
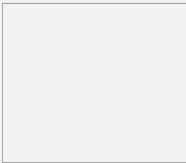
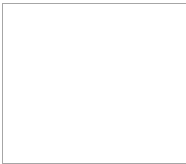
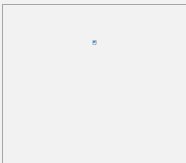
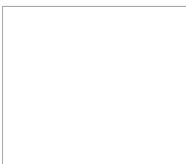
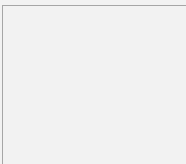


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Glossary of Terms

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ID/Type/OLE	Word/Definition/Link
102	Computer Works
	
	Absolute Zero
	n. The lower limit of the thermodynamic temperature scale. A state at which the entropy and enthalpy of a cooled ideal gas reaches its minimum value. Absolute zero in the Kelvin Scale is -273K.
	https://en.wikipedia.org/wiki/Absolute_zero
129	Computer Works
	
	Alternating Current
	n. Electrical current which periodically reverses direction; often referred to as "cycles" (e.g. 60 cycle electricity).
	https://en.wikipedia.org/wiki/Alternating_current
82	Computer Works
	
	Alternating Current (AC)
	n. An electric current which periodically reverses direction.
	https://en.wikipedia.org/wiki/Alternating_current
106	Computer Works
	
	Amino Sugar
	n. In chemistry an amino sugar (technically 2-amino-2-deoxysugar) is a sugar molecule (i.e. a glucose or a fructose) in which a hydroxyl (i.e. with an OH-) group has been replaced with an amine (contains a Nitrogen atom) group.
	https://en.wikipedia.org/wiki/Amino_sugar
76	Computer Works
	
	AND Logic Gate
	n. A basic digital logic gate that implements logical conjunction.
	https://en.wikipedia.org/wiki/AND_gate
94	Computer Works
	
	Angstrom
	n. A unit of measurement often used to describe biomolecule dimensions equal to 0.1 nanometer (one ten-billionth) of a meter.
	https://en.wikipedia.org/wiki/%C3%85ngstr%C3%B6m

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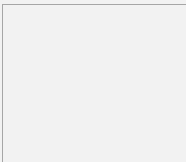
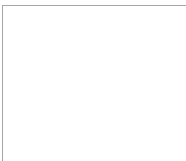
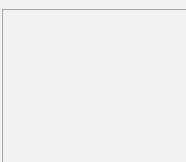
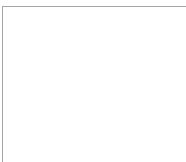
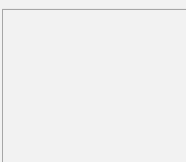
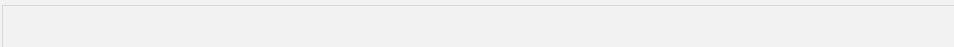
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ID/Type/OLE	Word/Definition/Link
68	Computer Works
	Anode (+)
	n. An electrode through which conventional current flows into a polarized electrical device.
	https://en.wikipedia.org/wiki/Anode
110	Computer Works
	Anti-parallel
	adv. Description of the orientation of two polymer strands that are aligned next to each other but in opposite orientations. Used to describe the two strands in DNA.
	https://en.wikipedia.org/wiki/Antiparallel_(biochemistry)
121	Computer Works
	Atom
	n. The smallest unit of ordinary matter that has the properties of a chemical element.
	https://en.wikipedia.org/wiki/Atom
489	Computer Works
	Baud Rate (Bd)
	n. In telecommunications and electronics, the for symbol rate or modulation rate. The number of distinct symbol changes of pulse rate changes per unit of time, usually seconds.
	https://en.wikipedia.org/wiki/Baud
61	Computer Works
	Binary Numbering System
	n. a numbering system where on 0's and 1's are used. The Binary Numbering System (Base Two) is used in Classical Computing.
	https://en.wikipedia.org/wiki/Binary_number
175	Computer Works
	Bipolar Junction Transistor (BJT)
	n. A type of transistor that uses electron and hole charge carriers. In contrast to unipolar or field effect transistors (FET's).
	https://en.wikipedia.org/wiki/Bipolar_junction_transistor

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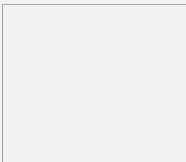
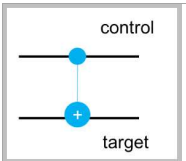
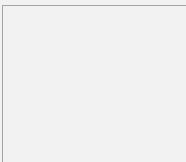
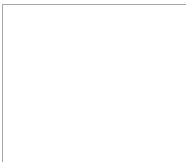
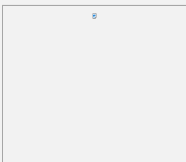
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ID/Type/OLE	Word/Definition/Link
471	Computer Works
	Bode Plot n. A method for describing how a filter will alter a signal's phase and magnitude (or gain). https://en.wikipedia.org/wiki/Bode_plot
64	Computer Works
	Breadboard n. A construction base for prototyping of electronics. https://en.wikipedia.org/wiki/Breadboard
124	Computer Works
	Capacitance n. The ability of an electrical system to store an electric charge; usually measured in "farads." https://en.wikipedia.org/wiki/Capacitance
254	Computer Works
	Capacitance, Measurement of n. Capacitance can be used in sensors, such as the accelerometer. See how capacitance changes when sensor plates move closer or farther away from one another, the surface area between the plates increases or different materials are located between the capacitor plates. https://www.youtube.com/watch?v=f_MZNEqyQw&t=97s
486	Computer Works
	Capacitor n. A passive, two terminal electrical component that stores electrical energy in an electric field. https://en.wikipedia.org/wiki/Capacitor
69	Computer Works
	Cathode (-) n. The electrode through which conventional electrical current leaves from a polarized electrical device. 

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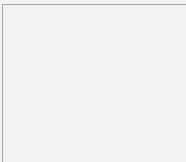
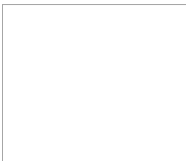
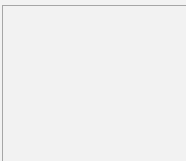
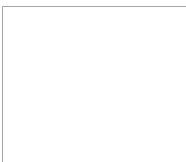
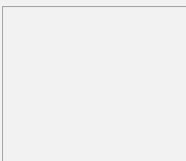
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ID/Type/OLE	Word/Definition/Link
111 Computer Works	Cell Nucleus  <p>n. The part of an eukaryotic cell containing DNA and the site of DNA transcription.</p> <p>https://en.wikipedia.org/wiki/Cell_nucleus</p>
87 Computer Works	Circuit Diagram  <p>n. A graphical representation of a circuit or a system of circuits. It shows all the components used and the connections between each of the components.</p> <p>https://en.wikipedia.org/wiki/Circuit_diagram</p>
509 Computer Works	CNOT  <p>n. A conditional gate in IBM's Composer. It flips a qubit depending on the value of its "Control qubit." For example, the "target qubit" is flipped if its "control qubit" is "1."</p> <p>https://quantumexperience.ng.bluemix.net/qx/tutorial?sectionId=a3ac6cc67b</p>
460 Computer Works	Coulomb ©  <p>n. A unit of electric charge. It is the charge ("Q" or "q") transported by a constant current of 1 ampere for one second. It is also the amount of excess charge on a capacitor of 1 Farad (F) charged to a potential difference of one volt.</p> <p>https://en.wikipedia.org/wiki/Coulomb</p>
479 Computer Works	Crosstalk  <p>n. A phenomenon of inductance where the electrical signals in one part of a circuit can affect the signals in other parts of the circuit.</p> <p>https://en.wikipedia.org/wiki/Crosstalk</p>
473 Computer Works	Decibels  <p>n. A decibel (dB) is a logarithmic unit used to express a ratio of two values of a physical quantity.</p> <p>https://en.wikipedia.org/wiki/Decibel</p>

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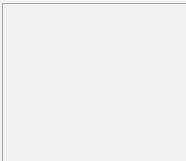
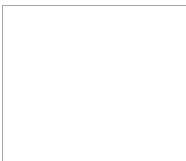
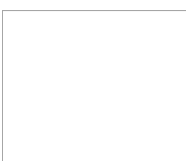
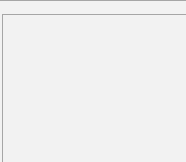
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ID/Type/OLE	Word/Definition/Link
99	Computer Works
	
	Decoherence
	n. The loss of quantum coherence. Particles such as electrons behave like waves and are described by a wave function, and phase relationships between the states of the particle can exist. However, when a quantum state is not perfectly isolated or is interfered with or disturbed; the coherence decays into decoherence.
	https://en.wikipedia.org/wiki/Quantum_decoherence
485	Computer Works
	
	Diode
	n. A two-terminal electric component that allows current to flow in only one direction. For example, an LED is a light-emitting diode.
	https://en.wikipedia.org/wiki/Diode
118	Computer Works
	
	Diploid
	adj. Having two copies of each chromosome. Most vertebrates are diploid.
	https://en.wikipedia.org/wiki/Ploidy_-_Diploid
128	Computer Works
	
	Direct Current
	n. The unidirectional flow of electrical charge. This compares to "alternating current" where electrical charge moves backward-and-forward along a wire.
	https://en.wikipedia.org/wiki/Direct_current
81	Computer Works
	
	Direct Current (DC)
	n. The unidirectional flow of charge.
	https://en.wikipedia.org/wiki/Direct_current
104	Computer Works
	
	DNA
	n. Deoxyribonucleic acid. The biopolymer containing the genetic information and instructions of all known living organisms.
	https://en.wikipedia.org/wiki/DNA

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Glossary of Terms


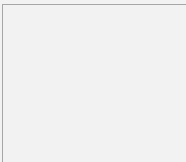
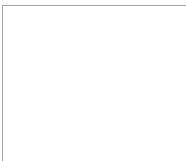
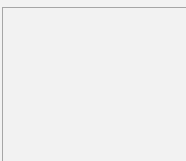
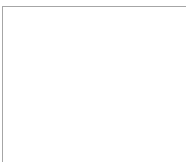
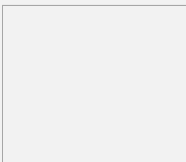
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ID/Type/OLE	Word/Definition/Link
112	Computer Works
	
	DNA Transcription
	n. The process in which the genetic information in DNA is copied into messenger RNA (mRNA).
	https://en.wikipedia.org/wiki/Transcription_(biology)
488	Computer Works
	
	Duty Cycle
	n. The fraction of one period in which a signal or system is active.
	https://en.wikipedia.org/wiki/Duty_cycle
166	Computer Works
	
	Electrical
	adj. The set of physical phenomena that is associated with the presence and flow of an electron-based charge.
	https://en.wikipedia.org/wiki/Electricity
67	Computer Works
	
	Electrical Charge
	n. The physical property of matter that causes it to experience a force when placed in an electromagnetic field. There are two types of charges: positive and negative.
	https://en.wikipedia.org/wiki/Electric_charge
62	Computer Works
	
	Electrical Circuit
	A complete electrical network of electrical components, usually connected with a wire or a number of wires, making up a closed loop thereby making way for a return path for electrical current.
	https://en.wikipedia.org/wiki/Circuit
477	Computer Works
	
	Electromagnetic Force
	n. The physical force that causes electrically charged particles to react with one another.
	https://en.wikipedia.org/wiki/Electromagnetism

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Glossary of Terms


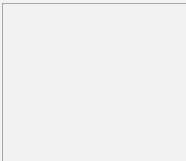
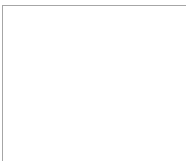
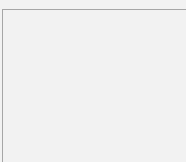
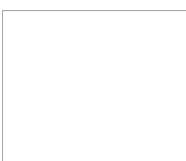
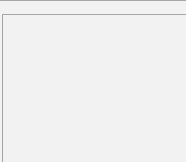
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ID/Type/OLE	Word/Definition/Link
125	Computer Works
	
	Electron
	n. A sub-atomic particle bearing negative charge that participates in covalent bonds between atoms.
	https://en.wikipedia.org/wiki/Electron
127	Computer Works
	
	Electron Hole
	n. The absence of an electron in a position where it otherwise could exist.
	https://en.wikipedia.org/wiki/Electron_hole
514	Computer Works
	
	Electron Spin
	n. An intrinsic characteristic of an electron particle. Electron spin is observed by monitoring its trajectory while passing through a magnetic field. Electron spin can also be affected by its angular momentum which is generally, its tendency to twist in its orbit around a nucleus.
	https://en.wikipedia.org/wiki/Spin_(physics)
468	Computer Works
	
	Electronic Filters
	n. Electrical circuits designed to remove specific frequencies of signals passing through them. Filters can be "active" or "passive," or "analog" or "digital."
	https://en.wikipedia.org/wiki/Electronic_filter
513	Computer Works
	
	Entanglement (Quantum)
	n. A physical phenomenon that occurs when pairs or groups of particles are generated or interact in ways such that the quantum state of each particle cannot be described independently of the other particle(s).
	https://en.wikipedia.org/wiki/Quantum_entanglement
179	Computer Works
	
	Enthalpy
	n. Measurement of the energy in a thermodynamic system. Not to be confused with "entropy."
	https://en.wikipedia.org/wiki/Enthalpy

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Glossary of Terms

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ID/Type/OLE	Word/Definition/Link
158	Computer Works
	
	Entropy
	n. The statistical state of the atoms or molecules in a thermodynamic system. Not to be confused with "enthalpy."
	https://en.wikipedia.org/wiki/Entropy_(classical_thermodynamics)_-Definition
78	Computer Works
	
	Exclusive OR (XOR) Gate
	n. A digital logical gate that gives a "True" when the number of "True" inputs is odd.
	https://en.wikipedia.org/wiki/XOR_gate
461	Computer Works
	
	Farad (F)
	n. The unit of electrical capacitance. The capacitance across which, when charged with one coulomb, there is a potential difference of one volt.
	https://en.wikipedia.org/wiki/Farad
86	Computer Works
	
	Full Adder
	n. A full adder adds binary numbers and accounts for "carry in" and "carry out" values.
	https://en.wikipedia.org/wiki/Adder_(electronics)_-Full_adder
465	Computer Works
	
	Function Generator
	n. A piece of electronic equipment or computer software used to generate different types of electrical wave forms over a wide range of frequencies.
	https://en.wikipedia.org/wiki/Function_generator
469	Computer Works
	
	Gain
	n. The measure of a two-port (i. e. Input Port and Output Port) circuit's ability to increase the power or amplitude of a signal(Output/Input).
	https://en.wikipedia.org/wiki/Gain_(electronics)

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Glossary of Terms


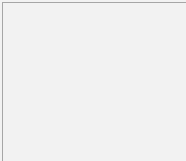
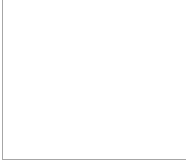
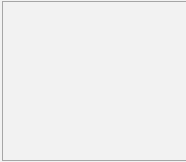
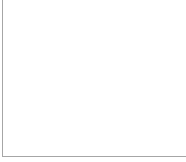
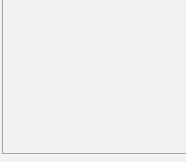
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ID/Type/OLE	Word/Definition/Link
70	Computer Works
	
	Ground
	n. "Ground" or "Earth" is the reference from which voltages are measured, serves as a common return path for electrical current or a direct physical connection to the Earth.
	https://en.wikipedia.org/wiki/Ground_(electricity)
103	Computer Works
	
	Grover's Algorithm
	n. A quantum algorithm that finds with high probability the unique input of a black box function that produces a particular output value using just the square root of the number of possible values.
	https://en.wikipedia.org/wiki/Grover%27s_algorithm
490	Computer Works
	
	H Bridge
	n. An electronic circuit that enables a voltage to be applied across a load in either direction. It is commonly used when driving a DC motor in two directions.
	https://en.wikipedia.org/wiki/H_bridge
501	Computer Works
	
	H Gate
	n. This gate in IBM's Composer creates a superposition state. Also known as the "Hadamard Gate."
	https://quantumexperience.ng.bluemix.net/qx/tutorial?sectionId=e38b3109ec
503	Computer Works
	
	Hadamard Gate
	n. This gate in IBM's Composer creates a superposition state. Also known as the "H Gate."
	https://quantumexperience.ng.bluemix.net/qx/tutorial?sectionId=e38b3109ec
85	Computer Works
	
	Half Adder
	n. An electrical logic circuit that adds two single binary digits, A and B. It has two outputs: a "sum" and a "carry" digit.
	https://en.wikipedia.org/wiki/Adder_(electronics)_-Half_adder

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Glossary of Terms

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ID/Type/OLE		Word/Definition/Link
97	Computer Works	Heisenberg's Uncertainty Principle
		n. A principle in quantum Mechanics asserting a fundamental limit to the precision with which certain pairs of the properties of a particle can be known. For example, the principle asserts that the position and rate of movement of a particle cannot be known at the same time.
		https://en.wikipedia.org/wiki/Uncertainty_principle
105	Computer Works	Helix
		n. A type of curved shape in three-dimensional space. In biology, DNA is a helix, with two polymer strands entwined around each other in a helical shape (the well known double helix).
		https://en.wikipedia.org/wiki/Helix
476	Computer Works	High Pass Filter
		n. An electrical circuit that attenuates low frequency electrical signals while allowing high frequency signals to pass through. In a simple "high-pass" RC filter, the capacitor is in series with the output and the resistor is in parallel with the output.
		https://en.wikipedia.org/wiki/High-pass_filter
467	Computer Works	Impedance, Electrical
		n. The measure of the opposition that a circuit presents to a current when voltage is applied.
		https://en.wikipedia.org/wiki/Electrical_impedance
475	Computer Works	Impedance, Electrical
		n. A measure of the opposition that a circuit presents to a current when a voltage is applied.
		https://en.wikipedia.org/wiki/Electrical_impedance
478	Computer Works	Inductance
		n. Changes in the current in one conductor (e.g. a wire) will cause a change in current flow in a nearby conductor (e.g. a wire) within the magnetic field of the original conductor. Inductance is measured in "Henries" (H). The letter "L" is used as a label for an Inductor.
		https://en.wikipedia.org/wiki/Inductance

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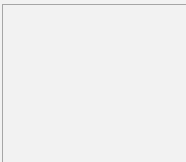
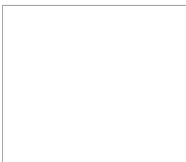
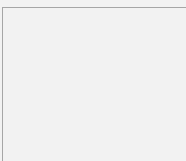
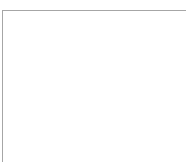
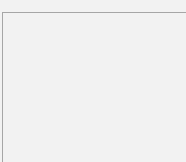
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ID/Type/OLE	Word/Definition/Link
480 Computer Works	<p>Inductor</p> <p>n. A passive, two-terminal electrical component that stores electromagnetic energy in a magnetic field when an electrical current is flowing through it. Inductors opposes the change in current that created the magnetic field. An inductor is labeled with an "L" in a circuit diagram.</p> <p>https://en.wikipedia.org/wiki/Inductor</p>
178 Computer Works	<p>Insulator</p> <p>n. A material whose interior electric charges do not flow freely. Therefore, it is nearly impossible to conduct an electrical current through them.</p> <p>https://en.wikipedia.org/wiki/Insulator_(electricity)</p>
117 Computer Works	<p>Integrase</p> <p>n. An enzyme (a protein that catalyzes or enhances a chemical reaction) that inverts a sequence of DNA by 1) cutting the sugar-phosphate backbone at specific positions, 2) flipping the released segment of double-stranded DNA, 3) and rejoining the DNA.</p> <p>https://en.wikipedia.org/wiki/Site-specific_recombination</p>
116 Computer Works	<p>Invertase</p> <p>n. An enzyme (a protein that catalyzes or enhances a chemical reaction) that inverts a sequence of DNA by 1) cutting the sugar-phosphate backbone at specific positions, 2) flipping the released segment of double-stranded DNA, 3) and rejoining the DNA.</p> <p>https://en.wikipedia.org/wiki/Site-specific_recombination</p>
457 Computer Works	<p>Kirchoff's Current Law</p> <p>n. The total current travelling out of a circuit must be equal to the current entering the circuit.</p> <p>https://en.wikipedia.org/wiki/Kirchhoff's_circuit_laws</p>
458 Computer Works	<p>Kirchoff's Voltage Law</p> <p>n. The directed sum of electrical potential differences (i. e. voltage) is equal to zero.</p> <p>https://en.wikipedia.org/wiki/Kirchhoff%27s_circuit_laws</p>

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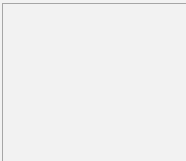
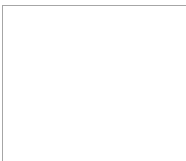
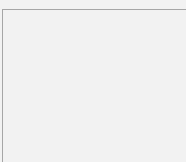
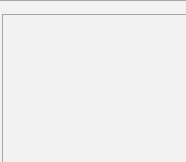
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ID/Type/OLE	Word/Definition/Link
65	Computer Works
	
	Light Emitting Diode (LED)
	n. A two lead semiconductor light source .
	https://en.wikipedia.org/wiki/Light-emitting_diode
517	Computer Works
	
	Light Polarizer
	n. A device that allows light of uni-directional waves to pass through while blocking the transmission of light with waves oriented in different directions. For example, most sun glasses allow light waves In only one direction to pass through their lenses.
	https://en.wikipedia.org/wiki/Polarizer
168	Computer Works
	
	Load, Electrical
	n. An electrical component of portion of a circuit that consumes electric power.
	https://en.wikipedia.org/wiki/Electrical_load
472	Computer Works
	
	Logarithmic Scale
	n. A graphical scale used where the intervals on one or both axes are orders of magnitude instead of being linear. This is useful when the ranges to be analyzed are very large.
	https://en.wikipedia.org/wiki/Logarithmic_scale
497	Computer Works
	
	Logic Gate
	n. Hardware that performs operations on Boolean inputs and, thereby, develop logical answers from complex mechanical or electronic devices. The most commonly used logic gates are NOT, AND, OR, NAND, XOR, NAND, NOR and XNOR.
	https://en.wikipedia.org/wiki/Logic_gate
474	Computer Works
	
	Low Pass Filter
	n. An electronic filter that attenuates high frequency signals but allow the low frequency signals to pass through. In a simple "low-pass" RC filter, the capacitor is in parallel with the output and the resistor is in series with the output.
	https://en.wikipedia.org/wiki/Low-pass_filter

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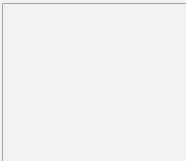
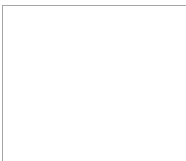
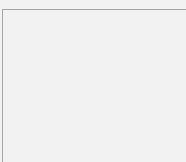
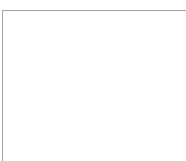
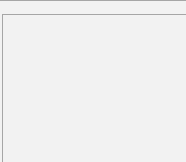
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ID/Type/OLE	Word/Definition/Link
122	Computer Works
	Micro Electro Mechanical Systems (MEMS) n. Very small machines, usually less than 100 micrometers in dimension (about the width of a human hair)
	
92	Computer Works
	Micrometer (um) n. A unit of length in the metric system equal to one-millionth of a meter.
	https://en.wikipedia.org/wiki/Micrometre
91	Computer Works
	Millimeter (mm) n. The unit of length in the metric system equal to one-thousandth of a meter.
	https://en.wikipedia.org/wiki/Millimetre
109	Computer Works
	Monomer n. Identifiable minimal units that are linked together to form a polymer chain by covalent bonds.
	https://en.wikipedia.org/wiki/Monomer
80	Computer Works
	Multimeter n. An electronic measuring instrument that combines several measuring functions in one unit.
	https://en.wikipedia.org/wiki/Multimeter
77	Computer Works
	NAND Logic Gate n. A logic gate that produces a "false" output only if the inputs are "true."
	https://en.wikipedia.org/wiki/NAND_gate

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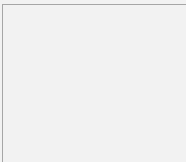
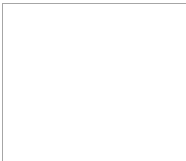
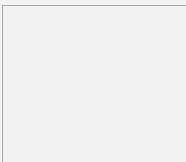
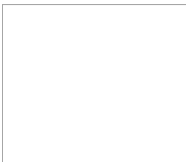
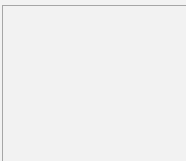
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ID/Type/OLE	Word/Definition/Link
93	Computer Works
	
	Nanometer (nm)
	n. A unit of length in the metric system equal to .000000001 meter or 10 Angstroms.
	https://en.wikipedia.org/wiki/Nanometre
173	Computer Works
	
	N-doping
	v. In semiconductor production, intentionally introducing impurities into an extremely pure intrinsic semiconductor for the purpose of modulating its electrical properties. Implies the introduction of negative "electrons."
	https://en.wikipedia.org/wiki/Doping_(semiconductor)
83	Computer Works
	
	N-P-N Transistor
	n. One of two types of transistors consisting of a layer of p-doped semiconductors with two outer layers of n-doped semiconductor.
	https://en.wikipedia.org/wiki/Bipolar_junction_transistor_-_NPN
107	Computer Works
	
	Nucleobase (Base)
	n. One of four nucleic acids that express the information in DNA or RNA: adenine, thymine, cytosine and guanine.
	https://en.wikipedia.org/wiki/Nucleobase
72	Computer Works
	
	Ohms
	n. Unit of electrical resistance named after Georg Ohm.
	https://en.wikipedia.org/wiki/Ohm
73	Computer Works
	
	Ohms Law
	n. Ohm's Law states that the current through a conductor between two points is directly proportional to the voltage across those two points: $V = I \times R$.
	https://en.wikipedia.org/wiki/Ohm%27s_law

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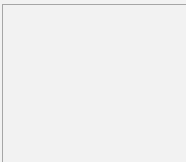
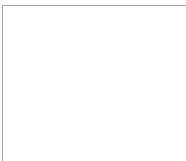
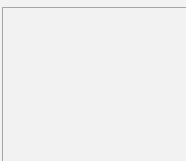
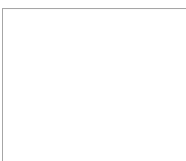
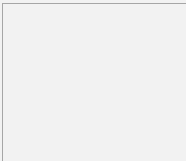
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ID/Type/OLE	Word/Definition/Link
75	Computer Works
	
	OR Logic Gate
	n. A digital logic gate that implements logical disjunction.
	https://en.wikipedia.org/wiki/OR_gate
170	Computer Works
	
	P-doping
	v. In semiconductor production, intentionally introducing impurities into an extremely pure intrinsic semiconductor for the purpose of modulating its electrical properties. Implies the introduction of positive "electron holes."
	https://en.wikipedia.org/wiki/Doping_(semiconductor)
470	Computer Works
	
	Phase Shift
	n. The difference expressed in angle degrees or time, between two waves having the same frequency.
	https://en.wikipedia.org/wiki/Phase_(waves)-Phase_shift
95	Computer Works
	
	Picometer (pm)
	n. The unit of measurement in the metric system equal to one ten-trillionth of a meter.
	https://en.wikipedia.org/wiki/Picometre
84	Computer Works
	
	P-N-P Transistor
	n. A type of bi-polar junction (BJT) transistor with an n-doped region and two p-doped regions on each side.
	https://en.wikipedia.org/wiki/Bipolar_junction_transistor-PNP
516	Computer Works
	
	Polarizer (light)
	n. A device that allows light of uni-directional waves to pass through while blocking the transmission of light with waves oriented in different directions. For example, most sun glasses allow light waves in only one direction to pass through their lenses.
	https://en.wikipedia.org/wiki/Polarizer

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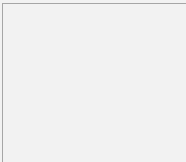
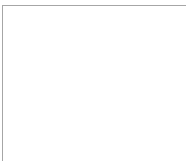
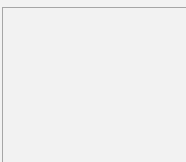
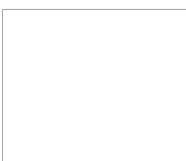
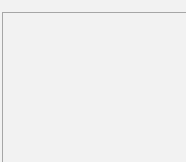
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ID/Type/OLE	Word/Definition/Link
108	Computer Works
	
	Polymer
	n. A large molecule, often linear which is made up of repeated identical or similar monomers such as plastics (nylon etc.) or biopolymers (DNA, RNA, and proteins).
	https://en.wikipedia.org/wiki/Polymer
119	Computer Works
	
	Polyploidy
	n. Having more than two (2) copies of each chromosome, a common feature of certain plants.
	https://en.wikipedia.org/wiki/Polyploid
496	Computer Works
	
	Potential Divider
	n. Also known as a "voltage divider." A simple circuit in which two resistors are connected in series that produces an output voltage that is a fraction of the input voltage applied to the overall system. The output voltage is proportional to the relative resistance values of the two resistors.
	https://en.wikipedia.org/wiki/Voltage_divider
493	Computer Works
	
	Potentiometer
	n. A manually adjusted variable resistor and/or a voltage divider with three terminals. It consists two terminals connected to each end of a resistive element and "wiper" connected to the middle terminal. The position of the wiper determines the output voltage from the potentiometer.
	http://www.resistorguide.com/potentiometer/
63	Computer Works
	
	Power Supply
	n. An electronic device which supplies electric energy to an electric load.
	https://en.wikipedia.org/wiki/Power_supply
484	Computer Works
	
	Pull-down Resistor
	n. A resistor connected to ground. It works the same way as a "pull-up resistor." It hold the logic signal at a low logic level when no other active device is coNnected.
	https://en.wikipedia.org/wiki/Pull-up_resistor

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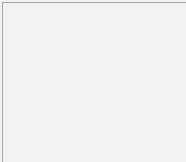
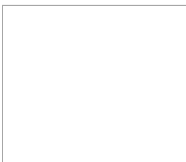
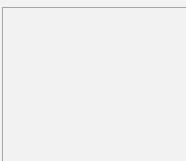
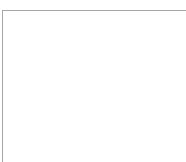
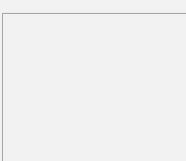
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ID/Type/OLE	Word/Definition/Link
483	Computer Works
	
	Pull-up Resistor
	n. A resistor connected between a positive power source and a connector. It will ensures there is a valid, logical signal level if external devices are disconnected.
	https://en.wikipedia.org/wiki/Pull-up_resistor
88	Computer Works
	
	Quantum Computing
	n. A theoretical computing system which utilizes quantum-mechanical phenomena such as superposition and entanglement to perform calculations.
	https://en.wikipedia.org/wiki/Quantum_computing
498	Computer Works
	
	Quantum Correlation
	n. The expected change in the physical characteristics as one quantum system passes through an interaction site. For example, two entangled particles have a common correlation where a physical change to one of the pair of entangled particles will imply an "expected correlation" for a change in the physical characteristics of the other particle. The correlation is detected only after the observations of the two particles are compared.
	https://en.wikipedia.org/wiki/Quantum_correlation
90	Computer Works
	
	Quantum Entanglement
	adv. A physical phenomenon that occurs when pairs or groups of particles are generated or interact in ways such that the quantum state of each particle cannot be described independently of the other particles.
	https://en.wikipedia.org/wiki/Quantum_entanglement
512	Computer Works
	
	Quantum Entanglement
	n. A physical phenomenon that occurs when pairs or groups of particles are generated or interact in ways such that the quantum state of each particle cannot be described independently of the other particle(s).
	https://en.wikipedia.org/wiki/Quantum_entanglement
510	Computer Works
	
	Quantum Parallelism
	n. Refers to the quantum-mechanical phenomena of combine superposition and entanglement.
	https://en.wikipedia.org/wiki/Quantum_computing

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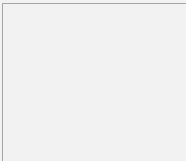
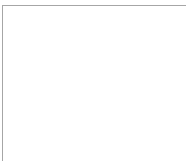
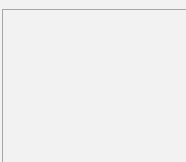
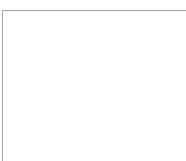
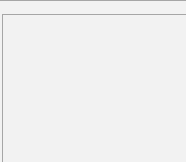
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ID/Type/OLE	Word/Definition/Link
89	Computer Works
	
	Quantum Superposition
	n. A fundamental principle in Quantum Mechanics that states that, much like waves in classical physics, any two or more quantum states can be added together (superposed) and the resulting state will be another valid quantum state.
	https://en.wikipedia.org/wiki/Quantum_superposition
100	Computer Works
	
	Quantum Tunneling (or Tunneling)
	n. Refers to the quantum mechanical phenomenon where a particle (such as an electron) tunnels through a barrier that it "classically" could not surmount. This phenomenon is often explained by the Heisenberg Uncertainty Principle.
	https://en.wikipedia.org/wiki/Quantum_tunnelling
101	Computer Works
	
	Qubit
	n. A quantum bit. A unit of quantum information.
	https://en.wikipedia.org/wiki/Qubit
463	Computer Works
	
	RC Circuit
	n. Resistor-capacitor circuit. An electrical circuit composed of resistors and capacitors.
	https://en.wikipedia.org/wiki/RC_circuit
462	Computer Works
	
	RC Time Constant (Tau)
	n. The amount of time in seconds that a capacitor takes to discharge to 37.8% of its voltage or to charge to 63.2% of its voltage capacity.
	https://en.wikipedia.org/wiki/RC_time_constant
466	Computer Works
	
	Reactance, Electrical
	n. Opposition to a change in current or voltage due to the elements of inductance or capacitance.
	https://en.wikipedia.org/wiki/Electrical_reactance

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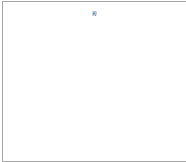
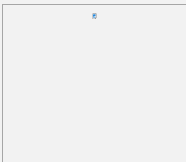
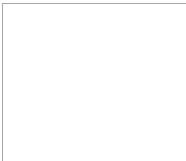
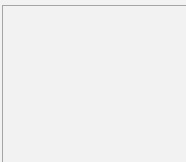
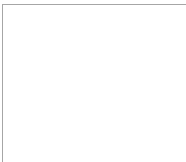
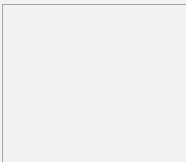
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ID/Type/OLE	Word/Definition/Link
66	Computer Works
	
	Resistor
	n. A passive two-terminal electrical component that implements electrical resistance as a circuit element.
	https://en.wikipedia.org/wiki/Resistor
71	Computer Works
	
	Resistor Color Code
	n. Used to indicate the values or ratings of resistance in a resistor.
	https://en.wikipedia.org/wiki/Electronic_color_code
96	Computer Works
	
	Ribosome
	n. The large RNA and protein complex that is the site of protein synthesis by the translation of the sequence in messenger RNA (mRNA) into a sequence of amino acids in the protein product.
	https://en.wikipedia.org/wiki/Ribosome
481	Computer Works
	
	RL Circuit
	n. A circuit consisting solely of resistors and inductors.
	https://en.wikipedia.org/wiki/RL_circuit
114	Computer Works
	
	RNA Polymerase (RNAP)
	n. An enzyme that produces primary transcript RNA and, thereby, promotes creation of proteins from the Messenger RNA (mRNA) template.
	https://en.wikipedia.org/wiki/RNA_polymerase
113	Computer Works
	
	RNA Translation
	n. Translation is a process in which ribosomes in the cell's cytoplasm create proteins following "Transcription" of DNA to RNA.
	https://en.wikipedia.org/wiki/Translation_(biology)

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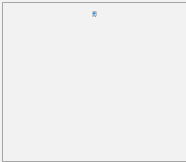
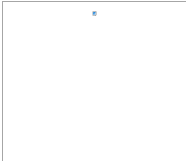
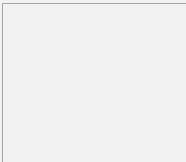
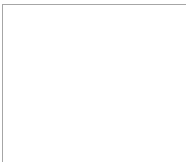
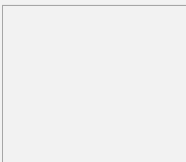
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ID/Type/OLE	Word/Definition/Link
505	Computer Works
	
	S Gate
	n. A gate in IBM's Composer which rotates a qubit one-half pi radians around the Z-axis.
	https://quantumexperience.ng.bluemix.net/qx/tutorial?sectionId=e38b3109ec
507	Computer Works
	
	S+ Gate
	n. The inverse of the S Gate. A gate in IBM's Composer which rotates a qubit minus one-half pi radians around the Z-axis.
	https://quantumexperience.ng.bluemix.net/qx/tutorial?sectionId=e38b3109ec
174	Computer Works
	
	Semiconductor
	n. Crystalline or amorphous solids with distinct electrical characteristics. They typically have high electrical resistance; however a resistance that is lower than an insulator.
	https://en.wikipedia.org/wiki/Semiconductor
494	Computer Works
	
	SMD Code
	n. A 3-digit code for marking the total resistance available from a resistor or a potentiometer; which is a "variable resistor." The two digits on the left are the most significant digits for the resistance value and the last digit on the right is the multiplier. For example, an SMD code of "102" would be 1,000 ohms (i.e. 10×10 to the second power).
515	Computer Works
	
	Spin
	n. An intrinsic characteristic of an electron particle. Electron spin is observed by monitoring its trajectory while passing through a magnetic field. Electron spin can also be affected by its angular momentum which generally, is the tendency to twist in its orbit around a nucleus.
	https://en.wikipedia.org/wiki/Spin_(physics)
511	Computer Works
	
	Superposition
	n. A fundamental principle in quantum mechanics that states that any two or more valid quantum states can be added together (i. e. "superposed") and the result will be another valid quantum state.
	https://en.wikipedia.org/wiki/Quantum_superposition

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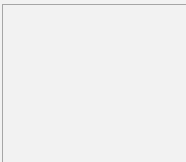
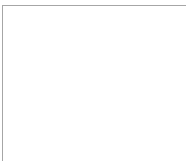
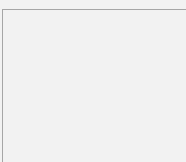
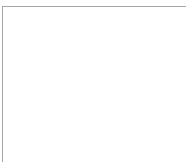

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ID/Type/OLE	Word/Definition/Link
487	Computer Works
	
	Switch
	n. An electrical component that can make or break an electrical circuit by interrupting current or redirecting current from one path to another.
	https://en.wikipedia.org/wiki/Switch
506	Computer Works
	
	T Gate
	n. A gate in IBM's Composer which rotates a qubit one-quarter pi radians around the Z-axis.
	https://quantumexperience.ng.bluemix.net/qx/tutorial?sectionId=e38b3109ec
508	Computer Works
	
	T+ Gate
	n. The inverse of the T Gate. A gate in IBM's Composer which rotates a qubit minus one-quarter pi radians around the Z-axis.
	https://quantumexperience.ng.bluemix.net/qx/tutorial?sectionId=e38b3109ec
115	Computer Works
	
	Transcriptor
	n. A transistor-like device composed of DNA and RNA rather than semi-conducting material such as silicon. Prior to its invention in 2013, the Transcriptor was considered an important component in building biological computers.
	https://en.wikipedia.org/wiki/Transcriptor
464	Computer Works
	
	Transducer
	n. A device which converts one form of energy (.e.g. electrical energy) into another form of energy (e. g. sound). It converts one form of a signal into another form of a signal.
	https://en.wikipedia.org/wiki/Transducer
74	Computer Works
	
	Transistor
	n. A semiconductor device use to amplify or switch electronic signals and electrical power.
	https://en.wikipedia.org/wiki/Transistor

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ID/Type/OLE	Word/Definition/Link
79	Computer Works
	Truth Table
	n. A mathematical table used in logic, specifically in connection with Boolean Algebra, which sets out the functional values of logical expressions on each of their functional arguments.
	https://en.wikipedia.org/wiki/Truth_table
163	Computer Works
	Vector
	n. Any geometric object that has magnitude (or length) and direction.
	https://en.wikipedia.org/wiki/Inertia
120	Computer Works
	Voltage
	n. An electromotive force, or potential difference. For example, a 9-volt battery has a "potential" of 9 volts to use to turn a motor. One can use a voltage tester to measure the amount of power left in a battery.
495	Computer Works
	Voltage Divider
	n. Also known as a "potential divider." A simple circuit in which two resistors are connected in series that produces an output voltage that is a fraction of the input voltage applied to the overall system. The output voltage is proportional to the relative resistance values of the two resistors.
	https://en.wikipedia.org/wiki/Voltage_divider
98	Computer Works
	Wave-Particle Duality
	n. The concept that every elementary particle or quantic entity may be partly described in terms of not only particles but also waves.
	https://en.wikipedia.org/wiki/Wave%E2%80%93particle_duality
459	Computer Works
	Wheatstone Bridge
	n. A electrical circuit configuration used to measure an unknown resistance such as in a thermistor, or light resistor. Two parallel resistors. $R_X = ((R_2 / (R_1 + R_2) + (V_{out} / V_{in})) / (1 - (R_1 / (R_1 + R_2) + (V_{out} / V_{in}))) \times R_3$.
	https://en.wikipedia.org/wiki/Wheatstone_bridge


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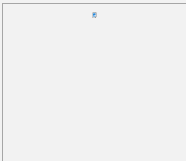
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ID/Type/OLE

Word/Definition/Link

500	Computer Works	X Gate
		<p>n. A quantum gate used by IBM's Composer. It flips a qubit pi radians; that is, a state of "0" is flipped to "1," or a state of "1" is flipped to "0." Similar to a classical "NOT Gate."</p> <p>https://quantumexperience.ng.bluemix.net/qx/tutorial?sectionId=e38b3109ec</p>

504	Computer Works	Z Gate
		<p>n. A quantum gate in IBM's Composer that rotates a qubit pi radians around the Z-axis.</p> <p>https://quantumexperience.ng.bluemix.net/qx/tutorial?sectionId=e38b3109ec</p>