or more elements. **związek chemiczny**

concentration [N-COUNT-U5] A **concentration** refers to the number of molecules of a substance in a given volume. **(chem.) stężenie**

conclusion [N-COUNT-U7] A **conclusion** is a decision or determination that is made after an experiment. **wniosek, konkluzja**

conserve [V-T-U2] To **conserve** something is to use little or none of something so that it will be available at a later time. **oszczędzać (np. energię)**

constraint [N-COUNT-U12] A **constraint** is a restriction or limitation. **tu: ograniczenie (konstrukcyjne, projektowe)**

construct [V-T-U12] To **construct** something is to build it. **konstruować, budować**

consumption [N-UNCOUNT-U10] **Consumption** is the amount of an extensive quantity that is destroyed during a particular period of time. **zużycie, rozchód, spożycie (wolumin tego, co zostało zużyte)**

control group [N-COUNT-U7] A **control group** is a part of an experiment that does not receive the action or treatment that is being tested. **grupa kontrolna (w badaniach)**

cooling jacket [N-COUNT-U6] A **cooling jacket** is a covering placed around a container, such as a tank or pipe, to add or remove heat. **płaszcz chłodzący**

criteria [N-COUNT-U12] **Criteria** are standards or requirements that must be met. **kryteria**

CSTR [ABBREV-U6] A **CSTR (continuous stirred-tank reactor)** is a type of reactor that receives and discharges a continuous flow of material, and thoroughly mixes its contents. **reaktor przepływowy z całkowitym wymieszaniem, reaktor CSTR**

deductive reasoning [N-UNCOUNT-U13] **Deductive reasoning** is the process of forming a conclusion based on the logical application of known truths. **rozumowanie dedukcyjne, dedukcja (proces wyprowadzania wniosków z tego, co już jest wiadome)**

detailed design [N-COUNT-U12] A **detailed design** is an in-depth version of a design, usually updated from the preliminary design with the results of research and analysis. **projekt wykonawczy**

deviation [N-COUNT-U9] A **deviation** is an unexpected or unusual number in a set of data, as compared to the average of the group. **odchylenie (np. statystyczne)**

diameter [N-COUNT-U4] A **diameter** is a measure of distance across a circle at its widest part. **średnica**

diatomic [ADJ-U1] If a molecule is **diatomic**, it contains two atoms. **dwuatomowy**

double blind [ADJ-U8] If an experiment is **double blind**, the assignment of members to the control group and experimental group is unknown to both the subjects and researchers. **podwójnie ślepy (np. eksperyment)**

driving force [N-COUNT-U4] A **driving force** is the act of using force to propel something forward or along a set path. **siła napędowa**

electromagnetic radiation [N-UNCOUNT-U2] **Electromagnetic radiation** is energy that travels in waves and often produces light. **promieniowanie elektromagnetyczne**

electron [N-COUNT-U1] An **electron** is a part of an atom with a negative electrical charge. **elektron**

electron affinity [N-UNCOUNT-U3] **Electron affinity** is the negative charge that occurs when an atom receives an extra electron and becomes a negative ion. **powinowactwo elektronowe**

electron configuration [N-COUNT-U3] An **electron configuration** is a system that shows how electrons are distributed in an atom's orbitals. **konfiguracja elektronowa pierwiastka**

electron shell [N-COUNT-U3] An **electron shell** is the path an electron follows as it orbits the nucleus of an atom, which may consist of one or more orbitals. **powłoka elektronowa**

Glossary

element [N-COUNT-U1] An **element** is a basic substance that is made up of one particular type of atom. **pierwiastek (chemiczny)**

element symbol [N-COUNT-U3] An **element symbol**, or chemical symbol, is a one- or two-letter designation that scientists use to refer to an element, which is often based on the Latin name of the element. **symbol pierwiastka**

elementary algebra [N-UNCOUNT-U11] **Elementary algebra** is a branch of mathematics that deals with the rules of applying operations to variable quantities. **algebra elementarna**

energy efficiency [N-UNCOUNT-U2] **Energy efficiency** is the ratio between the useful output and input of energy conversion. **efektywność energetyczna**

energy quality [N-UNCOUNT-U2] **Energy quality** is a measurement of an energy's potential to do useful work. **jakość energetyczna**

engineer [N-COUNT-U14] An **engineer** is someone who designs and builds complex products and features. **inżynier**

estimate [V-T-U12] To **estimate** something is to attempt to determine the likely amount or cost of it before it is finished. **szacować (np. koszty)**

Euclidean geometry [N-UNCOUNT-U11] **Euclidean geometry** is a branch of mathematics that deals with the rules and behavior of structural elements in a flat plane. **geometria euklidesowa**

experiment [N-COUNT-U7] An **experiment** is a scientific process that is designed to reveal the effect of something. **eksperyment**

experimental group [N-COUNT-U7] An **experimental group** is a part of an experiment that receives the action or treatment that is being tested. **grupa eksperymentalna (w badaniach)**

experimentation [N-UNCOUNT-U8] **Experimentation** is the process of performing controlled studies of something in order to get more information about it. **eksperymentowanie, przeprowadzanie badań**

extensive quantity [N-COUNT-U10] An **extensive quantity** is an amount that changes based on the size of a system and has distinct, countable units. **(termod.) parametr ekstensywny (zależny od wielkości układu, np. masa, objętość)**

external validity [N-UNCOUNT-U8] **External validity** is the degree to which an experiment and its results can be applied to different scenarios or subjects. **trafność zewnętrzna (np. badania naukowego)**

feasibility study [N-COUNT-U12] A **feasibility study** is a period of research to determine whether a proposition is possible and likely to be successful, based on realistic conditions. **studium wykonalności**

field experiment [N-COUNT-U8] A **field experiment** is an experiment occurring in a real environment rather than a controlled laboratory. **eksperyment terenowy**

final [ADJ-U10] If something is **final**, it is related to the status of something at the end of a process or period of time. **końcowy**

flow rate [N-COUNT-U4] A **flow rate** is the amount of fluid that is able to flow in a given amount of time. **natężenie przepływu**

flux [N-UNCOUNT-U4] **Flux** is the rate of movement of a quantity of liquid, measured at one particular point in a system. **(fiz.) strumień**

formal logic [N-UNCOUNT-13] **Formal logic** is a branch of logic that deals only with deductive reasoning and emphasizes the form of a statement over its content. **logika formalna, logika matematyczna**

frame of reference [N-COUNT-U2] A **frame of reference** is a set of values on which measurements can be based. **tu: punkt odniesienia**

generation [N-UNCOUNT-U10] **Generation** is the amount of an extensive quantity that is created during a particular period of time. **wytwarzanie, produkcja, generowanie (wolumin tego, co zostało wytworzone)**

geodesy [N-UNCOUNT-U11] **Geodesy** is the study of the physical dimensions and structure of the Earth. **geodezja**

group [N-COUNT-U3] A **group** is a collection of elements that are found in the same column of the periodic table. **grupa (w układzie okresowym pierwiastków; czasem zwana rodziną pierwiastków)**

heat [N-UNCOUNT-U2] **Heat** is a form of energy that produces high temperatures and includes the kinetic energy of atoms and ions within an object. **ciepło**

hypothesis [N-COUNT-U7] A **hypothesis** is an idea, statement, or prediction that explains something, but which is not tested or proven correct. **hipoteza**

identify [V-T-U12] To **identify** something is to recognize or establish it. **identyfikować, rozpoznawać**

impeller [N-COUNT-U6] An **impeller** is a part of a machine that rotates to move fluids. **wirnik**

in excess [ADV-U5] If something is **in excess**, it surpasses a normal, predicted, or required amount. **w nadmiarze**

independent variable [N-COUNT-U7] An **independent variable** is the factor in an experiment that changes from one group to another. **zmienna niezależna**

inductive reasoning [N-UNCOUNT-U13] **Inductive reasoning** is the process of forming a conclusion based on what happens in a small sample of instances. **rozumowanie indukcyjne, indukcja (wnioskowanie „od szczegółu do ogółu")**

informal logic [N-UNCOUNT-13] **Informal logic** is a branch of logic the deals with reason, fallacies, and critical thinking in ordinary language. **logika nieformalna**

initial [ADJ-U10] If something is **initial**, it is related to the status of something at the beginning of a process or period of time. **początkowy**

inlet [N-COUNT-U4] An **inlet** is a place where something enters something else. **wlot, otwór wlotowy**

input [N-COUNT-U10] An **input** is the amount of an existing extensive quantity that is added to a system during a particular period of time. **wkład, substancje/materiały wejściowe (w sensie chemicznym: substraty)**

inspector [N-COUNT-U14] An **inspector** is someone who is responsible for examining something in order to make sure that it meets particular requirements or standards. **inspektor, kontroler**

intensive quantity [N-COUNT-U10] An **intensive quantity** is an amount that does not change based on the size of a system, which can be measured, but cannot be separated into distinct, countable units. **(termod.) parametr intensywny (niezależny od wielkości układu i mający sens do każdego jego elementu, np. ciśnienie, temperatura)**

internship [N-COUNT-U14] An **internship** is a program in which a student or recent graduate works with professionals in order to gain experience in an industry. **praktyka, staż**

ion [N-COUNT-U1] An **ion** is an atom or combination of atoms that has a positive or negative electrical charge. **jon**

ionization energy [N-UNCOUNT-U3] **Ionization energy** is the minimum amount of energy required to remove an electron from an atom, ion, or molecule in its ground state. **energia jonizacji, potencjał jonizacyjny atomu lub cząsteczki**

isotope [N-COUNT-U1] An **isotope** is one of two or more atoms with the same number of protons but different numbers of neutrons in their nuclei. **izotop**

kinetic energy [N-UNCOUNT-U2] **Kinetic energy** is energy that is active or moving. **energia kinetyczna**

lab technician [N-COUNT-U14] A **lab technician** is a worker who performs scientific tests in a laboratory. **technik laborant**

limiting reactant [N-COUNT-U5] A **limiting reactant** is the first reactant to be completely consumed in a chemical reaction, and is responsible for stopping the reaction. **reagent ograniczający**

logic [N-UNCOUNT-U13] **Logic** is the science of the processes involved in thought and reason. **logika**

logical form [N-COUNT-13] A **logical form** is the basic structure of a sentence, proposition, or statement without regard for the content of the words. **forma logiczna**

Glossary

mass number [N-COUNT-U1] A **mass number** is a measure of the number of protons and neutrons in an atom, and may differ among atoms of the same element. **liczba masowa**

mathematical logic [N-UNCOUNT-13] **Mathematical logic** is the use of logic to analyze numerical quantities. **logika matematyczna**

mean [N-COUNT-U9] A **mean**, or average, is a quantity that is calculated by adding all the quantities together and then dividing the total by the number of quantities. **średnia (np. w statystyce)**

mean absolute deviation [N-COUNT-U9] The **mean absolute deviation**, or average absolute deviation, is the average distance of a set of values from the set's mean value, and is used to measure how consistent the results are. **średnie odchylenie bezwzględne, odchylenie przeciętne**

median [N-COUNT-U9] A **median** is a quantity that is in the middle of a set when the numbers are listed sequentially. **mediana, wartość środkowa**

membrane bioreactor [N-COUNT-U6] A **membrane bioreactor** is a reactor that uses both a membrane process and microorganisms to treat sewage or wastewater. **bioreaktor membranowy**

mode [N-COUNT-U9] A **mode** is a common quantity in a set of quantities, and is calculated by determining which quantity appears most frequently in the set. **dominanta, wartość najczęstsza (w statystyce)**

molecule [N-COUNT-U1] A **molecule** is the smallest piece of a substance that contains all the elements in the substance. **cząsteczka, molekuła**

moral [ADJ-U15] Acting in a **moral** way is to be governed by personal values and beliefs. **moralny (np. obowiązek)**

narrow down [PHRASAL V-U12] To **narrow** something **down** is to eliminate the less feasible or less desirable options. **zawęzić, zawężać (np. liczbę projektów)**

natural experiment [N-COUNT-U8] A **natural experiment** is an observational study wherein nature or factors other than the experimenters determine the conditions. **eksperyment w warunkach naturalnych**

neutral [ADJ-U15] **Neutral** is being neither good nor bad. **tu: neutralny, bezstronny**

neutron [N-COUNT-U1] A **neutron** is a part of an atom with no electrical charge. **neutron**

noble gas [N-COUNT-U3] A **noble gas** is an element that is not chemically reactive under normal circumstances, and belongs to Group 18 on the periodic table. **gaz szlachetny, helowiec**

nonacademic [ADJ-U14] If something is **nonacademic**, it is not related to teaching or studying. **nieakademicki, zawodowy, praktyczny**

non-Euclidean geometry [N-UNCOUNT-U11] **Non-Euclidean geometry** is any type of geometry that deals with rules and behavior of structural elements on a surface that is curved rather than flat. **geometria nieeuklidesowa**

nonprofit [ADJ-U14] If an organization is **nonprofit**, its purpose is to complete work without making a profit. **non-profit, niedochodowy, nieprzynoszący dochodów**

nucleus [N-COUNT-U1] A **nucleus** is the central part of an atom. **jądro (atomowe)**

observation [N-COUNT-U7] An **observation** is a fact that is discovered by watching something closely. **obserwacja, spostrzeżenie**

observational study [N-COUNT-U8] An **observational study** is a study in which the placement of subjects into a control group or a treated group is not determined by the researcher. **obserwacja (metoda badawcza)**

open system [N-COUNT-U10] An **open system** is a system that allows mass to enter and leave it. **(termod.) układ otwarty (możliwa wymiana materii i energii)**

outlet [N-COUNT-U4] An **outlet** is a place where something exits or is released. **wylot, otwór wylotowy**

output [N-COUNT-U10] An **output** is the amount of an extensive quantity that is removed from a system, but not destroyed, during a particular period of time. **uzysk, wydajność, substancje/materiały wyjściowe (w sensie chemicznym: produkty)**

patent [N-COUNT-U14] A **patent** is an official document that gives an inventor or company the sole right to make a particular invention for a certain amount of time. **patent**

patient welfare [PHRASE-U15] **Patient welfare** is consideration made for safety and well-being during treatment or care. **dobro pacjenta**

peer review [N-UNCOUNT-U8] **Peer review** is the process of reading materials that were produced by other members of the same profession for the purpose of providing an opinion or testing validity. **peer review (w krajach anglosaskich: system recenzowania, opierający się na anonimowości i niezależności recenzentów, co ma zachęcić do nieskrępowanej krytyki i ograniczać kumoterstwo)**

period [N-COUNT-U3] A **period** is one row on the periodic table. **okres (w układzie okresowym pierwiastków)**

periodic table [N-COUNT-U3] The **periodic table** is a chart that organizes elements into groups and periods, according to their atomic number and chemical properties. **układ okresowy pierwiastków, tablica Mendelejewa**

placebo effect [N-COUNT-U8] The **placebo effect** is a situation in which someone is not receiving a treatment, but thinks he or she is receiving the treatment and therefore experiences the effects of the treatment. **efekt placebo**

plug flow reactor [N-COUNT-U6] A **plug flow reactor**, also called a tubular reactor, is a type of reactor in which a reaction occurs, as reactants are pumped through a tube. **reaktor o przepływie tłokowym**

population [N-COUNT-U9] A **population** is an entire group of factors or objects that are the subject of an experiment. **(statyst.) populacja, zbiorowość generalna**

potential energy [N-UNCOUNT-U2] **Potential energy** is energy that is not active or moving, and is stored for possible future use. **energia potencjalna**

predicate logic [N-UNCOUNT-13] **Predicate logic** is a type of symbolic logic that deals with the internal structure of statements using formulas with specific and quantifiable variables. **logika predykatów, rachunek kwantyfikatorów, logika pierwszego rzędu**

preliminary design [N-COUNT-U12] A **preliminary design** is an initial, conceptual design meant to explore the general idea of a design. **projekt wstępny**

probability [N-UNCOUNT-U11] **Probability** is a numerical calculation that determines how likely a particular outcome is. **prawdopodobieństwo**

problem [N-COUNT-U7] A **problem** is a question or situation that needs to be answered or resolved. **problem, zagadnienie**

product [N-COUNT-U5] A **product** is something that is created as the result of a process or chemical reaction. **produkt (np. reakcji chemicznej)**

professor [N-COUNT-U14] A **professor** is a teacher at a university who usually has a doctorate or other advanced degree. **tu: nauczyciel akademicki (w USA)**

profit [N-UNCOUNT-U15] **Profit** is the money remaining after paying expenses. **zysk**

propositional logic [N-UNCOUNT-13] **Propositional logic** is a type of symbolic logic that deals with the truth or falseness of a proposition. **logika zdań, logika twierdzeń**

proton [N-COUNT-U1] A **proton** is a part of an atom with a positive electrical charge. **proton**

pure mathematics [N-UNCOUNT-U11] **Pure mathematics**, or speculative mathematics, is a branch of mathematics that focuses on abstract and general ideas rather than direct applications for mathematical concepts. **matematyka teoretyczna**

range [N-COUNT-U9] A **range** is the difference between two values in a data set, usually calculated as the amount of data between the lowest and highest numbers in the set. **tu: zakres, przedział**

rate [N-COUNT-U4] A **rate** is a measure of the speed or number of times that something happens during a fixed period of time. **tu: szybkość, tempo**

Glossary

rate process [N-COUNT-U4] A **rate process** is the movement of an object or substance over a set period of time. **przebieg zmian w układzie w funkcji czasu**

raw data [N-UNCOUNT-U9] **Raw data**, or primary data, are the results of an experiment or analysis as they appear immediately after collection from their source, before processing of any kind. **dane pierwotne (nieprzetworzone)**

reactant [N-COUNT-U5] A **reactant** is a substance that participates during a chemical reaction. **reagent (substancja reagująca)**

reaction [N-COUNT-U5] A **reaction** is a chemical event that occurs when multiple substances combine to create a new substance. **reakcja (chemiczna)**

reactor [N-COUNT-U6] A **reactor** is a large machine that generates energy. **reaktor**

reagent [N-COUNT-U5] A **reagent** is a substance that is added to a system to cause a chemical reaction, but is not necessarily consumed by the reaction. **odczynnik chemiczny**

regulation [N-COUNT-U15] An **regulation** is a rule or condition that governs procedure or behavior. **regulacja, przepis**

reproducibility [N-UNCOUNT-U8] **Reproducibility** is the ability for an entire experiment or its parts to be duplicated by another person and generate the same results. **odtwarzalność (np. wyników badań)**

research [N-UNCOUNT-U8] **Research** is the process of investigating materials and sources to reach new conclusions. **badanie, badania, badania naukowe**

researcher [N-COUNT-U14] A **researcher** is someone who gathers and assesses information. **pracownik naukowo-badawczy**

resistance [N-UNCOUNT-U4] **Resistance** is the slowing or stopping effect imposed by one material on another. **opór**

responsibility [N-COUNT-U15] **Responsibility** is something that someone is required to do. **odpowiedzialność**

result [N-COUNT-U7] A **result** is something that occurs because of something else. **wynik, rezultat**

rotating biodisk tank [N-COUNT-U6] A **rotating biodisk tank** is a container with a series of moving disks that transfer bacteria to wastewater to break down organic materials. **obrotowy zbiornik biodyskowy (biologiczny)**

safeguard [N-COUNT-U8] A **safeguard** is something that is used to protect against loss or damage. **zabezpieczenie**

sample [N-COUNT-U9] A **sample** is a subset of a population that is usually representative of that population. **(statyst.) próba, próbka, zbiorowość próbna**

scientific method [N-COUNT-U7] The **scientific method** is a system of observation, measurement, and experimentation used to form and test hypotheses. **metoda naukowa**

scientist [N-COUNT-U14] A **scientist** is someone who is educated in a scientific field and conducts research or experiments professionally. **naukowiec**

selection bias [N-UNCOUNT-U8] **Selection bias** is a statistical likelihood to favor certain individuals or groups when selecting subjects for a scientific study, which may result in flawed results. **błąd selekcji (zniekształcenie analizy statystycznej, wynikające z metody zbierania prób)**

sketch [N-COUNT-U12] A **sketch** is a rough drawing that is not usually intended to be a finished product. **szkic**

skew [V-T-U8] To **skew** something is to move or change something so that it is no longer correct. **wypaczać, zniekształcać (wyniki badań)**

solute [N-COUNT-U5] A **solute** is a substance that dissolves into a solvent to form a solution. **substancja rozpuszczana, solut**

solution [N-COUNT-U5] A **solution** is a mixture of two or more substances. **roztwór (chemiczny)**

solvent [N-COUNT-U5] A **solvent** is a substance in which a solute dissolves to form a solution. **rozpuszczalnik**

statistics [N-UNCOUNT-U9] **Statistics** is a branch of mathematics that focuses on the analysis of data, and is often used to determine probability and make predictions. **statystyka (nauka)**

subatomic particle [N-COUNT-U1] A **subatomic particle** is a particle that is smaller than an atom. **cząstka subatomowa**

symbolic logic [N-UNCOUNT-13] **Symbolic logic** is a type of formal logic that deals with the manipulation of symbols based on certain rules. **logika symboliczna**

system [N-COUNT-U10] A **system** is a set of connected things that work together to produce a result. **układ**

tank [N-COUNT-U6] A **tank** is a large container that can hold liquid or gas. **zbiornik**

testable [ADJ-U7] If something is **testable**, it can be proven or disproven by performing an experiment. **testowalny, możliwy do przetestowania**

thermal energy [N-UNCOUNT-U2] **Thermal energy** is energy that is released by the movement or vibration of a material's atoms or molecules. **energia termiczna, (pot.) energia cieplna**

thorough [ADJ-U15] If testing is **thorough**, it is done very carefully and in a detailed way so that nothing is left out or omitted. **szczegółowy, gruntowny, drobiazgowy (np. o badaniu, testach)**

topology [N-UNCOUNT-U11] **Topology** is a branch of mathematics that deals with continuous surfaces, which can be stretched or deformed, but not separated or torn. **topologia**

transfer [V-T-U2] To **transfer** something is to change the location of something. **tu: przekazywać (energię)**

trial [N-COUNT-U15] A **trial** involves making an assessment of how useful or valuable that thing is. **próba**

trigonometry [N-UNCOUNT-U11] **Trigonometry** is a branch of mathematics that deals with properties of triangles and cyclical motion. **trygonometria**

tubular reactor [N-COUNT-U6] A **tubular reactor**, also called a plug flow reactor, is a type of reactor in which a reaction occurs as reactants are pumped through a tube. **reaktor rurowy, reaktor z przepływem tłokowym**

universal accounting equation [N-UNCOUNT-U10] The **universal accounting equation** is a method for measuring changes in extensive quantities over particular periods of time. **uniwersalne równanie bilansu**

valence shell [N-COUNT-U3] A **valence shell** is an atom's outermost electron shell. **powłoka walencyjna**

variance [N-UNCOUNT-U9] **Variance** is a measurement of the amount of change or difference between components of something. **(statyst.) wariancja, średnie odchylenie kwadratowe**

variation [N-COUNT-U9] A **variation** is a change or difference between components of something. **zmiany, wahania**

verify [V-T-U12] To **verify** information is to make sure it is correct or valid. **sprawdzać, weryfikować**

viscosity [N-UNCOUNT-U4] **Viscosity** is the resistance of a liquid that affects how fast it flows. **lepkość, tarcie wewnętrzne (cecha płynów)**

work [N-UNCOUNT-U2] **Work** is action or movement that is produced by energy. **praca**

yield [N-COUNT-U5] A **yield** is the amount of something that is produced during a process. **wydajność (reakcji chemicznej)**