English - Japanese
Quick Reference Dictionary

Engineering Terms

Adam G. Carlyle
**Introduction**

This quick reference dictionary was compiled to assist the engineering student or intern in learning vocabulary words that would be helpful if the student found himself or herself working (or studying) in Japan. It assumes the reader has a basic understanding of the structure and grammar of the Japanese Language, but such knowledge is not necessary to benefit from the book. Words were chosen based on English vocabulary from my own domestic work experience and input from students that have traveled to and worked in Japan in the Engineering field. Words from many different engineering specialties are included, as well as some day-to-day or business terms that are used frequently in a professional engineering setting. Words in the latter category are separated out into a ‘basic words’ section for ease of use.

At times, multiple entries of the same word are included. Sometimes this reflects the fact that there are multiple Japanese translations of the same English word. Other times, there are two different Japanese words that are used for this entry, and their use depends on whether the word is used in the context of job-related communication or in the context of day-to-day conversations.

The format of each word entry is illustrated below:

<table>
<thead>
<tr>
<th>Brief Definition</th>
<th>Romanized Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Word</td>
<td>Part of Speech</td>
</tr>
<tr>
<td></td>
<td>Japanese Equivalent</td>
</tr>
</tbody>
</table>

**Engineering**

- The act of applying the principals of science and mathematics to natural energy sources for the benefit and growth of society.

- The act of applying the principals of science and mathematics to natural energy sources for the benefit and growth of society.  

**koogaku**

One final note concerning the Romanized Japanese Pronunciation: The following English conventions were used:

- Double Consonants: “tt” (ie. ワット = Watto)
- Long Vowels: “oo” (ie. ほそおどおろ = Hosoodooro)
- Two “n’s” next to each other: “n’n”  
  (ie. トンネル = Ton’neru, so it is not confused with a double consonant.)
Part 1: Engineering Words
<table>
<thead>
<tr>
<th><strong>abrasive</strong></th>
<th><strong>adj.</strong></th>
<th>すり減らす</th>
<th><strong>suriherasu</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Irritating or rough.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>absolute</strong></th>
<th><strong>adj.</strong></th>
<th>絶対量</th>
<th><strong>zettai ryou</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A quantity which is independent of arbitrary standards of measurement.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>absolute value</strong></th>
<th><strong>noun</strong></th>
<th>絶対値</th>
<th><strong>zettai chi</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A number which is equal in magnitude to a given real number but is always nonnegative.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>absolute zero</strong></th>
<th><strong>noun</strong></th>
<th>絶対零度</th>
<th><strong>zettai reido</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The theoretical temperature at which no heat energy can exist; also defined as 0 Kelvin or -273.15°C.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>absorb</strong></th>
<th><strong>verb</strong></th>
<th>吸収する</th>
<th><strong>kyuushuu suru</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>To take up or draw in.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>abstract</strong></th>
<th><strong>noun</strong></th>
<th>アブストラクト</th>
<th><strong>abusutorakuto</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A beginning section of text that summarizes the essentials of the following document.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>abstract</strong></th>
<th><strong>adj.</strong></th>
<th>抽象</th>
<th><strong>chuushiu</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>That which is confined to theory or speculation as opposed to practical application.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>abutment</strong></th>
<th><strong>noun</strong></th>
<th>橋台</th>
<th><strong>kyoudai</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The part of a structure that receives pressure and bears load.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>acceleration</strong></th>
<th><strong>noun</strong></th>
<th>加速度</th>
<th><strong>kasokudo</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The rate at which velocity changes over time.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>accuracy</strong></th>
<th><strong>noun</strong></th>
<th>精度</th>
<th><strong>seido</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Freedom from error.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>action</strong></th>
<th><strong>noun</strong></th>
<th>作用</th>
<th><strong>sayou</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>An effect.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>adhesive</strong></th>
<th><strong>adj.</strong></th>
<th>粘着性（の）</th>
<th><strong>nenchakusei (no)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Tending to stick by gluing or fusing.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>admixture</strong></th>
<th><strong>noun</strong></th>
<th>混合（剤）、</th>
<th><strong>kongou(butsu)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Something added through mixing.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>aerospace engineering</strong></th>
<th><strong>noun</strong></th>
<th>航空宇宙工学</th>
<th><strong>koukuuuchuu kogaku</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The branch of engineering that deals with flight within the earth’s atmosphere and the space beyond.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>aesthetics</strong></td>
<td>noun</td>
<td>美学</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>A state of containing a visually pleasing element or elements.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>allocate</strong></th>
<th>verb</th>
<th>（割）当てる</th>
</tr>
</thead>
<tbody>
<tr>
<td>To distribute for a specific purpose.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>affiliation</strong></th>
<th>noun</th>
<th>提携 / 合併</th>
</tr>
</thead>
<tbody>
<tr>
<td>A group with which one associates with or becomes a member.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>alignment</strong></th>
<th>noun</th>
<th>会合体</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard non-reactive substance (e.g. gravel) mixed with a cementing material to form concrete or mortar.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>algebra</strong></th>
<th>noun</th>
<th>代数学</th>
</tr>
</thead>
<tbody>
<tr>
<td>A branch of mathematics using symbols (letters) to explore the relationships between numbers.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>algorithm</strong></th>
<th>noun</th>
<th>アルゴリズム</th>
</tr>
</thead>
<tbody>
<tr>
<td>A procedure for solving a mathematical problem using a series of succinct repeatable steps.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>align</strong></th>
<th>verb</th>
<th>整列させる</th>
</tr>
</thead>
<tbody>
<tr>
<td>To place into a correct position.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>alley</strong></th>
<th>noun</th>
<th>裏通り / 路地</th>
</tr>
</thead>
<tbody>
<tr>
<td>A narrow street that allows access to the rear of buildings or connects parallel streets.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>angle</strong></td>
<td><strong>noun</strong></td>
<td>角度</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>The figure formed by two lines extending from the same point.</td>
<td></td>
<td>kakudo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>apparatus</strong></th>
<th><strong>noun</strong></th>
<th>装置</th>
</tr>
</thead>
<tbody>
<tr>
<td>A set of materials or equipment designed for a particular use.</td>
<td></td>
<td>soochi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>approximate</strong></th>
<th><strong>adj.</strong></th>
<th>大体（の）</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearly, but not perfectly, exact.</td>
<td></td>
<td>daitai (no)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>approximately</strong></th>
<th><strong>adv.</strong></th>
<th>約</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearly correct or exact</td>
<td></td>
<td>yaku</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>arch</strong></th>
<th><strong>noun</strong></th>
<th>弓形</th>
</tr>
</thead>
<tbody>
<tr>
<td>A supportive curved structural member that spans an opening.</td>
<td></td>
<td>yumigata</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>architecture</strong></th>
<th><strong>noun</strong></th>
<th>建築学</th>
</tr>
</thead>
<tbody>
<tr>
<td>The art or practice of designing the layout and appearance of structures, especially habitable ones.</td>
<td></td>
<td>kenchikugaku</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>artificial neural network</strong></th>
<th><strong>noun</strong></th>
<th>人口神経回路網</th>
</tr>
</thead>
<tbody>
<tr>
<td>A man-made computer architecture in which processors are interconnected in a manner suggestive of the neurons in a human brain.</td>
<td></td>
<td>jinkou shinnkei kairo mou</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>assess</strong></th>
<th><strong>verb</strong></th>
<th>評価する</th>
</tr>
</thead>
<tbody>
<tr>
<td>To determine the importance, size, or inherent value of something.</td>
<td></td>
<td>hyooka suru</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>assignment</strong></th>
<th><strong>noun</strong></th>
<th>任務</th>
</tr>
</thead>
<tbody>
<tr>
<td>A specified task or amount of work to be undertaken at the request of an authority.</td>
<td></td>
<td>ninmu</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>association</strong></th>
<th><strong>noun</strong></th>
<th>団体</th>
</tr>
</thead>
<tbody>
<tr>
<td>An organization of persons having a common interest.</td>
<td></td>
<td>dantai</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>assumption</strong></th>
<th><strong>noun</strong></th>
<th>仮定</th>
</tr>
</thead>
<tbody>
<tr>
<td>A fact or statement that is taken for granted.</td>
<td></td>
<td>katei</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>atomic energy</strong></th>
<th><strong>noun</strong></th>
<th>原子力</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy produced by the breakdown of large atoms into smaller atoms.</td>
<td></td>
<td>genshiryoku</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>automation</strong></th>
<th><strong>noun</strong></th>
<th>自動化</th>
</tr>
</thead>
<tbody>
<tr>
<td>The technique of making a process or system operate independently of human control.</td>
<td></td>
<td>jidouka</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>available</strong></th>
<th><strong>adj.</strong></th>
<th>使用可能</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present in the proper chemical or physical form to be usable (such as by an industrial plant).</td>
<td></td>
<td>shiyoukanou</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td><strong>axiom</strong></td>
<td>公理</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td><strong>koori</strong></td>
<td></td>
</tr>
<tr>
<td>A statement that is accepted as true, to be used as a basis for a mathematical argument.</td>
<td>公理</td>
<td></td>
</tr>
<tr>
<td><strong>axle</strong></td>
<td>車軸</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td><strong>shajiku</strong></td>
<td></td>
</tr>
<tr>
<td>A shaft on which a wheel (or wheels) revolves.</td>
<td>車軸</td>
<td></td>
</tr>
<tr>
<td><strong>balance</strong></td>
<td>鉛合</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td><strong>tsurial</strong></td>
<td></td>
</tr>
<tr>
<td>Stability produced by equal distribution of force on each side of an axis.</td>
<td>鉛合</td>
<td></td>
</tr>
<tr>
<td><strong>ball bearing</strong></td>
<td>玉軸受け</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td><strong>tamajikuuke</strong></td>
<td></td>
</tr>
<tr>
<td>One of several hardened steel balls that roll easily over each other, to be used in mechanical joints.</td>
<td>玉軸受け</td>
<td></td>
</tr>
<tr>
<td><strong>barrel</strong></td>
<td>槽</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td><strong>taru</strong></td>
<td></td>
</tr>
<tr>
<td>An easily visible plastic barrier used in roadway construction to contain traffic.</td>
<td>槽</td>
<td></td>
</tr>
<tr>
<td><strong>barrier</strong></td>
<td>障壁</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td><strong>shouheki</strong></td>
<td></td>
</tr>
<tr>
<td>A dense immovable wall that is intended to block passage of traffic between lanes.</td>
<td>障壁</td>
<td></td>
</tr>
<tr>
<td><strong>bend</strong></td>
<td>曲げる</td>
<td></td>
</tr>
<tr>
<td><strong>verb</strong></td>
<td><strong>mageru</strong></td>
<td></td>
</tr>
<tr>
<td>To turn or force from a straight configuration.</td>
<td>曲げる</td>
<td></td>
</tr>
<tr>
<td><strong>bid</strong></td>
<td>入札</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td><strong>nyuusatsu</strong></td>
<td></td>
</tr>
<tr>
<td>To offer a price for payment or legal acceptance.</td>
<td>入札</td>
<td></td>
</tr>
<tr>
<td><strong>big bang theory</strong></td>
<td>ビッグバン宇宙論</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td><strong>biggu ban uchu ron</strong></td>
<td></td>
</tr>
<tr>
<td>The astronomic theory that states the universe originated from a single explosion of nearly infinite energy.</td>
<td>ビッグバン宇宙論</td>
<td></td>
</tr>
<tr>
<td><strong>binary</strong></td>
<td>二進法（の）</td>
<td></td>
</tr>
<tr>
<td><strong>adj.</strong></td>
<td><strong>nishinhoo(no)</strong></td>
<td></td>
</tr>
<tr>
<td>A numbering system of base 2.</td>
<td>二進法（の）</td>
<td></td>
</tr>
<tr>
<td><strong>biodegradable</strong></td>
<td>生物分解性な</td>
<td></td>
</tr>
<tr>
<td><strong>adj.</strong></td>
<td><strong>seibutsu bunnkaisei na</strong></td>
<td></td>
</tr>
<tr>
<td>Capable of being broken down by the action of living things (such as microorganisms).</td>
<td>生物分解性な</td>
<td></td>
</tr>
<tr>
<td><strong>biodegradation</strong></td>
<td>微生物分解</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td><strong>seibutsubunkai</strong></td>
<td></td>
</tr>
<tr>
<td>The process of being broken down by the action of microorganisms.</td>
<td>微生物分解</td>
<td></td>
</tr>
<tr>
<td><strong>biofeedback</strong></td>
<td>バイオフィードバック</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td><strong>baiofiidobakku</strong></td>
<td></td>
</tr>
<tr>
<td>The technique of making involuntary bodily processes perceptible to the senses with the goal of manipulating them with the mind.</td>
<td>バイオフィードバック</td>
<td></td>
</tr>
<tr>
<td><strong>bioreactor</strong></td>
<td>バイオリアクター</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td><strong>baioriakutaa</strong></td>
<td></td>
</tr>
<tr>
<td>A device in which living organisms (i.e. bacteria) synthesize useful substances or break down harmful ones.</td>
<td>バイオリアクター</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Meaning</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>biotechnology</td>
<td>生物工学</td>
<td>Applied Biological science, especially in genetic engineering.</td>
</tr>
<tr>
<td>board</td>
<td>板</td>
<td>A long piece of lumber of little thickness.</td>
</tr>
<tr>
<td>bolt</td>
<td>ボルト</td>
<td>A metal rod or pin for fastening objects together.</td>
</tr>
<tr>
<td>bond</td>
<td>接着剤</td>
<td>An adhesive or cementing substance that combines two materials.</td>
</tr>
<tr>
<td>boring</td>
<td>鑽孔</td>
<td>A cylindrical mass of material, usually excavated from the ground for testing purposes.</td>
</tr>
<tr>
<td>brace</td>
<td>支え</td>
<td>An auxiliary structural member that transmits or supports force or pressure.</td>
</tr>
<tr>
<td>breakthrough</td>
<td>発見</td>
<td>A sudden advance, especially in scientific knowledge.</td>
</tr>
<tr>
<td>brevity</td>
<td>簡潔さ</td>
<td>Shortness or conciseness of expression.</td>
</tr>
<tr>
<td>brick</td>
<td>煉瓦</td>
<td>A small rectangular unit of building or paving material.</td>
</tr>
<tr>
<td>budget</td>
<td>予算</td>
<td>To allocate funds towards expenditures.</td>
</tr>
<tr>
<td>budget</td>
<td>予算</td>
<td>A plan for the allocation of funds and the payment of expenditures.</td>
</tr>
<tr>
<td>bulk</td>
<td>容積</td>
<td>Largeness of size, shape, or mass.</td>
</tr>
<tr>
<td>bulldozer</td>
<td>ブルドーザー</td>
<td>A construction machine with a broad horizontal blade for moving earth.</td>
</tr>
<tr>
<td>buoyant</td>
<td>浮かびやすい</td>
<td>Displaying a tendency to float.</td>
</tr>
</tbody>
</table>
burst
noun
- A sudden blast or outbreak.

business hours
noun
- A timeframe that describes the hours of operation of a business.

buttress
noun
- A projecting structure of masonry or wood that supports a wall.

by-product
noun
- Something produced in an industrial or biological process that is in addition to the desired product.

byte
noun
- A group of eight binary digits processed as a unit by a computer.

cage
noun
- A framework that serves as support.

calculate
verb
- To determine by mathematical processes.

calculation
noun
- The result of a worked mathematical process.

calculator
noun
- An electronic device used to perform mathematical calculations.

calculus
noun
- The branch of mathematics that deals with the theory of integrals and derivatives.

caliber
noun
- Degree of strength, reliability, or quality.

canal
noun
- An artificial waterway for navigation or for irrigating land.

capacitor
noun
- An electrical component used in circuits to store energy in the form of electrical potential.

capital
noun
- The value of accumulated goods and currency.
<table>
<thead>
<tr>
<th>English Word</th>
<th>Japanese Word</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>carbon</td>
<td>炭素</td>
<td>A nonmetallic element that forms diamond and graphite and is found in coal and other carbonates.</td>
</tr>
<tr>
<td>cartridge</td>
<td>カートリッジ</td>
<td>A container that holds an otherwise unmanageable substance and is usually easily changed.</td>
</tr>
<tr>
<td>catalyst</td>
<td>触媒</td>
<td>A substance (i.e. an enzyme) that enables a chemical reaction to proceed at a faster rate, or under different conditions than otherwise possible.</td>
</tr>
<tr>
<td>cell</td>
<td>細胞</td>
<td>A very small division of living matter, with one center of activity, able alone or with others to perform all the operations necessary for life.</td>
</tr>
<tr>
<td>center of gravity</td>
<td>重心</td>
<td>The point at which the weight of an object may be theoretically concentrated.</td>
</tr>
<tr>
<td>centimeter</td>
<td>センチ (メートル)</td>
<td>A unit of length equal to 1/100th of a meter.</td>
</tr>
<tr>
<td>certification</td>
<td>保証</td>
<td>A statement made by an official person that a fact or facts are true.</td>
</tr>
<tr>
<td>channel</td>
<td>水路</td>
<td>A natural or man-made path used to contain and direct a flowing fluid.</td>
</tr>
<tr>
<td>chapter</td>
<td>支部</td>
<td>A local branch of an organization.</td>
</tr>
<tr>
<td>characteristic</td>
<td>特有の</td>
<td>A feature that indicates a special quality or identity.</td>
</tr>
<tr>
<td>chemical</td>
<td>化学物質</td>
<td>A substance obtained by a chemical process or used for producing a chemical effect.</td>
</tr>
<tr>
<td>chemical engineering</td>
<td>化学工学</td>
<td>Branch of engineering that deals with the creation and manipulation of chemical compounds.</td>
</tr>
<tr>
<td>chemical reaction</td>
<td>化学反応</td>
<td>An interaction between chemical compounds that changes reactants into chemical products.</td>
</tr>
<tr>
<td>chlorine</td>
<td>塩素</td>
<td>A halogen element that is used as a disinfectant in water purification.</td>
</tr>
<tr>
<td><strong>circuit</strong></td>
<td><strong>noun</strong></td>
<td>回路</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>• The complete path of an electric current that includes a source of electric energy.</td>
<td></td>
<td>kairo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>circulate</strong></th>
<th><strong>verb</strong></th>
<th>広まる</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To become widespread.</td>
<td></td>
<td>hiromaru</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>circumference</strong></th>
<th><strong>noun</strong></th>
<th>円周</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A measurement of length that describes the distance around the outer edge of a circle.</td>
<td></td>
<td>enshuu</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>civil engineering</strong></th>
<th><strong>noun</strong></th>
<th>土木工学</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Branch of engineering that deals with the design and analysis of structures and other public works.</td>
<td></td>
<td>dobokukougaiku</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>clarification</strong></th>
<th><strong>noun</strong></th>
<th>解明</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Communication that renders an idea free of confusion.</td>
<td></td>
<td>kaiimei</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>classification</strong></th>
<th><strong>noun</strong></th>
<th>分類</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A systematic approach for grouping items into categories according to pre-established criteria.</td>
<td></td>
<td>bunrui</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>clockwise</strong></th>
<th><strong>adv.</strong></th>
<th>時計回り</th>
</tr>
</thead>
<tbody>
<tr>
<td>• In the direction in which the hands of a clock rotate when viewed from the front.</td>
<td></td>
<td>tokeimawari</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>coagulate</strong></th>
<th><strong>verb</strong></th>
<th>固まる</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To cause to become viscous or thickened into a cohesive mass.</td>
<td></td>
<td>katamaru</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>code</strong></th>
<th><strong>noun</strong></th>
<th>法典</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A system of principles or rules.</td>
<td></td>
<td>houtenn</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>coefficient</strong></th>
<th><strong>noun</strong></th>
<th>係数</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The number by which a variable is multiplied.</td>
<td></td>
<td>keisu</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>cohesion</strong></th>
<th><strong>noun</strong></th>
<th>団結</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The act of sticking together tightly.</td>
<td></td>
<td>danketsu</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>coincide</strong></th>
<th><strong>verb</strong></th>
<th>一致する</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To occupy corresponding positions on a scale or in a series.</td>
<td></td>
<td>icchisuru</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>collaborate</strong></th>
<th><strong>verb</strong></th>
<th>合作する</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To work jointly with others or together, especially in an intellectual endeavor.</td>
<td></td>
<td>gassakusuru</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>collapse</strong></th>
<th><strong>verb</strong></th>
<th>崩壊する</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To cave in or give way.</td>
<td></td>
<td>houkai suru</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Meaning</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>collision</td>
<td>衝突</td>
<td>Act of coming together with direct impact.</td>
</tr>
<tr>
<td>combine</td>
<td>組合わせ</td>
<td>To join together, to form a single unit or whole, unite.</td>
</tr>
<tr>
<td>combustible</td>
<td>可燃性（の）</td>
<td>Capable of the spontaneous act of burning.</td>
</tr>
<tr>
<td>communication satellite</td>
<td>通信衛星</td>
<td>A manufactured machine used to relay video or audio signals from orbit in outer space.</td>
</tr>
<tr>
<td>compass</td>
<td>コンパス</td>
<td>A drafting instrument used for drawing circles.</td>
</tr>
<tr>
<td>compensate</td>
<td>補償する</td>
<td>To make an appropriate payment.</td>
</tr>
<tr>
<td>compensation</td>
<td>補償</td>
<td>Payment for goods or services rendered.</td>
</tr>
<tr>
<td>competence</td>
<td>能力</td>
<td>The knowledge that enables a person to perform a specific function well.</td>
</tr>
<tr>
<td>compiler</td>
<td>コンパイラ</td>
<td>A computer program that translates a set of high-level commands into machine language to be executed.</td>
</tr>
<tr>
<td>complete</td>
<td>完成する</td>
<td>To bring to an end, especially into a perfected state.</td>
</tr>
<tr>
<td>complex</td>
<td>複雑（な）</td>
<td>Hard to analyze or understand.</td>
</tr>
<tr>
<td>composite</td>
<td>合成（の）</td>
<td>Describing a solid material made of multiple substances that add to the whole, yet retain original properties.</td>
</tr>
<tr>
<td>compound</td>
<td>複合（の）</td>
<td>Composed of two or more parts.</td>
</tr>
<tr>
<td>compress</td>
<td>圧縮する</td>
<td>To press or squeeze together.</td>
</tr>
<tr>
<td>English term</td>
<td>Japanese equivalent</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>compression (force)</td>
<td>壓縮</td>
<td></td>
</tr>
<tr>
<td>compute</td>
<td>計算する</td>
<td></td>
</tr>
<tr>
<td>computer science</td>
<td>情報工学</td>
<td></td>
</tr>
<tr>
<td>computer-aided design</td>
<td>CAD（キャド）</td>
<td></td>
</tr>
<tr>
<td>concept</td>
<td>概念</td>
<td></td>
</tr>
<tr>
<td>concise</td>
<td>簡潔（な）</td>
<td></td>
</tr>
<tr>
<td>conclude</td>
<td>結論を出す</td>
<td></td>
</tr>
<tr>
<td>concrete</td>
<td>コンクリート</td>
<td></td>
</tr>
<tr>
<td>condition</td>
<td>状態</td>
<td></td>
</tr>
<tr>
<td>conductivity</td>
<td>導電性</td>
<td></td>
</tr>
<tr>
<td>conductor</td>
<td>導電体</td>
<td></td>
</tr>
<tr>
<td>confident</td>
<td>確信して</td>
<td></td>
</tr>
<tr>
<td>confidential</td>
<td>機密（の）</td>
<td></td>
</tr>
<tr>
<td>connection</td>
<td>連結部</td>
<td></td>
</tr>
</tbody>
</table>

- compression (force): A force which tends to shorten or contract the body on which it is applied.
- compute: To make a calculation.
- computer science: Study or practice of computer programming and software creation.
- computer-aided design: Act of creating construction documents using specialized computer software.
- concept: An abstract or generic idea generalized from particular instances.
- concise: Free from all elaboration and superfluous detail.
- conclude: To reach a logically necessary finality.
- concrete: A material made with a cementing agent, an aggregate, and water which sets and hardens the mixture.
- condition: A current state of being.
- conductivity: A measurement of the ease of which an electrical component allows flow of an electric current; also the reciprocal of electrical resistivity.
- conductor: A material or object through which electric current flows easily.
- confident: Possessing great assurance.
- confidential: Containing information of a secret nature.
- connection: Something that connects; a link.
<table>
<thead>
<tr>
<th>English Term</th>
<th>Japanese Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>consolidate</td>
<td>強固になる</td>
<td>verb: To form into a compact mass.</td>
</tr>
<tr>
<td>construction</td>
<td>建設</td>
<td>noun: The process, art, or manner of building something.</td>
</tr>
<tr>
<td>consultant</td>
<td>コンサルタント</td>
<td>noun: One who gives professional advice or services.</td>
</tr>
<tr>
<td>contaminate</td>
<td>汚染する</td>
<td>verb: To make unusable through the introduction of dangerous or undesirable substances.</td>
</tr>
<tr>
<td>contract</td>
<td>契約書</td>
<td>noun: A legal document describing a binding agreement between two or more parties.</td>
</tr>
<tr>
<td>contractor</td>
<td>土建屋</td>
<td>noun: A person who contracts to perform work or provide supplies for civil engineering projects.</td>
</tr>
<tr>
<td>contraption</td>
<td>仕掛け</td>
<td>noun: An often small mechanical or electronic device with a practical use.</td>
</tr>
<tr>
<td>control</td>
<td>管理</td>
<td>noun: A device or mechanism used to regulate something.</td>
</tr>
<tr>
<td>convex</td>
<td>凸面（の）</td>
<td>adj: Curved or rounded like the exterior of a sphere.</td>
</tr>
<tr>
<td>copier</td>
<td>コピー機</td>
<td>noun: A machine used to create additional identical paper documents from an original.</td>
</tr>
<tr>
<td>copper</td>
<td>銅</td>
<td>noun: A soft reddish metal; also an elemental substance.</td>
</tr>
<tr>
<td>copyright</td>
<td>著作権</td>
<td>noun: The exclusive legal right to publish and sell a work.</td>
</tr>
<tr>
<td>cord</td>
<td>ひも</td>
<td>noun: A long flexible building material that consists of many thin strands of metal, woven together.</td>
</tr>
<tr>
<td>core</td>
<td>核心</td>
<td>noun: A basic, essential, enduring part.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Definition</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>corporation</td>
<td>企業</td>
<td>A legally autonomous association of employers and employees in a business venture.</td>
</tr>
<tr>
<td>correction</td>
<td>訂正</td>
<td>Something substituted in place of what is wrong.</td>
</tr>
<tr>
<td>corrective</td>
<td>修正的な</td>
<td>Something intended to correct.</td>
</tr>
<tr>
<td>correspondence</td>
<td>通信</td>
<td>Communication by letters or written notices.</td>
</tr>
<tr>
<td>corrosion</td>
<td>腐食</td>
<td>The product of gradual wear by chemical action.</td>
</tr>
<tr>
<td>corrugated</td>
<td>波型（の）</td>
<td>Having a shape of alternating ridges and grooves.</td>
</tr>
<tr>
<td>cosmetic</td>
<td>表面的（な）</td>
<td>Superficial; Lacking depth.</td>
</tr>
<tr>
<td>council</td>
<td>委員会</td>
<td>A group that acts as an advisory or legislative body.</td>
</tr>
<tr>
<td>counterweight</td>
<td>分銅</td>
<td>An equivalent weight used in mechanical systems to balance forces for operational purposes.</td>
</tr>
<tr>
<td>cross section</td>
<td>断面</td>
<td>A representation of a cutting of something, cut at right angles to a given axis.</td>
</tr>
<tr>
<td>crucial</td>
<td>重大（な）</td>
<td>Important or essential.</td>
</tr>
<tr>
<td>cubic</td>
<td>立方（の）</td>
<td>Of third degree or power.</td>
</tr>
<tr>
<td>culvert</td>
<td>暗渠</td>
<td>A drain that passes perpendicularly to a path for the purpose of allowing fluid to flow under.</td>
</tr>
<tr>
<td>cumulative</td>
<td>累積（の）</td>
<td>Increasing by successive additions.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>English</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>curb</td>
<td>抑制</td>
<td>decimal</td>
</tr>
<tr>
<td>• A restraining frame, border, or edging.</td>
<td>yokusei</td>
<td>• Numbered or proceeding by tens.</td>
</tr>
<tr>
<td>curve</td>
<td>曲線</td>
<td>decompose</td>
</tr>
<tr>
<td>• A smoothly bent line.</td>
<td>kyokusen</td>
<td>• To break up into constituent parts through a chemical process.</td>
</tr>
<tr>
<td>cylinder</td>
<td>円柱形</td>
<td>deep</td>
</tr>
<tr>
<td>• The surface traced by a straight line moving parallel to another fixed straight line.</td>
<td>enchuukei</td>
<td>• Extending far downward.</td>
</tr>
<tr>
<td>damage</td>
<td>損害</td>
<td>defect</td>
</tr>
<tr>
<td>• Harm resulting from injury to person or property.</td>
<td>songai</td>
<td>• An imperfection that impairs worth or utility.</td>
</tr>
<tr>
<td>data</td>
<td>データ</td>
<td>deform</td>
</tr>
<tr>
<td>• Factual information (such as measurements) used as a basis for reasoning or calculation.</td>
<td>deeta</td>
<td>• To alter the shape of by stress.</td>
</tr>
<tr>
<td>database</td>
<td>データベース</td>
<td>demolish</td>
</tr>
<tr>
<td>• A large collection of data optimized for rapid retrieval.</td>
<td>deeta bessu</td>
<td>• To tear down or break into pieces.</td>
</tr>
<tr>
<td>debris</td>
<td>がれき類</td>
<td>denominator</td>
</tr>
<tr>
<td>• The remains of something broken down or destroyed.</td>
<td>gareki rui</td>
<td>• The part of a fraction below the line that signifies division.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td><strong>density</strong></td>
<td>密度</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>mitsudo</td>
<td></td>
</tr>
<tr>
<td>The quantity per unit volume or unit area.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>derivative</strong></td>
<td>導関数</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>doukansu</td>
<td></td>
</tr>
<tr>
<td>The limit of the ratio of the change in a function to the change in its independent variable as the variable approaches zero.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>design</strong></td>
<td>設計</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>sekkei</td>
<td></td>
</tr>
<tr>
<td>A sketch or drawing showing the main features of something to be carried out or build.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>detour</strong></td>
<td>迂回路</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>ukairo</td>
<td></td>
</tr>
<tr>
<td>A deviation from a direct course, usually used in the case of roadway closures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>development</strong></td>
<td>開発</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>kaihatsu</td>
<td></td>
</tr>
<tr>
<td>Result of making land suitable for commercial or residential purposes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>dimension</strong></td>
<td>寸法</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>sunpoo</td>
<td></td>
</tr>
<tr>
<td>A measure in one direction.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>director</strong></td>
<td>取締役</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>torishimariyaku</td>
<td></td>
</tr>
<tr>
<td>The authoritative head of an organized group or management unit.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>discrete</strong></td>
<td>ディスクリー</td>
<td></td>
</tr>
<tr>
<td>adj.</td>
<td>dessukurii</td>
<td></td>
</tr>
<tr>
<td>Describing specifically a single component semiconductor, as opposed to circuit board comprised of many semiconductors.</td>
<td></td>
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</tr>
<tr>
<td><strong>discussion</strong></td>
<td>考察</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>koosatsu</td>
<td></td>
</tr>
<tr>
<td>A thorough treatment of a topic or questions in a scientific paper.</td>
<td></td>
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</tr>
<tr>
<td><strong>disinfectant</strong></td>
<td>消毒剤</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>shoodokuzai</td>
<td></td>
</tr>
<tr>
<td>A substance that eliminates the potential for microbial contamination.</td>
<td></td>
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</tr>
<tr>
<td><strong>disparity</strong></td>
<td>格差</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>kakusa</td>
<td></td>
</tr>
<tr>
<td>Being completely different or unequal.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>dissolve</strong></td>
<td>融ける</td>
<td></td>
</tr>
<tr>
<td>verb</td>
<td>tokeru</td>
<td></td>
</tr>
<tr>
<td>To cause a solute to disperse into solution.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>distill</strong></td>
<td>蒸留する</td>
<td></td>
</tr>
<tr>
<td>verb</td>
<td>jooryuu suru</td>
<td></td>
</tr>
<tr>
<td>To purify a liquid by successive evaporation and condensation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>drafting</strong></td>
<td>製図</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>seizu</td>
<td></td>
</tr>
<tr>
<td>Act of drawing a representation of something to be built.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Definition</td>
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<td>---------</td>
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</tr>
<tr>
<td><strong>drag</strong></td>
<td>抗力</td>
<td>The resisting force acting on a body (such as an airplane) moving through a fluid (such as air).</td>
</tr>
<tr>
<td><strong>drainage</strong></td>
<td>排水</td>
<td>The process of removing undesirable excess liquid from a surface.</td>
</tr>
<tr>
<td><strong>drainage system</strong></td>
<td>排水設備</td>
<td>A civil engineering work used to remove rainwater from roadways or land.</td>
</tr>
<tr>
<td><strong>driveway</strong></td>
<td>私道</td>
<td>A privately driven surface that connects a public roadway to a private lot or building.</td>
</tr>
<tr>
<td><strong>effective</strong></td>
<td>効果的 (な)</td>
<td>Producing a desired effect, such as the stresses in soils that determine strength.</td>
</tr>
<tr>
<td><strong>efficiency</strong></td>
<td>効率</td>
<td>Quickness of working well.</td>
</tr>
<tr>
<td><strong>elastic</strong></td>
<td>弾性な</td>
<td>Able to spring back into shape after being stretched or able to spring back into shape after being stretched or bent.</td>
</tr>
<tr>
<td><strong>electric field</strong></td>
<td>電場</td>
<td>A region associated with a distribution of electric charge where resulting forces act upon other electric charges.</td>
</tr>
<tr>
<td><strong>electric motor</strong></td>
<td>電動機</td>
<td>A rotating machine that transforms electrical energy into mechanical energy.</td>
</tr>
<tr>
<td><strong>electric potential</strong></td>
<td>電位</td>
<td>The energy released in the transfer of a unit quantity of electricity from one point to another.</td>
</tr>
<tr>
<td><strong>electric power</strong></td>
<td>電力</td>
<td>The means of supplying energy that utilizes electricity.</td>
</tr>
<tr>
<td><strong>electrical engineering</strong></td>
<td>電気工学</td>
<td>Branch of engineering that deals with the design of electrical circuits and components.</td>
</tr>
<tr>
<td><strong>electrical steel</strong></td>
<td>電炉鋼</td>
<td>Steel comprised of a percentage of silicon, used to transform kinetic energy to electrical energy, or vice-versa (Also called Silicon Steel).</td>
</tr>
<tr>
<td><strong>electron</strong></td>
<td>電子</td>
<td>An elementary atomic particle with an inherent negative charge.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Definition</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>element</td>
<td>要素</td>
<td>A quantity which can be noticed.</td>
</tr>
<tr>
<td>elementary particle</td>
<td>素粒子</td>
<td>The most basic indivisible particles that comprise matter and energy and dictate fundamental forces of nature.</td>
</tr>
<tr>
<td>elevation</td>
<td>高度</td>
<td>The height of something, as measured from the surface of the ocean.</td>
</tr>
<tr>
<td>embankment</td>
<td>堤防</td>
<td>A sloping expanse of soil or other construction material.</td>
</tr>
<tr>
<td>employee</td>
<td>従業員</td>
<td>One employed by another for wages or salary.</td>
</tr>
<tr>
<td>energy</td>
<td>活力</td>
<td>The capacity for doing work.</td>
</tr>
<tr>
<td>engineering department</td>
<td>技術部</td>
<td>A group within a company or government agency which practices engineering.</td>
</tr>
<tr>
<td>entropy</td>
<td>エントロピー</td>
<td>State or magnitude of disorder.</td>
</tr>
<tr>
<td>environmental department</td>
<td>環境部</td>
<td>A group within a company or government agency which practices environmental control or observation.</td>
</tr>
<tr>
<td>enzyme</td>
<td>酵素</td>
<td>Complex proteins that are produced by living cells to speed up specific biochemical reactions.</td>
</tr>
<tr>
<td>equal (to)</td>
<td>同等の</td>
<td>Like in magnitude or nature.</td>
</tr>
<tr>
<td>equation</td>
<td>方程式</td>
<td>A formal statement of the equality of mathematical or logical expressions.</td>
</tr>
<tr>
<td>equipment</td>
<td>備品／機材</td>
<td>The fixed assets of a business, other than land and buildings.</td>
</tr>
<tr>
<td>error</td>
<td>間違い</td>
<td>Variation in measurements or calculations of a quantity due to mistakes or to uncontrollable factors.</td>
</tr>
</tbody>
</table>
**estimate**  
noun  
- A statement of the cost of work to be done; a rough or approximate calculation.

**evaporate**  
verb  
- To convert into vapor.

**even (number)**  
noun  
- A numerical value that leaves no remainder when divided by (2).

**excavate**  
verb  
- To dig out and remove.

**existing**  
adj.  
- Present in the current state.

**expansion**  
noun  
- The state of increasing in volume.

**experiment**  
noun  
- An operation carried out under controlled conditions in order to discover an unknown effect.

**explicit**  
adj.  
- Clear and fully expressed; with full details.

**evaporate**  
verb  
- To convert into vapor.

**even (number)**  
noun  
- A numerical value that leaves no remainder when divided by (2).

**excavate**  
verb  
- To dig out and remove.

**existing**  
adj.  
- Present in the current state.

**expansion**  
noun  
- The state of increasing in volume.

**experiment**  
noun  
- An operation carried out under controlled conditions in order to discover an unknown effect.
<table>
<thead>
<tr>
<th>English</th>
<th>Japanese</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>flow</td>
<td>流れ</td>
<td>The motion characteristic of fluids.</td>
</tr>
<tr>
<td>fluid mechanics</td>
<td>流体力学</td>
<td>A branch of physics that deals with fluids, their properties and their motion.</td>
</tr>
<tr>
<td>force</td>
<td>力</td>
<td>An influence, that if applied to a free body, results in its acceleration and sometimes in its deformation.</td>
</tr>
<tr>
<td>foreman</td>
<td>現場監督</td>
<td>A person in charge of a group of workers.</td>
</tr>
<tr>
<td>formula</td>
<td>公式</td>
<td>A general fact, rule, or principle expressed in usually mathematical symbols.</td>
</tr>
<tr>
<td>formulate</td>
<td>定式化する</td>
<td>To put into a systematized statement or expression.</td>
</tr>
<tr>
<td>formulation</td>
<td>公式化</td>
<td>An expression in an exact way.</td>
</tr>
<tr>
<td>foundation</td>
<td>基盤</td>
<td>An underlying base or support; the whole substructure of a building.</td>
</tr>
<tr>
<td>fraction</td>
<td>分数</td>
<td>A numerical representation indicating the quotient of two numbers.</td>
</tr>
<tr>
<td>fracture</td>
<td>折れる</td>
<td>To cause a small break in.</td>
</tr>
<tr>
<td>frame</td>
<td>構造</td>
<td>The load-bearing skeleton of a structure.</td>
</tr>
<tr>
<td>framework</td>
<td>骨組み</td>
<td>A skeletal, openwork, or structural frame.</td>
</tr>
<tr>
<td>friction</td>
<td>摩擦</td>
<td>The force that resists relative motion between two bodies in contact.</td>
</tr>
<tr>
<td>function</td>
<td>動く</td>
<td>The act of working according to intended design.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Definition</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>function</td>
<td>関数</td>
<td>A mathematical correspondence where one variable is linked to another in an exclusive manner.</td>
</tr>
<tr>
<td>funds</td>
<td>資金</td>
<td>Money that is available to be distributed.</td>
</tr>
<tr>
<td>fuzzy logic</td>
<td>ファジー理論</td>
<td>Theory that challenges traditional logic as it applies to self evident truths.</td>
</tr>
<tr>
<td>galvanize</td>
<td>亜鉛メッキ</td>
<td>To immerse in molten zinc to produce a coating of zinc-iron alloy.</td>
</tr>
<tr>
<td>gas main</td>
<td>ガス本管</td>
<td>Large pipe that transmits natural gas between distribution centers.</td>
</tr>
<tr>
<td>gauge</td>
<td>計量器</td>
<td>An instrument for measuring or testing.</td>
</tr>
<tr>
<td>gear</td>
<td>ギア</td>
<td>A toothed wheel.</td>
</tr>
<tr>
<td>gear box</td>
<td>変速機</td>
<td>A mechanical casing containing gears.</td>
</tr>
<tr>
<td>gear ratio</td>
<td>歯車比</td>
<td>A ratio measure of the difference of diameter of two adjacent gears.</td>
</tr>
<tr>
<td>generator</td>
<td>発電機</td>
<td>A machine by which mechanical energy is changed into electrical energy.</td>
</tr>
<tr>
<td>genetic engineering</td>
<td>遺伝子工学</td>
<td>Branch of biology that deals with the reconstruction of DNA in plants and animals.</td>
</tr>
<tr>
<td>geology</td>
<td>地質学</td>
<td>A science that analyzes the history of the earth and its life by means of its rocks and minerals.</td>
</tr>
<tr>
<td>geometric mean</td>
<td>幾何平均</td>
<td>The number that is the second of three consecutive terms of a geometric progression.</td>
</tr>
<tr>
<td>geometry</td>
<td>幾何学</td>
<td>A branch of mathematics that deals with the properties and relationships of points, lines, angles, etc.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
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<tr>
<td>grade</td>
<td>グレード</td>
<td></td>
</tr>
<tr>
<td>• A level or state of quality as defined by industry standards.</td>
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</tr>
<tr>
<td>noun</td>
<td>gureedo</td>
<td></td>
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<tr>
<td>gram</td>
<td>グラム</td>
<td></td>
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<tr>
<td>• A metric unit of mass equal to the mass of one cubic centimeter of water at its maximum density.</td>
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</tr>
<tr>
<td>noun</td>
<td>guramuu</td>
<td></td>
</tr>
<tr>
<td>graph</td>
<td>グラフ</td>
<td></td>
</tr>
<tr>
<td>• A diagram that represents the variation of a variable in comparison with other variables.</td>
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<tr>
<td>noun</td>
<td>gurafuu</td>
<td></td>
</tr>
<tr>
<td>graphics</td>
<td>グラフィックス</td>
<td></td>
</tr>
<tr>
<td>• A set of drawings, images, or formations of text or engraving.</td>
<td></td>
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</tr>
<tr>
<td>noun</td>
<td>gurafikkusu</td>
<td></td>
</tr>
<tr>
<td>guardrail</td>
<td>ガードレール</td>
<td></td>
</tr>
<tr>
<td>• A safety system of posts and railing constructed along road embankments.</td>
<td></td>
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</tr>
<tr>
<td>noun</td>
<td>gaadoreeruu</td>
<td></td>
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<tr>
<td>gutter</td>
<td>溝</td>
<td></td>
</tr>
<tr>
<td>• A sloped or depressed area adjacent to a roadway curb line used to channel rainfall and runoff.</td>
<td></td>
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</tr>
<tr>
<td>noun</td>
<td>dobu / mizo</td>
<td></td>
</tr>
<tr>
<td>hairline (crack)</td>
<td>毛割れ</td>
<td></td>
</tr>
<tr>
<td>• An extremely thin, often microscope fracture.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>keware</td>
<td></td>
</tr>
<tr>
<td>hard drive</td>
<td>ハードディスクドライブ</td>
<td></td>
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<tr>
<td>• A piece of computer hardware used to store data magnetically.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>haadodisuku doraibu</td>
<td></td>
</tr>
<tr>
<td>hardness</td>
<td>硬さ</td>
<td></td>
</tr>
<tr>
<td>• Resistance of metal to indentation or scratching under a static load.</td>
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</tr>
<tr>
<td>noun</td>
<td>katasa</td>
<td></td>
</tr>
<tr>
<td>hardware</td>
<td>ハードウェア</td>
<td></td>
</tr>
<tr>
<td>• Tangible items of equipment or components used for a particular purpose.</td>
<td></td>
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</tr>
<tr>
<td>noun</td>
<td>haado ueaa</td>
<td></td>
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<tr>
<td>heat</td>
<td>熱</td>
<td></td>
</tr>
<tr>
<td>• The energy associated with temperature.</td>
<td></td>
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</tr>
<tr>
<td>noun</td>
<td>netsuu</td>
<td></td>
</tr>
<tr>
<td>heat capacity</td>
<td>熱容量</td>
<td></td>
</tr>
<tr>
<td>• The potential or suitability for storing thermal energy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>netsuyooryoo</td>
<td></td>
</tr>
<tr>
<td>heat insulating</td>
<td>断熱材</td>
<td></td>
</tr>
<tr>
<td>• A nonconductive material used to prevent the transfer of thermal energy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>dannetsuzai</td>
<td></td>
</tr>
<tr>
<td>heavy water</td>
<td>重水</td>
<td></td>
</tr>
<tr>
<td>• The molecular compound formed by two hydrogen isotopes (deuterium) and oxygen.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>juusui</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
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<td>---------</td>
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</tr>
<tr>
<td><strong>high-priority</strong></td>
<td>最優先（の）</td>
<td></td>
</tr>
<tr>
<td><strong>adj.</strong></td>
<td>saiyuusen (no)</td>
<td></td>
</tr>
<tr>
<td>• Having a urgent or important nature.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>high-voltage</strong></td>
<td>高圧（の）</td>
<td></td>
</tr>
<tr>
<td><strong>adj.</strong></td>
<td>kooatsu (no)</td>
<td></td>
</tr>
<tr>
<td>• Describing electric lines that posses a dangerously large electric potential.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>highway</strong></td>
<td>高速道路</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td>kousokudouro</td>
<td></td>
</tr>
<tr>
<td>• A limited-access roadway for the rapid movement of motor vehicles.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>hinge</strong></td>
<td>蝶つがい</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td>chootsugai</td>
<td></td>
</tr>
<tr>
<td>• A jointed device on which a door or other swinging part turns.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>homogeneous</strong></td>
<td>単一（の）</td>
<td></td>
</tr>
<tr>
<td><strong>adj.</strong></td>
<td>tan’itsu (no)</td>
<td></td>
</tr>
<tr>
<td>• Of uniform structure or composition throughout.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>horizontal</strong></td>
<td>水平（な）</td>
<td></td>
</tr>
<tr>
<td><strong>adj.</strong></td>
<td>suihei (na)</td>
<td></td>
</tr>
<tr>
<td>• Operating in a plane parallel to the horizon.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>hydroelectric</strong></td>
<td>水力発電（の）</td>
<td></td>
</tr>
<tr>
<td><strong>adj.</strong></td>
<td>suiryouku hatsuden (no)</td>
<td></td>
</tr>
<tr>
<td>• Of or relating to production of electricity by waterpower.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>hypothesis</strong></td>
<td>仮説</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td>kasetsu</td>
<td></td>
</tr>
<tr>
<td>• A tentative assumption made in order to draw out and test its logical or empirical consequences.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>impedance</strong></td>
<td>電気抵抗</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td>denki teikou</td>
<td></td>
</tr>
<tr>
<td>• The apparent opposition in an electrical circuit to the flow of an alternating current.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>inaccurate</strong></td>
<td>不正確（な）</td>
<td></td>
</tr>
<tr>
<td><strong>adj.</strong></td>
<td>fuseikaku (na)</td>
<td></td>
</tr>
<tr>
<td>• Not accurate; faulty.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>inch</strong></td>
<td>インチ</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td>inchi</td>
<td></td>
</tr>
<tr>
<td>• A unit of length equal to 1/36 yard.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>incidental</strong></td>
<td>付随的な</td>
<td></td>
</tr>
<tr>
<td><strong>adj.</strong></td>
<td>fuzuitekina</td>
<td></td>
</tr>
<tr>
<td>• Being likely to be included as a normal consequence. (e.g. payment for construction items.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>incline (of a road)</strong></td>
<td>斜面</td>
<td></td>
</tr>
<tr>
<td><strong>noun</strong></td>
<td>shamenn</td>
<td></td>
</tr>
<tr>
<td>• A sloped or slanted surface.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>industrial</strong></td>
<td>工業（の）</td>
<td></td>
</tr>
<tr>
<td><strong>adj.</strong></td>
<td>koogyoo (no)</td>
<td></td>
</tr>
<tr>
<td>• Relating to systematic labor, especially for the creation of something of value.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Pinyin</td>
</tr>
<tr>
<td>---------</td>
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</tr>
<tr>
<td>inertia</td>
<td>惯性</td>
<td>kansei</td>
</tr>
<tr>
<td>infinite</td>
<td>無限（の）</td>
<td>mugen (no)</td>
</tr>
<tr>
<td>infrared rays</td>
<td>赤外線</td>
<td>sekigaisen</td>
</tr>
<tr>
<td>ingenuity</td>
<td>巧妙さ</td>
<td>koumyousa</td>
</tr>
<tr>
<td>innovate</td>
<td>革新する</td>
<td>kushinnsuru</td>
</tr>
<tr>
<td>input</td>
<td>入力</td>
<td>nyuuryoku</td>
</tr>
<tr>
<td>insignificant</td>
<td>取るに足らない</td>
<td>torunitaranai</td>
</tr>
<tr>
<td>Word</td>
<td>Meaning</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>iron</td>
<td>A very common and useful metal; also an elemental substance.</td>
<td></td>
</tr>
<tr>
<td>iron</td>
<td>A heavy malleable ductile magnetic silver-white metallic element that readily rusts in moist air.</td>
<td></td>
</tr>
<tr>
<td>isometric</td>
<td>A spacial system characterized by three equal axes at right angles.</td>
<td></td>
</tr>
<tr>
<td>itemize</td>
<td>To set down in detail or by particulars.</td>
<td></td>
</tr>
<tr>
<td>jack</td>
<td>Something that holds or supports in position.</td>
<td></td>
</tr>
<tr>
<td>jam (traffic)</td>
<td>Undesirable buildup of vehicles on transportation routes.</td>
<td></td>
</tr>
<tr>
<td>jamb</td>
<td>An upright surface that forms the side of an opening.</td>
<td></td>
</tr>
<tr>
<td>jet</td>
<td>A forceful stream of fluid discharged from a nozzle.</td>
<td></td>
</tr>
<tr>
<td>jobsite</td>
<td>A physical location where an engineering work is being constructed.</td>
<td></td>
</tr>
<tr>
<td>joint</td>
<td>The junction of multiple members of a framed structure.</td>
<td></td>
</tr>
<tr>
<td>joist</td>
<td>A piece of timber or metal that spans walls and supports a roof or floor above.</td>
<td></td>
</tr>
<tr>
<td>junction</td>
<td>A place or point of meeting.</td>
<td></td>
</tr>
<tr>
<td>junction box</td>
<td>A chamber inlaid into pavement or sidewalk to serve as a connection point for underground wiring.</td>
<td></td>
</tr>
<tr>
<td>keyboard</td>
<td>An assemblage of systematically arranged keys by which a machine or device is operated.</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>---</td>
</tr>
<tr>
<td><strong>kilowatt</strong></td>
<td>キロワット</td>
<td>千瓦 (1000) of the absolute meter-kilogram-second units of power.</td>
</tr>
<tr>
<td><strong>laboratory</strong></td>
<td>研究所</td>
<td>ラボラトリー</td>
</tr>
<tr>
<td><strong>laminate</strong></td>
<td>薄板</td>
<td>ラミネート</td>
</tr>
<tr>
<td><strong>landslide</strong></td>
<td>地滑り</td>
<td>ランドスリド</td>
</tr>
<tr>
<td><strong>lane</strong></td>
<td>車線</td>
<td>ライン</td>
</tr>
<tr>
<td><strong>laser</strong></td>
<td>レーザー</td>
<td>レーザー</td>
</tr>
<tr>
<td><strong>liability</strong></td>
<td>負債</td>
<td>負担</td>
</tr>
<tr>
<td><strong>light bulb</strong></td>
<td>電球</td>
<td>ライト</td>
</tr>
<tr>
<td><strong>linear</strong></td>
<td>線形</td>
<td>リニア</td>
</tr>
<tr>
<td><strong>logarithm</strong></td>
<td>対数</td>
<td>ログ</td>
</tr>
<tr>
<td><strong>loss</strong></td>
<td>損</td>
<td>ロス</td>
</tr>
<tr>
<td><strong>magnesium</strong></td>
<td>磁気</td>
<td>マグネシウム</td>
</tr>
<tr>
<td><strong>magnetic</strong></td>
<td>磁石 (の)</td>
<td>マグネット</td>
</tr>
<tr>
<td><strong>magnitude</strong></td>
<td>規模</td>
<td>マス カラス</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td><strong>management</strong></td>
<td>管理者</td>
<td></td>
</tr>
<tr>
<td>The group of persons responsible for the conducting or supervising of something.</td>
<td>kannrisha</td>
<td></td>
</tr>
<tr>
<td><strong>manufactured goods</strong></td>
<td>製品</td>
<td></td>
</tr>
<tr>
<td>Made or produced articles for sale.</td>
<td>seihin</td>
<td></td>
</tr>
<tr>
<td><strong>manufacturing</strong></td>
<td>加工</td>
<td></td>
</tr>
<tr>
<td>Process of making raw materials into a product suitable for use.</td>
<td>kakou</td>
<td></td>
</tr>
<tr>
<td><strong>maximum</strong></td>
<td>最高値</td>
<td></td>
</tr>
<tr>
<td>The largest value assumed by a continuous function defined on any given interval.</td>
<td>saikouchi</td>
<td></td>
</tr>
<tr>
<td><strong>measurement</strong></td>
<td>寸法</td>
<td></td>
</tr>
<tr>
<td>A figure, extent, or amount obtained by measuring.</td>
<td>sunnpou</td>
<td></td>
</tr>
<tr>
<td><strong>mechanics</strong></td>
<td>力学</td>
<td></td>
</tr>
<tr>
<td>A branch of physical science that deals with energy and forces and their effect on bodies.</td>
<td>rikigaku</td>
<td></td>
</tr>
<tr>
<td><strong>medical</strong></td>
<td>医学の</td>
<td></td>
</tr>
<tr>
<td>Relating to physicians or to the science that deals with the maintenance of health.</td>
<td>igakuno</td>
<td></td>
</tr>
<tr>
<td><strong>medical school</strong></td>
<td>医学校</td>
<td></td>
</tr>
<tr>
<td>An academic entity that trains pupils in the theory and practice of Medicine.</td>
<td>igaku kou</td>
<td></td>
</tr>
<tr>
<td><strong>mesh</strong></td>
<td>網目</td>
<td></td>
</tr>
<tr>
<td>Material woven in a network with small holes between the threads.</td>
<td>amime</td>
<td></td>
</tr>
<tr>
<td><strong>metal</strong></td>
<td>金属</td>
<td></td>
</tr>
<tr>
<td>Any of various ductile and typically lustrous substances that are good conductors of electricity and heat.</td>
<td>kinzoku</td>
<td></td>
</tr>
<tr>
<td><strong>metric system</strong></td>
<td>メートル法</td>
<td></td>
</tr>
<tr>
<td>A decimal system of weights and measures based on the meter and on the kilogram.</td>
<td>meetoru hoo</td>
<td></td>
</tr>
<tr>
<td><strong>milligram</strong></td>
<td>ミリグラム</td>
<td></td>
</tr>
<tr>
<td>(1/1000) of a gram, a metric unit of mass nearly equal to the mass of one cubic centimeter of water at its maximum density.</td>
<td>miriguramu</td>
<td></td>
</tr>
<tr>
<td><strong>millimeter</strong></td>
<td>ミリ</td>
<td></td>
</tr>
<tr>
<td>(1/1000) of the base unit of length in the International System of Units.</td>
<td>miri</td>
<td></td>
</tr>
<tr>
<td><strong>minimum</strong></td>
<td>最低限</td>
<td></td>
</tr>
<tr>
<td>The smallest value assumed by a continuous function defined on any given interval.</td>
<td>saiteigen</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td><strong>model</strong></td>
<td>型</td>
<td></td>
</tr>
<tr>
<td>- A particular type of vehicle, weapon, machine, instrument, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>modulus</strong></td>
<td>率</td>
<td></td>
</tr>
<tr>
<td>- Rate; ratio; proportion; percentage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>monitor</strong></td>
<td>モニター</td>
<td></td>
</tr>
<tr>
<td>- A general term for technology used to display images.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>mouse</strong></td>
<td>マウス</td>
<td></td>
</tr>
<tr>
<td>- A small manual device that controls movement of the cursor on a computer monitor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>multiplication</strong></td>
<td>掛け算</td>
<td></td>
</tr>
<tr>
<td>- A mathematical operation comprised of adding an integer to itself a specified number of times.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>negative (number)</strong></td>
<td>負数</td>
<td></td>
</tr>
<tr>
<td>- A numeric value which is less than zero.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>nonlinear</strong></td>
<td>非線形</td>
<td></td>
</tr>
<tr>
<td>- Related to something which is not directly or inversely proportional to a given variable. A nonlinear diagram.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>notes</strong></td>
<td>注記</td>
<td></td>
</tr>
<tr>
<td>- Brief comments to aid in understanding.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>notify</strong></td>
<td>通知する</td>
<td></td>
</tr>
<tr>
<td>- To tell someone of or about something.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>nuclear reactor</strong></td>
<td>原子炉</td>
<td></td>
</tr>
<tr>
<td>- A device for the controlled release of nuclear energy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>numerical</strong></td>
<td>数（の）</td>
<td></td>
</tr>
<tr>
<td>- Expressed in or involving numbers or a number system.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>occupation</strong></td>
<td>職業</td>
<td></td>
</tr>
<tr>
<td>- The principle career or business of one's life.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>odd (number)</strong></td>
<td>奇数</td>
<td></td>
</tr>
<tr>
<td>- A numerical value that leaves a remainder equal to (1) when divided by (2).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>on-ramp</strong></td>
<td>入りロランプ</td>
<td></td>
</tr>
<tr>
<td>- A ramp which connects a surface road to a limited-access highway.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Definition</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>optimal</td>
<td>最適（の）</td>
<td>Most desirable or satisfactory.</td>
</tr>
<tr>
<td>origin (of coordinates)</td>
<td>原点</td>
<td>The intersection of the axes of a coordinate system.</td>
</tr>
<tr>
<td>oval</td>
<td>椭円形</td>
<td>Geometric figure similar to a circle, but with two differing axis lengths.</td>
</tr>
<tr>
<td>overflow</td>
<td>溢れる</td>
<td>To fill a space to capacity and spread beyond its limits.</td>
</tr>
<tr>
<td>overload</td>
<td>荷物を積み過ぎる</td>
<td>To put an excess weight or mass upon.</td>
</tr>
<tr>
<td>panel</td>
<td>パネル</td>
<td>A flat usually rectangular piece of construction material made to form part of a surface.</td>
</tr>
<tr>
<td>parallel</td>
<td>平行（の）</td>
<td>Extending in the same direction, everywhere equidistant, and not meeting.</td>
</tr>
<tr>
<td>parameter</td>
<td>パラメーター</td>
<td>An arbitrary constant whose value characterizes a member of a system.</td>
</tr>
<tr>
<td>pavement</td>
<td>舗装道路</td>
<td>The artificially covered surface of a public thoroughfare.</td>
</tr>
<tr>
<td>percentage</td>
<td>百分率</td>
<td>A part of a whole expressed in hundredths.</td>
</tr>
<tr>
<td>perpendicular</td>
<td>垂直（な）</td>
<td>Two or more lines, vectors, etc. standing at right angles to each other.</td>
</tr>
<tr>
<td>phase</td>
<td>段階</td>
<td>A particular state in a regularly recurring cycle of states.</td>
</tr>
<tr>
<td>physics</td>
<td>物理学</td>
<td>A science that deals with matter and energy and their interactions.</td>
</tr>
<tr>
<td>pier</td>
<td>橋脚</td>
<td>An intermediate span support between two bridge abutments.</td>
</tr>
<tr>
<td>English Word</td>
<td>Japanese Word</td>
<td>Translation</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>plaster</td>
<td>漆喰</td>
<td>A pasty mixture of lime, water, and sand that hardens on drying and is used for coating walls and ceilings.</td>
</tr>
<tr>
<td>plot</td>
<td>(グラフ上に) (点)を書く</td>
<td>To mark or note on or as if on a map or chart.</td>
</tr>
<tr>
<td>plutonium</td>
<td>プルトニウム</td>
<td>A radioactive metallic element similar chemically to uranium.</td>
</tr>
<tr>
<td>plywood</td>
<td>ベニヤ板</td>
<td>A structural material consisting of sheets of wood cemented together at varying angles.</td>
</tr>
<tr>
<td>polar coordinates</td>
<td>極座標</td>
<td>A coordinate system that uses distance and angle to locate points.</td>
</tr>
<tr>
<td>positive (number)</td>
<td>正数</td>
<td>A numeric value which is greater than zero.</td>
</tr>
<tr>
<td>power</td>
<td>電力</td>
<td>A source or means of supplying electrical energy.</td>
</tr>
<tr>
<td>power (mathemtical)</td>
<td>累乗</td>
<td>The number of times a number occurs as a factor in a product.</td>
</tr>
<tr>
<td>practical</td>
<td>実用的な</td>
<td>Capable of being put to use or account.</td>
</tr>
<tr>
<td>precise</td>
<td>正確（な）</td>
<td>Exactly or sharply defined or stated.</td>
</tr>
<tr>
<td>preliminary</td>
<td>予備（の）</td>
<td>Coming before and usually forming a necessary prelude to something else.</td>
</tr>
<tr>
<td>pressure</td>
<td>圧力</td>
<td>The scalar quantity that describes a magnitude of force exerted over some surface divided by the surface's area.</td>
</tr>
<tr>
<td>professional</td>
<td>プロ</td>
<td>One that engages in a pursuit or activity professionally.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Definition</td>
</tr>
<tr>
<td>---------</td>
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<td>------------</td>
</tr>
<tr>
<td>profit</td>
<td>利益</td>
<td>The excess of income over expenditures.</td>
</tr>
<tr>
<td>program (computer)</td>
<td>プログラム</td>
<td>A sequence of coded instructions that can be executed.</td>
</tr>
<tr>
<td>programming</td>
<td>プログラミング</td>
<td>Act of inputting high-level language commands into a computer to be compiled and executed.</td>
</tr>
<tr>
<td>property</td>
<td>資産</td>
<td>Something owned, usually a piece of real estate.</td>
</tr>
<tr>
<td>proposed</td>
<td>提案</td>
<td>Recommended to correct something that is currently lacking.</td>
</tr>
<tr>
<td>protocol</td>
<td>議定書</td>
<td>A code prescribing strict adherence to correct etiquette.</td>
</tr>
<tr>
<td>quadrangle</td>
<td>中庭</td>
<td>A four sided open area formed by the walls of adjacent buildings.</td>
</tr>
<tr>
<td>quadrant</td>
<td>四分円</td>
<td>One of four parts into which a plane is divided by its rectangular coordinate axes.</td>
</tr>
<tr>
<td>quadratic</td>
<td>二次</td>
<td>Involving mathematical terms to the second power, but no higher.</td>
</tr>
<tr>
<td>quadratic equation</td>
<td>二次方程式</td>
<td>An equation that includes mathematical terms to the second power, but no higher.</td>
</tr>
<tr>
<td>quadrilateral</td>
<td>四辺形</td>
<td>A four-sided polygon.</td>
</tr>
<tr>
<td>qualification</td>
<td>資格</td>
<td>A proof that one has passed an examination and gained a certain level of knowledge or skill.</td>
</tr>
<tr>
<td>quality assurance</td>
<td>品質保証</td>
<td>A firm statement that a product's quality certainly meets pre-determined levels.</td>
</tr>
<tr>
<td>quality control</td>
<td>品質管理</td>
<td>Activities and checks designed to ensure adequate quality in manufactured products.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td><strong>quantity</strong></td>
<td>数量</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>A measured or estimated amount.</td>
<td>suuryoo</td>
</tr>
<tr>
<td><strong>quotient</strong></td>
<td>商</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>The result of dividing two numbers.</td>
<td>shoo</td>
</tr>
<tr>
<td><strong>radioactive</strong></td>
<td>放射性（の）</td>
<td></td>
</tr>
<tr>
<td>adj</td>
<td>Caused by or exhibiting radioactivity.</td>
<td>hooshasei (no)</td>
</tr>
<tr>
<td><strong>radius</strong></td>
<td>半径</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>A line segment extending from the center of a circle or sphere to its circumference or bounding surface.</td>
<td>hankei</td>
</tr>
<tr>
<td><strong>railroad</strong></td>
<td>線路</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>A permanent road having a line of rails fixed to ties for the movement of locomotives.</td>
<td>senro</td>
</tr>
<tr>
<td><strong>reaction</strong></td>
<td>反応</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>Force exercised by a body in reply to another force, which is of equal strength and acts in the opposite direction.</td>
<td>han’noo</td>
</tr>
<tr>
<td><strong>replacement</strong></td>
<td>掛け替え</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>Something that is utilized in place of something and is designed to fulfill its original purpose.</td>
<td>kakegae</td>
</tr>
<tr>
<td><strong>reservoir</strong></td>
<td>貯水池</td>
<td></td>
</tr>
<tr>
<td>noun</td>
<td>A place where something is kept in store, such as an artificial lake where water is collected.</td>
<td>chosuichi</td>
</tr>
<tr>
<td><strong>resistivity</strong></td>
<td>抵抗</td>
<td></td>
</tr>
<tr>
<td>adj</td>
<td>The opposition offered by an electrical component to the passage of an electric current; also the reciprocal of electrical conductivity.</td>
<td>teikou</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Explanation</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>resistor</td>
<td>テイクウキ</td>
<td>An electric component that offers an opposing force to current that passes through it.</td>
</tr>
<tr>
<td>restoration</td>
<td>修復</td>
<td>A bringing back to a former position or condition.</td>
</tr>
<tr>
<td>restrain</td>
<td>拒止する</td>
<td>To moderate or limit the force, effect, or full exercise of.</td>
</tr>
<tr>
<td>results</td>
<td>結果</td>
<td>Something obtained by calculation or scientific investigation.</td>
</tr>
<tr>
<td>retaining wall</td>
<td>擁壁</td>
<td>A structural barrier used to hold back an engineering material, usually soil.</td>
</tr>
<tr>
<td>right angle</td>
<td>直角</td>
<td>An angle which measures 90 degrees.</td>
</tr>
<tr>
<td>rivet</td>
<td>びょう</td>
<td>A headed pin or bolt of metal used for uniting two or more pieces of metal.</td>
</tr>
<tr>
<td>rock</td>
<td>岩</td>
<td>A concreted mass of stony material or broken pieces of such masses.</td>
</tr>
<tr>
<td>roller</td>
<td>ローラー</td>
<td>A revolving cylinder over or on which something is moved.</td>
</tr>
<tr>
<td>rotation</td>
<td>回転</td>
<td>One complete turn round a fixed point.</td>
</tr>
<tr>
<td>rotation</td>
<td>回転</td>
<td>The process of spinning around an axis.</td>
</tr>
<tr>
<td>ruler</td>
<td>定規</td>
<td>A smooth-edged strip that is marked off in units and is used as a straightedge or for measuring.</td>
</tr>
<tr>
<td>sanitation</td>
<td>下水道施設</td>
<td>The act or process of collecting and treating domestic waterborne wastes.</td>
</tr>
<tr>
<td>scaffold</td>
<td>足場</td>
<td>A temporary or movable platform for workers.</td>
</tr>
</tbody>
</table>
**scale**  
*noun*  
A proportion between two sets of dimensions.

**hiritsu**

**scale**  
*noun*  
A measuring instrument used to read distances off of engineering or architectural plans.

**sukeeru**

**schematic**  
*noun*  
A diagram that illustrates a concise plan.

**zuhyou**

**scientific**  
*adj.*  
Exhibiting principles of a department of systematized knowledge as an object of study.

**kagaku teki (na)**

**screw**  
*noun*  
A simple machine which is used for fastening pieces of solid material together.

**neji**

**sediment**  
*noun*  
The matter that settles to the bottom of a liquid.

**chindenbutsu**

**separation**  
*noun*  
The chemical process of dividing a substance into constituent parts.

**bunri**

**shaft**  
*noun*  
A commonly cylindrical bar used to support rotating pieces or to transmit power or motion by rotation.

**shafuto**

**shear**  
*noun*  
A heavy cutting tool which works like scissors.

**sendan**

**shock absorber**  
*noun*  
Any of several devices for absorbing the energy of sudden impulses or shocks in machinery.

**kanshooki**

**short circuit (electric)**  
*noun*  
A connection of lower resistance accidentally made between points on a circuit where resistance is normally higher.

**tanraku**

**sign**  
*noun*  
A posted direction, command or warning along a roadway.

**hyoushiki**

**silicon steel**  
*noun*  
Steel comprised of a percentage of silicon, used to transform kinetic energy to electrical energy, or vice-versa (Also called Electric Steel).

**keisokou**

**skyscraper**  
*noun*  
A very tall building.

**chookoosoo biru**
<table>
<thead>
<tr>
<th><strong>slope</strong></th>
<th><strong>noun</strong></th>
<th>勾配</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Upward or downward slant or inclination or degree of slant.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>sod</strong></th>
<th><strong>noun</strong></th>
<th>芝土</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The grass-covered surface of the ground.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>software</strong></th>
<th><strong>noun</strong></th>
<th>ソフトウェア</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The set of programs and procedures associated with a system, especially with computers.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>soil</strong></th>
<th><strong>noun</strong></th>
<th>土</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The upper layer of earth that may be dug and in which plants grow.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>solder</strong></th>
<th><strong>noun</strong></th>
<th>はんだ</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A metal or metallic alloy which is melted and used to join metallic surfaces.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>solution</strong></th>
<th><strong>noun</strong></th>
<th>水溶液</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A homogenous blend of a solute in a solvent.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>specific gravity</strong></th>
<th><strong>noun</strong></th>
<th>比重</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The ratio of the density of a substance to the density of some other control substance.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>speed limit</strong></th>
<th><strong>noun</strong></th>
<th>制限速度</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The maximum or minimum road speed permitted by law in a given area.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>square root</strong></th>
<th><strong>noun</strong></th>
<th>平方根</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A factor of a number that when squared, results in that number.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>stability</strong></th>
<th><strong>noun</strong></th>
<th>安定性</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The strength to stand or endure.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>stable</strong></th>
<th><strong>adj.</strong></th>
<th>安定している</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Firmly established; not changing or fluctuating.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>stake</strong></th>
<th><strong>noun</strong></th>
<th>杭</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A pointed piece of wood driven into the ground as a marker or support.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>standard</strong></th>
<th><strong>noun</strong></th>
<th>標準</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A level or degree of quality that is considered proper or acceptable.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>steam</strong></th>
<th><strong>noun</strong></th>
<th>水蒸気</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A vapor arising from a heated substance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>strain</strong></td>
<td>noun</td>
<td>変形させる</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><em>Minute deformations caused by tension, compression, or other forces.</em></td>
<td>hennkei saseru</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>strength</strong></th>
<th>noun</th>
<th>強さ</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Capacity for exertion or endurance.</em></td>
<td>tsuyosa</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>stress</strong></th>
<th>noun</th>
<th>応力</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The scalar value that describes a force acting over a surface divided by the area of that surface.</em></td>
<td>ooryoku</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>structural</strong></th>
<th>adj.</th>
<th>構造</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Relating to the design or form of something, especially buildings.</em></td>
<td>kouzou</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>support</strong></th>
<th>verb</th>
<th>支える</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>To hold up or serve as a foundation or prop.</em></td>
<td>sasaeru</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>suspension</strong></th>
<th>noun</th>
<th>懸濁液</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A non-homogenous system consisting of a solid solute in a solvent.</em></td>
<td>kenntagu eki</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>suspension bridge</strong></th>
<th>noun</th>
<th>吊り橋</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A bridge that is supported from above by spans of cables and links.</em></td>
<td>tsuribashi</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>tangent</strong></th>
<th>noun</th>
<th>接線</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A straight line that is the limiting position of the edge of a curve.</em></td>
<td>sessen</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>tension (force)</strong></th>
<th>noun</th>
<th>張力</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A force which tends to lengthen or stretch the body on which it is applied.</em></td>
<td>chouryoku</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>theodolite</strong></th>
<th>noun</th>
<th>経緯儀</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A surveyor's instrument for measuring horizontal and vertical angles.</em></td>
<td>keiigi</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>thermodynamics</strong></th>
<th>noun</th>
<th>熱力学学</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Branch of physics that deals with thermal energy and heat transfer.</em></td>
<td>netsurikigaku</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>tissue</strong></th>
<th>noun</th>
<th>細胞の</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A collection of cells together with their intercellular substance that form the structural materials of a plant or an animal.</em></td>
<td>saibou no</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>traffic engineering</strong></th>
<th>noun</th>
<th>交通工学</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Branch of engineering that deals with motor vehicles and the public works they require.</em></td>
<td>koutsuukoogaku</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>training</strong></th>
<th>noun</th>
<th>訓練</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The process of practicing a skill under the direction of a competent observer.</em></td>
<td>kunn renn</td>
<td></td>
</tr>
<tr>
<td>English Word</td>
<td>Japanese Word</td>
<td>Meaning</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
<td>---------</td>
</tr>
<tr>
<td>transfer</td>
<td>移動させる</td>
<td>To cause to pass from one location or state to another.</td>
</tr>
<tr>
<td>transistor</td>
<td>トランジスタ</td>
<td>A solid-state electronic device that is used to control the flow of electricity in electronic equipment.</td>
</tr>
<tr>
<td>transmission</td>
<td>伝動</td>
<td>Act of transporting and delivering energy or material from one location to another.</td>
</tr>
<tr>
<td>transportation</td>
<td>交通手段</td>
<td>Means of conveyance or travel from one place to another.</td>
</tr>
<tr>
<td>triangle</td>
<td>三角形</td>
<td>A 3-sided polygon.</td>
</tr>
<tr>
<td>trigonometry</td>
<td>三角法</td>
<td>A branch of mathematics that deals with the properties of triangles and trigonometric functions.</td>
</tr>
<tr>
<td>tunnel</td>
<td>トンネル</td>
<td>A covered passageway; a horizontal passageway through or under an obstruction.</td>
</tr>
<tr>
<td>UHF</td>
<td>極超短波</td>
<td>A radio frequency; Ultrahigh Frequency.</td>
</tr>
<tr>
<td>ultimate strength</td>
<td>極限強度</td>
<td>The point at which a material is infinitesimally close to failing.</td>
</tr>
<tr>
<td>ultrasonic wave</td>
<td>超音波</td>
<td>An energy pattern that has a frequency higher than the human ear's audible limit.</td>
</tr>
<tr>
<td>ultraviolet radiation</td>
<td>紫外線</td>
<td>Energy with wavelength shorter than visible light and longer than X rays.</td>
</tr>
<tr>
<td>uncertainty</td>
<td>不確かさ</td>
<td>A wavering between two or more conclusions.</td>
</tr>
<tr>
<td>update</td>
<td>更新</td>
<td>To bring a set of data from previously-defined values to new, more current values.</td>
</tr>
<tr>
<td>uranium</td>
<td>ウラン</td>
<td>A silvery, heavy, radioactive metallic element used in nuclear power generation.</td>
</tr>
</tbody>
</table>
| utility | noun | ユーティリティ
- A service (e.g. light, power, water) provided by a public entity. |
| vacuum tube | noun | 真空管
- An electron tube evacuated of almost all air. |
| valence electron | noun | 価電子
- An electron in the outer shell of an atom. |
| value | noun | 数値
- A numerical quantity that is assigned or determined. |
| valve | noun | 弁
- A mechanical device used to regulate the flow of a liquid or gas. |
| vane | noun | 翼
- A thin flat pane that rotates to redirect a flow of a fluid. |
| vapor | noun | 蒸気
- Diffused matter suspended and floating in the air. |
| variable | noun | 変数
- A quantity that may assume any one of many values. |
| velocity | noun | 速度
- Quickness and direction of motion. |
| velocity gradient | noun | 速度勾配
- The set of individual velocities that occur along a boundary or surface. |
| velocity head | noun | 速度ヘッド
- Potential energy in a fluid system that results from particle motion. |
| vent | noun | 通気孔
- An opening for the escape of a gas or liquid. |
| ventilation | noun | 換気
- A mechanical system or other means of providing fresh air. |
| vertex | noun | 頂点
- A point that comprises the intersection of two or more lines or curves. |
<table>
<thead>
<tr>
<th>English</th>
<th>Japanese</th>
<th>English</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>vertical</strong></td>
<td>鉛直（en’choku）</td>
<td><strong>water table</strong></td>
<td>地下水面（chikasuimen）</td>
</tr>
<tr>
<td>noun</td>
<td>• Perpendicular to the plate of the horizon.</td>
<td>noun</td>
<td>• The elevation of the surface of water as found in natural underground aquifers.</td>
</tr>
<tr>
<td>VHF</td>
<td>超短波（choutanpa）</td>
<td>watt</td>
<td>ワット（watto）</td>
</tr>
<tr>
<td>noun</td>
<td>• Very high frequency.</td>
<td>noun</td>
<td>• An absolute meter-kilogram-second unit of power.</td>
</tr>
<tr>
<td>vibration</td>
<td>振動（shindoo）</td>
<td>weight</td>
<td>重り（omori）</td>
</tr>
<tr>
<td>noun</td>
<td>• The action of moving back and forth with short concise strokes.</td>
<td>noun</td>
<td>• A piece of metal that has a known heaviness and can be balanced against something else in order to measure its heaviness.</td>
</tr>
<tr>
<td>void ratio</td>
<td>空隙率（kuugekiritsu）</td>
<td>widen</td>
<td>広げる（hirogeru）</td>
</tr>
<tr>
<td>noun</td>
<td>• In soil mechanics, the ratio of the void spaces to solid volume within a soil.</td>
<td>verb</td>
<td>• To make greater in breadth.</td>
</tr>
<tr>
<td>voltage</td>
<td>電圧（den’atsu）</td>
<td>x-axis</td>
<td>エックス軸（ekkusu jiku）</td>
</tr>
<tr>
<td>noun</td>
<td>• Electric potential expressed in volts.</td>
<td>noun</td>
<td>• One of the three axes in a three-dimensional rectangular coordinate system</td>
</tr>
<tr>
<td>volume</td>
<td>体積（taiseki）</td>
<td>xerox (copy)</td>
<td>ゼロックス（zerokkusu）</td>
</tr>
<tr>
<td>noun</td>
<td>• Amount of space occupied by a three-dimensional object.</td>
<td>noun</td>
<td>• A photocopy made by a photocopying machine.</td>
</tr>
<tr>
<td>water main</td>
<td>給水本管（kyuusui honnkann）</td>
<td>x-intercept</td>
<td>エックス切片（ekkusu seppen）</td>
</tr>
<tr>
<td>noun</td>
<td>• A pipe of large diameter used to transmit water between distribution centers.</td>
<td>noun</td>
<td>• The x-coordinate of a point where a line, curve, etc. intersects the x-axis.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Definition</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td><strong>X-rays</strong></td>
<td>エックス線</td>
<td>Any of the electromagnetic radiations similar to visible radiation but having shorter wavelength.</td>
<td></td>
</tr>
<tr>
<td><strong>yard</strong></td>
<td>ヤード</td>
<td>A unit of measure equal to (3) feet.</td>
<td></td>
</tr>
<tr>
<td><strong>yaw</strong></td>
<td>偏揺</td>
<td>Degree of sideways sway or rotation.</td>
<td></td>
</tr>
<tr>
<td><strong>y-axis</strong></td>
<td>ワイ軸</td>
<td>One of the three axes in a three-dimensional rectangular coordinate system.</td>
<td></td>
</tr>
<tr>
<td><strong>yield (rate)</strong></td>
<td>収率</td>
<td>To produce as return from an investment.</td>
<td></td>
</tr>
<tr>
<td><strong>yield point</strong></td>
<td>降伏点</td>
<td>Magnitude of stress at which a structural element stops exhibiting elastic strain.</td>
<td></td>
</tr>
<tr>
<td><strong>yielding</strong></td>
<td>従順な</td>
<td>Giving way to overpowering force or strain.</td>
<td></td>
</tr>
<tr>
<td><strong>y-intercept</strong></td>
<td>ワイ切片</td>
<td>The y-coordinate of a point where a line, curve, etc. intersects the y-axis.</td>
<td></td>
</tr>
<tr>
<td><strong>zero</strong></td>
<td>ゼロ</td>
<td>The arithmetical icon symbolizing the absence of all magnitude or quantity.</td>
<td></td>
</tr>
<tr>
<td><strong>zero gravity</strong></td>
<td>無重力状態</td>
<td>An environment which is devoid of substantial gravitational forces.</td>
<td></td>
</tr>
<tr>
<td><strong>z-plane</strong></td>
<td>ゼット平面</td>
<td>Plane in 3-dimensional space defined by the x and y axes.</td>
<td></td>
</tr>
</tbody>
</table>
Part 2: Basic Words
### academic

**adj.**
- Associated with an academy or school, especially of colleges.
- 学問的な
  - gakumontekina

### academic

**adj.**
- Associated with an academy or school, especially of colleges.
- 大学の
  - daigakuno

### advisor

**noun**
- One who gives counsel to another, especially in an academic setting.
- 顧問
  - komonn

### aircraft

**noun**
- A machine used for air travel.
- 飛行機
  - hikooki

### align

**verb**
- To place into a correct position.
- 並べる
  - naraberu

### appointment

**noun**
- An arrangement for a meeting.
- 予約
  - yoyaku

### architect

**noun**
- A person who designs the exterior and spacial layout of buildings.
- 建築家
  - kenchikuka

### beginner

**noun**
- An inexperienced person.
- 初心者
  - shoshinsha

### break

**noun**
- A brief interruption in an activity.
- 休み / 休憩
  - yasumi / kyuukee

### bridge

**noun**
- A structure that carries a roadway over a depression or obstacle.
- 橋
  - hashi

### build

**verb**
- To create by uniting materials through a gradual means into a finished whole.
- 建てる
  - tateru

### building

**noun**
- A roofed and walled structure built for permanent use or occupancy.
- 建物
  - tatemono

### bulletin board

**noun**
- A physical area on a wall used for posting notices.
- 揭示板
  - keijiban

### business

**noun**
- A commercial or industrial enterprise.
- 事業
  - jigyou
<table>
<thead>
<tr>
<th>English</th>
<th>Japanese</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>busy</td>
<td>忙しい</td>
<td>Experiencing a lack of availability.</td>
</tr>
<tr>
<td>centigrade</td>
<td>摂氏</td>
<td>A thermometric scale - the interval between the freezing / boiling point of water is divided into 100 degrees.</td>
</tr>
<tr>
<td>circular</td>
<td>丸い</td>
<td>Of or relating to a circle or its mathematical properties.</td>
</tr>
<tr>
<td>civil</td>
<td>市民(の)</td>
<td>Relating to the general public.</td>
</tr>
<tr>
<td>colleague</td>
<td>同僚</td>
<td>An associate in a profession or other working environment.</td>
</tr>
<tr>
<td>community</td>
<td>地域</td>
<td>The people with common interests living in a particular area.</td>
</tr>
<tr>
<td>company</td>
<td>会社</td>
<td>An association of persons for carrying on a commercial or industrial enterprise.</td>
</tr>
<tr>
<td>compose</td>
<td>書く</td>
<td>To produce a written work.</td>
</tr>
<tr>
<td>conference</td>
<td>会議</td>
<td>A meeting of two or more persons for discussing matters of common concern.</td>
</tr>
<tr>
<td>corner</td>
<td>角</td>
<td>The point where converging lines, edges, or sides meet.</td>
</tr>
<tr>
<td>correct</td>
<td>直す / 修正する</td>
<td>To replace something inaccurate or faulty with something accurate or well-suited. (See Repair)</td>
</tr>
<tr>
<td>correct</td>
<td>正しい</td>
<td>Conforming to fact or known truth.</td>
</tr>
<tr>
<td>dangerous</td>
<td>危ない / 危険(な)</td>
<td>Something that may cause harm, and requires careful observation.</td>
</tr>
<tr>
<td>degree</td>
<td>度</td>
<td>A unit of measure for angles.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Meaning</td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>difference</td>
<td>違い / 差</td>
<td>Something that makes one thing different from another.</td>
</tr>
<tr>
<td>email</td>
<td>Eメール</td>
<td>System of correspondence using computers and electronically stored text and graphics.</td>
</tr>
<tr>
<td>engineer</td>
<td>技師</td>
<td>A person who is trained in or follows as a profession a branch of engineering.</td>
</tr>
<tr>
<td>engineering</td>
<td>工学</td>
<td>The act of applying the principles of science and mathematics to natural energy sources for the benefit and growth of society.</td>
</tr>
<tr>
<td>environment</td>
<td>環境</td>
<td>The complex whole of physical, chemical, and biological factors that acts upon an organism.</td>
</tr>
<tr>
<td>environmental pollution</td>
<td>環境汚染</td>
<td>The result of making the environment impure by contamination with man-made waste.</td>
</tr>
<tr>
<td>exactly</td>
<td>ちょうど</td>
<td>With complete correctness.</td>
</tr>
<tr>
<td>fabricate</td>
<td>作る</td>
<td>To construct from diverse and usually standardized parts.</td>
</tr>
<tr>
<td>flooding</td>
<td>洪水</td>
<td>Result of abnormal sustained encroachment of water into homes or onto land.</td>
</tr>
<tr>
<td>greater than (math; &gt;)</td>
<td>〜より大きい</td>
<td>A mathematical operator used between numbers such that the first is larger than the second.</td>
</tr>
<tr>
<td>hazardous</td>
<td>危ない / 危険（な）</td>
<td>Involving or exposing one to risk.</td>
</tr>
<tr>
<td>internet</td>
<td>インターネット</td>
<td>An electronic communications network that connects computer networks around the world.</td>
</tr>
<tr>
<td>kilometer</td>
<td>キロメートル</td>
<td>(1000) of the base unit of length in the International System of Units.</td>
</tr>
<tr>
<td>less than (math; &lt;)</td>
<td>〜より少ない</td>
<td>A mathematical operator used between numbers such that the first is smaller than the second.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td>Meaning</td>
</tr>
<tr>
<td>---------</td>
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<td>---------</td>
</tr>
<tr>
<td>machinery</td>
<td>機械</td>
<td>Functioning units of machines.</td>
</tr>
<tr>
<td>material</td>
<td>材料</td>
<td>Anything from which something is or can be made; a natural or man-made substance.</td>
</tr>
<tr>
<td>mathematics</td>
<td>数学</td>
<td>The science of numbers and their operations, interrelations, and combinations.</td>
</tr>
<tr>
<td>necessary</td>
<td>必要な</td>
<td>That must be had, obtained, or done.</td>
</tr>
<tr>
<td>north</td>
<td>北 (の)</td>
<td>Situated toward or at the geographical north.</td>
</tr>
<tr>
<td>number(s)</td>
<td>数/番</td>
<td>A unit belonging to a mathematical system which is subject to specified mathematical laws.</td>
</tr>
<tr>
<td>office</td>
<td>事務所</td>
<td>A place where business is regularly transacted or a service is regularly supplied.</td>
</tr>
<tr>
<td>parking lot</td>
<td>駐車場</td>
<td>An area used for the parking of motor vehicles.</td>
</tr>
<tr>
<td>president (of a company)</td>
<td>社長</td>
<td>The highest ranking member of an organization or company.</td>
</tr>
<tr>
<td>project</td>
<td>プロジェクト</td>
<td>A planned undertaking.</td>
</tr>
<tr>
<td>promotion</td>
<td>昇進</td>
<td>The act of being raised in position or rank.</td>
</tr>
<tr>
<td>repair</td>
<td>修理</td>
<td>Something that has been brought back to a functional or unbroken state. (See &quot;Correction&quot;)</td>
</tr>
<tr>
<td>repair</td>
<td>修理する</td>
<td>To restore by replacing a part or putting together what is torn or broken. (See &quot;Correct&quot;, verb.)</td>
</tr>
<tr>
<td>safety</td>
<td>安全</td>
<td>State of being free from possible harm.</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
<td></td>
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<tr>
<td>---------</td>
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<td></td>
</tr>
<tr>
<td>street</td>
<td>道路</td>
<td></td>
</tr>
<tr>
<td>A flat public throughway used by motor vehicles.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>survey</td>
<td>調査</td>
<td></td>
</tr>
<tr>
<td>An exact determination of the location and topographical characteristics of a parcel of land.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>village</td>
<td>村</td>
<td></td>
</tr>
<tr>
<td>A community of few people.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>wood</td>
<td>木</td>
<td></td>
</tr>
<tr>
<td>The fibrous substance that makes up the greater part of the stems, branches, and roots of trees.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>work</td>
<td>仕事</td>
<td></td>
</tr>
<tr>
<td>One's occupation or livelihood.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>worker</td>
<td>社員</td>
<td></td>
</tr>
<tr>
<td>A non-executive level employee.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[I’m] Working.</td>
<td>仕事 をしています。</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>shigoto o shiteimasu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anyone is fine.</td>
<td>だれでもいいです。</td>
<td></td>
</tr>
<tr>
<td>daredemoiidesu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anything is fine.</td>
<td>何でもいいです。</td>
<td></td>
</tr>
<tr>
<td>nandemoiidesu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anytime is fine.</td>
<td>いつでもいいです。</td>
<td></td>
</tr>
<tr>
<td>itsudemoiidesu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anywhere is fine.</td>
<td>どこでもいいです。</td>
<td></td>
</tr>
<tr>
<td>dokodemoiidesu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excuse me for leaving early.</td>
<td>お先にしつれいします。</td>
<td></td>
</tr>
<tr>
<td>osakinishitsurei shimasu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excuse me.</td>
<td>すみません。</td>
<td></td>
</tr>
<tr>
<td>sumimasen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>For example…</th>
<th>たとえば。</th>
</tr>
</thead>
<tbody>
<tr>
<td>tatoeba</td>
<td></td>
</tr>
<tr>
<td>Forgive me.</td>
<td>失礼します。</td>
</tr>
<tr>
<td>shitsureishimasu</td>
<td></td>
</tr>
<tr>
<td>Good Afternoon.</td>
<td>こんにちは。</td>
</tr>
<tr>
<td>konnichiwa</td>
<td></td>
</tr>
<tr>
<td>Good Evening.</td>
<td>こんばんは。</td>
</tr>
<tr>
<td>konbanwa</td>
<td></td>
</tr>
<tr>
<td>Good Morning.</td>
<td>おはようございます。</td>
</tr>
<tr>
<td>ohayoogozaimasu</td>
<td></td>
</tr>
<tr>
<td>How is it?</td>
<td>どうですか。</td>
</tr>
<tr>
<td>doodesuka</td>
<td></td>
</tr>
<tr>
<td>How much?</td>
<td>いくらですか。</td>
</tr>
<tr>
<td>oikuradesuka</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>I didn’t hear.</td>
<td>聞こいませんでした。</td>
</tr>
<tr>
<td>I didn’t understand.</td>
<td>分かりませんでした。</td>
</tr>
<tr>
<td>I don’t need it.</td>
<td>いりません。</td>
</tr>
<tr>
<td>I understood.</td>
<td>分かりました。</td>
</tr>
<tr>
<td>I’m okay.</td>
<td>大丈夫です。</td>
</tr>
<tr>
<td>Is it okay?</td>
<td>大丈夫ですか。</td>
</tr>
<tr>
<td>May I help?</td>
<td>お手伝いしましょうか。</td>
</tr>
<tr>
<td>Nice to meet you.</td>
<td>はじめまして。</td>
</tr>
<tr>
<td>No problem. [slang]</td>
<td>もんだいない。</td>
</tr>
<tr>
<td>Pardon me, but…</td>
<td>あの、すみませんが…</td>
</tr>
<tr>
<td>Please favor me.</td>
<td>どうぞよろしくお願いいたします。</td>
</tr>
<tr>
<td>Please help.</td>
<td>手伝って下さい。</td>
</tr>
<tr>
<td>Please say it again.</td>
<td>もう一度言って下さい。</td>
</tr>
<tr>
<td>Please say it slowly.</td>
<td>ゆっくり言って下さい。</td>
</tr>
<tr>
<td>English</td>
<td>Japanese</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>Please.</td>
<td>どうぞ。</td>
</tr>
<tr>
<td>Thank you very much.</td>
<td>どうもありがとうございます。</td>
</tr>
<tr>
<td>Thanks for working hard.</td>
<td>おつかれさます。</td>
</tr>
<tr>
<td>Thanks, Hello, or Sorry</td>
<td>どうも。</td>
</tr>
<tr>
<td>That is enough for now.</td>
<td>とりあえず。</td>
</tr>
<tr>
<td>What should I do?</td>
<td>どうしたらいいですか。</td>
</tr>
<tr>
<td>What?</td>
<td>なんですか。</td>
</tr>
<tr>
<td>When?</td>
<td>いつですか。</td>
</tr>
<tr>
<td>Where?</td>
<td>どこですか。</td>
</tr>
<tr>
<td>Why?</td>
<td>どうしてですか。</td>
</tr>
<tr>
<td>You're welcome.</td>
<td>どういたしまして。</td>
</tr>
</tbody>
</table>

*English-Japanese Quick Reference Dictionary: Engineering Terms*
References


