Parts of an earring diagram

me he always is and was! He has a super pretty gf! He is kinda shy till you get to know him. He just wants to fuck u then throw you out like yesterdays trash. Just not worth it really. But he also does like just hooking up with chicks. Not really into serious or long-term relationships. Last I knew he was single, I found him on tinder a few weeks ago, too. Sam has or had a girlfriend who he is super cute with. How is it living in a dream world? Michael Del Zotto is interested in me and my friends keep saying that they've heard he's bad news but I googled his name and nothing really showed up out of the ordinary so I was wondering if what they heard was wrong. Is Jake Virtanen a douche or a sweet guy. By that I mean like is he all about sex or would he be a sweet boyfriend. Naked girl Tosh Locks with silky blonde hair is ready. To the anon who asked about Sam! I slept with him and he told me he didn't have a girlfriend, now whether that's true or not I don't know. I think sam reinhart is dating that Mandy girl, she was at wjc sitting with his parents. A pearl is a hard, glistening object produced within the soft tissue specifically the mantle of a living shelled mollusk or another animal, such as fossil conulariids. Just like the shell of a mollusk, a pearl is composed of calcium carbonate mainly aragonite or a mixture of aragonite and calcite [3] in minute crystalline form, which has deposited in concentric layers. The ideal pearl is perfectly round and smooth, but many other shapes, known as baroque pearls , can occur. The finest quality of natural pearls have been highly valued as gemstones and objects of beauty for many centuries. Because of this, pearl has become a metaphor for something rare, fine, admirable and valuable. The most valuable pearls occur spontaneously in the wild, but are extremely rare. These wild pearls are referred to as natural pearls. Cultured or farmed pearls from pearl oysters and freshwater mussels make up the majority of those currently sold. Imitation pearls are also widely sold in inexpensive jewelry, but the quality of their iridescence is usually very poor and is easily distinguished from that of genuine pearls. Pearls have been harvested and cultivated primarily for use in jewelry , but in the past were also used to adorn clothing. They have also been crushed and used in cosmetics, medicines and paint formulations. Whether wild or cultured, gem-quality pearls are almost always nacreous and iridescent , like the interior of the shell that produces them. However, almost all species of shelled mollusks are capable of producing pearls technically "calcareous concretions" of lesser shine or less spherical shape. Although these may also be legitimately referred to as "pearls" by gemological labs and also under U. Federal Trade Commission rules, [4] and are formed in the same way, most of them have no value except as curiosities. The English word pearl comes from the French perle , originally from the Latin perna meaning leg, after the ham- or mutton leg-shaped bivalve. All shelled mollusks can, by natural processes, produce some kind of "pearl" when an irritating microscopic object becomes trapped within its mantle folds, but the great majority of these "pearls" are not valued as gemstones. Nacreous pearls, the best-known and most commercially significant, are primarily produced by two groups of molluskan bivalves or clams. A nacreous pearl is made from layers of nacre , by the same living process as is used in the secretion of the mother of pearl which lines the shell. Natural or wild pearls, formed without human intervention, are very rare. Many hundreds of pearl oysters or mussels must be gathered and opened, and thus killed, to find even one wild pearl; for many centuries, this was the only way pearls were obtained, and why pearls fetched such extraordinary prices in the past. Cultured pearls are formed in pearl farms, using human intervention as well as natural processes. Saltwater pearls can grow in several species of marine pearl oysters in the family Pteriidae. Freshwater pearls grow within certain but by no means all species of freshwater mussels in the order Unionida, the families Unionidae and Margaritiferidae. The unique luster of pearls depends upon the reflection , refraction , and

diffraction of light from the translucent layers. The thinner and more numerous the layers in the pearl, the finer the luster. The iridescence that pearls display is caused by the overlapping of successive layers, which breaks up light falling on the surface. In addition, pearls especially cultured freshwater pearls can be dyed yellow, green, blue, brown, pink, purple, or black. The very best pearls have a metallic mirror-like luster. Because pearls are made primarily of calcium carbonate, they can be dissolved in vinegar. Calcium carbonate is susceptible to even a weak acid solution because the crystals react with the acetic acid in the vinegar to form calcium acetate and carbon dioxide. Freshwater and saltwater pearls may sometimes look quite similar, but they come from different sources. Freshwater pearls form in various species of freshwater mussels, family Unionidae , which live in lakes, rivers, ponds and other bodies of fresh water. These freshwater pearl mussels occur not only in hotter climates, but also in colder more temperate areas such as Scotland where they are protected under law. Most freshwater cultured pearls sold today come from China. Saltwater pearls grow within pearl oysters, family Pteriidae , which live in oceans. Saltwater pearl oysters are usually cultivated in protected lagoons or volcanic atolls. Pearls are formed inside the shell of certain mollusks as a defense mechanism against a potentially threatening irritant such as a parasite inside the shell, or an attack from outside that injures the mantle tissue. The mollusk creates a pearl sac to seal off the irritation. Pearls are thus the result of an immune response analogous in the human body to the capture of an antigen by a phagocyte phagocytosis. The mollusk's mantle protective membrane deposits layers of calcium carbonate $CaCO_3$ in the form of the mineral aragonite or a mixture of aragonite and calcite polymorphs with the same chemical formula, but different crystal structures held together by an organic horn-like compound called conchiolin. The combination of aragonite and conchiolin is called nacre , which makes up mother-of-pearl. The commonly held belief that a grain of sand acts as the irritant is in fact rarely the case. Typical stimuli include organic material, parasites, or even damage that displaces mantle tissue to another part of the mollusk's body. These small particles or organisms gain entry when the shell valves are open for feeding or respiration. In cultured pearls, the irritant is typically an introduced piece of the mantle epithelium, with or without a spherical bead beaded or beadless cultured pearls. It is thought that natural pearls form under a set of accidental conditions when a microscopic intruder or parasite enters a bivalve mollusk and settles inside the shell. The mollusk, irritated by the intruder, forms a pearl sac of external mantle tissue cells and secretes the calcium carbonate and conchiolin to cover the irritant. This secretion process is repeated many times, thus producing a pearl. Natural pearls come in many shapes, with perfectly round ones being comparatively rare. Typically, the build-up of a natural pearl consists of a brown central zone formed by columnar calcium carbonate usually calcite, sometimes columnar aragonite and a yellowish to white outer zone consisting of nacre tabular aragonite. In a pearl cross-section such as the diagram, these two different materials can be seen. The presence of columnar calcium carbonate rich in organic material indicates juvenile mantle tissue that formed during the early stage of pearl development. Displaced living cells with a well-defined task may continue to perform their function in their new location, often resulting in a cyst. Such displacement may occur via an injury. The fragile rim of the shell is exposed and is prone to damage and injury. Crabs, other predators and parasites such as worm larvae may produce traumatic attacks and cause injuries in which some external mantle tissue cells are disconnected from their layer. Embedded in the conjunctive tissue of the mantle, these cells may survive and form a small pocket in which they continue to secrete calcium carbonate, their natural product. The pocket is called a pearl sac, and grows with time by cell division. The juvenile mantle tissue cells, according to their stage of growth, secrete columnar calcium carbonate from pearl sac's inner surface. In time, the pearl sac's external mantle cells proceed to the formation of tabular aragonite. When the transition to nacre secretion occurs, the brown pebble becomes covered with a nacreous coating. During this process, the pearl sac seems to travel into the shell; however, the sac actually stays in its original relative position the mantle tissue while the shell itself grows. After a couple of years, a pearl forms and the shell may be found by a lucky pearl fisher. Cultured pearls are the response of the shell to a tissue implant. A tiny piece of mantle tissue called a graft from a donor shell is transplanted into a recipient shell, causing a pearl sac to form into which the tissue precipitates calcium carbonate. There are a number of methods for producing cultured pearls: using freshwater or seawater shells, transplanting the graft into the mantle or into the gonad, and adding a spherical bead as a nucleus. Most saltwater cultured pearls are grown with beads. Most beadless cultured pearls are mantle-grown in freshwater shells in China, and are known as freshwater cultured pearls. Cultured pearls can be distinguished from natural pearls by X-ray examination. After a bead is inserted into the oyster, it secretes a few layers of nacre around the bead; the resulting cultured pearl can then be harvested in as few as twelve to eighteen months. When a cultured pearl with

a bead nucleus is X-rayed, it reveals a different structure to that of a natural pearl see diagram. A beaded cultured pearl shows a solid center with no concentric growth rings, whereas a natural pearl shows a series of concentric growth rings. A beadless cultured pearl whether of freshwater or saltwater origin may show growth rings, but also a complex central cavity, witness of the first precipitation of the young pearl sac. Some imitation pearls also called shell pearls are simply made of mother-of-pearl , coral or conch shell, while others are made from glass and are coated with a solution containing fish scales called essence d'Orient. Although imitation pearls look the part, they do not have the same weight or smoothness as real pearls, and their luster will also dim greatly. A well-equipped gem testing laboratory can distinguish natural pearls from cultured pearls by using gemological X-ray equipment to examine the center of a pearl. With X-rays it is possible to see the growth rings of the pearl, where the layers of calcium carbonate are separated by thin layers of conchiolin. The differentiation of natural pearls from non-beaded cultured pearls can be very difficult without the use of this X-ray technique. Natural and cultured pearls can be distinguished from imitation pearls using a microscope. Another method of testing for imitations is to rub two pearls against each other. Imitation pearls are completely smooth, but natural and cultured pearls are composed of nacre platelets, making both feel slightly gritty. Fine quality natural pearls are very rare jewels. Their values are determined similarly to those of other precious gems, according to size, shape, color, quality of surface, orient and luster. Single natural pearls are often sold as collectors' items, or set as centerpieces in unique jewelry. Very few matched strands of natural pearls exist, and those that do often sell for hundreds of thousands of dollars. The introduction and advance of the cultured pearl hit the pearl industry hard. Pearl dealers publicly disputed the authenticity of these new cultured products, and left many consumers uneasy and confused about their much lower prices. Essentially, the controversy damaged the images of both natural and cultured pearls. By the s, when a significant number of women in developed countries could afford their own cultured pearl necklace, natural pearls were reduced to a small, exclusive niche in the pearl industry. Previously, natural pearls were found in many parts of the world. Present day natural pearling is confined mostly to seas off Bahrain. Australia also has one of the world's last remaining fleets of pearl diving ships. Australian pearl divers dive for south sea pearl oysters to be used in the cultured south sea pearl industry. The catch of pearl oysters is similar to the numbers of oysters taken during the natural pearl days. Hence significant numbers of natural pearls are still found in the Australian Indian Ocean waters from wild oysters. X-ray examination is required to positively verify natural pearls found today. Keshi pearls , although they often occur by chance, are not considered natural. They are a byproduct of the culturing process, and hence do not happen without human intervention. They are quite small, typically only a few millimeters. Keshi pearls are produced by many different types of marine mollusks and freshwater mussels in China. Keshi pearls are actually a mistake in the cultured pearl seeding process. In seeding the cultured pearl, a piece of mantle muscle from a sacrificed oyster is placed with a bead of mother of pearl within the oyster. If the piece of mantle should slip off the bead, a pearl forms of baroque shape about the mantle piece which is entirely nacre. Therefore, a Keshi pearl could be considered superior to cultured pearls with a mother of pearl bead center. In the cultured pearl industry, the resources used to create a mistaken all nacre baroque pearl is a drain on the production of round cultured pearls. Therefore, they are trying to improve culturing technique so that keshi pearls do not occur. All nacre pearls may one day be limited to natural found pearls. Tahitian pearls , frequently referred to as black pearls, [18] are highly valued because of their rarity; the culturing process for them dictates a smaller volume output and they can never be mass-produced because, in common with most sea pearls, the oyster can only be nucleated with one pearl at a time, while freshwater mussels are capable of multiple pearl implants. Before the days of cultured pearls, black pearls were rare and highly valued for the simple reason that white pearl oysters rarely produced naturally black pearls, and black pearl oysters rarely produced any natural pearls at all. Since the development of pearl culture technology, the black pearl oysters Pinctada margaritifera found in Tahiti and many other Pacific islands including the Cook Islands and Fiji are being extensively used for producing cultured pearls. The rarity of the black cultured pearl is now a "comparative" issue. The black cultured pearl is rare when compared to Chinese freshwater cultured pearls, and Japanese and Chinese akoya cultured pearls, and is more valuable than these pearls. However, it is more abundant than the South Sea pearl, which is more valuable than the black cultured pearl. This is simply because the black pearl oyster Pinctada margaritifera is far more abundant than the elusive, rare, and larger south sea pearl oyster Pinctada maxima , which cannot be found in lagoons, but which must be dived for in a rare number of deep ocean habitats or grown in hatcheries. Black pearls are very rarely black: they are usually shades of green, purple, aubergine, blue, grey, silver or peacock a mix of several

shades, like a peacock's feather. In the absence of an official definition for the pearl from the black oyster, these pearls are usually referred to as "black pearls". A farm in the Gulf of California , Mexico, is culturing pearls from the black lipped Pinctada mazatlanica oysters and the rainbow lipped Pteria sterna oysters. Biologically speaking, under the right set of circumstances, almost any shelled mollusk can produce some kind of pearl. However, most of these molluskan pearls have no luster or iridescence. The great majority of mollusk species produce pearls which are not attractive, and are sometimes not even very durable. Such pearls usually have no value at all, except perhaps to a scientist or collector, or as a curiosity. These objects used to be referred to as "calcareous concretions" by some gemologists, even though a malacologist would still consider them to be pearls. Valueless pearls of this type are sometimes found in edible mussels , edible oysters , escargot snails, and so on. The GIA and CIBJO now simply use the term 'pearl' or, where appropriate, the more descriptive term 'non-nacreous pearl' when referring to such items [24] [25] and, under Federal Trade Commission rules, various mollusk pearls may be referred to as 'pearls', without qualification. A few species produce pearls that can be of interest as gemstones. These species include the bailer shell Melo , the giant clam Tridacna , various scallop species, Pen shells Pinna , and the Haliotis iris species of abalone. Pearls of abalone, or paua , are mabe pearls, or blister pearls, unique to New Zealand waters and are commonly referred to as 'blue pearls'. They are admired for their incredible luster and naturally bright vibrant colors that are often compared to opal. Another example is the conch pearl sometimes referred to simply as the 'pink pearl' , which is found very rarely growing between the mantle and the shell of the queen conch or pink conch, Strombus gigas , a large sea snail or marine gastropod from the Caribbean Sea. These pearls, which are often pink in color, are a by-product of the conch fishing industry, and the best of them display a shimmering optical effect related to chatoyance known as 'flame structure'. Somewhat similar gastropod pearls, this time more orange in hue, are again very rarely found in the horse conch Triplofusus papillosus. The second largest pearl known was found in the Philippines in and is known as the Pearl of Lao Tzu. It is a naturally occurring, non-nacreous, calcareous concretion pearl from a giant clam. Because it did not grow in a pearl oyster it is not pearly; instead the surface is glossy like porcelain. The largest known pearl also from a giant clam is the Pearl of Puerto , also found in the Philippines by a fisherman from Puerto Princesa , Palawan Island. The ancient chronicle Mahavamsa mentions the thriving pearl industry in the port of Oruwella in the Gulf of Mannar in Sri Lanka. It also records that eight varieties of pearls accompanied Prince Vijaya 's embassy to the Pandyan king as well as king Devanampiya Tissa 's embassy to Emperor Ashoka. For thousands of years, seawater pearls were retrieved by divers in the Indian Ocean in areas such as the Persian Gulf , the Red Sea and the Gulf of Mannar. Margarita pearls are extremely difficult to find today and are known for their unique yellowish color. Before the beginning of the 20th century, pearl hunting was the most common way of harvesting pearls. Divers manually pulled oysters from ocean floors and river bottoms and checked them individually for pearls. Not all mussels and oysters produce pearls. In a haul of three tons, only three or four oysters will produce perfect pearls. Pearls were one of the attractions which drew Julius Caesar to Britain. Pearling was banned in the U. Today, the cultured pearls on the market can be divided into two categories. The first category covers the beaded cultured pearls, including akoya, South Sea and Tahiti. These pearls are gonad grown, and usually one pearl is grown at a time. This limits the number of pearls at a harvest period. The pearls are usually harvested after one year for akoya, 2â€"4 years for Tahitian and South Sea, and 2â€"7 years for freshwater. This periculture process was first developed by the British biologist William Saville-Kent who passed the information along to Tatsuhei Mise and Tokichi Nishikawa from Japan. The second category includes the non-beaded freshwater cultured pearls, like the Biwa or Chinese pearls. As they grow in the mantle, where on each wing up to 25 grafts can be implanted, these pearls are much more frequent and saturate the market completely. An impressive improvement in quality has taken place over ten years when the former rice-grain-shaped pebbles are compared with the near round pearls of today. Later, large near perfect round bead nucleated pearls up to 15mm in diameter have been produced with metallic luster. The nucleus bead in a beaded cultured pearl is generally a polished sphere made from freshwater mussel shell. Along with a small piece of mantle tissue from another mollusk donor shell to serve as a catalyst for the pearl sac, it is surgically implanted into the gonad reproductive organ of a saltwater mollusk. In freshwater periculture, only the piece of tissue is used in most cases, and is inserted into the fleshy mantle of the host mussel. South Sea and Tahitian pearl oysters, also known as Pinctada maxima and Pinctada margaritifera , which survive the subsequent surgery to remove the finished pearl, are often implanted with a new, larger beads as part of the same procedure and then returned to the water for another 2â€"3 years of growth. Despite the common misperception, Mikimoto did not discover the

process of pearl culture. Nishikawa was granted the patent in , and married the daughter of Mikimoto. Mikimoto was able to use Nishikawa's technology. After the patent was granted in , the technology was immediately commercially applied to akoya pearl oysters in Japan in Mise's brother was the first to produce a commercial crop of pearls in the akoya oyster. Mitsubishi's Baron Iwasaki immediately applied the technology to the south sea pearl oyster in in the Philippines, and later in Buton, and Palau. Today, a hybrid mollusk is used in both Japan and China in the production of akoya pearls. Cultured Pearls were sold in cans for the export market. These were packed in Japan by the I. Mitsubishi commenced pearl culture with the South Sea pearl oyster in , as soon as the technology patent was commercialized. By this project was showing signs of success, but was upset by the death of Tatsuhei Mise. Although the project was recommenced after Tatsuhei's death, the project was discontinued at the beginning of WWII before significant productions of pearls were achieved. Japanese companies were involved in all projects using technicians from the original Mitsubishi South Sea pre-war projects. Kuri Bay is now the location of one of the largest and most well-known pearl farms owned by Paspaley , the biggest producer of South Sea pearls in the world. In , China overtook Japan in akoya pearl production. These pearls are then processed often simply matched and sorted , relabeled as product of Japan, and exported. In the past two decades, cultured pearls have been produced using larger oysters in the south Pacific and Indian Ocean. The largest pearl oyster is the Pinctada maxima , which is roughly the size of a dinner plate. South Sea pearls are characterized by their large size and warm luster. In , pearl farmers began growing cultured freshwater pearls using the pearl mussels native to Lake Biwa. This lake, the largest and most ancient in Japan, lies near the city of Kyoto. The extensive and successful use of the Biwa Pearl Mussel is reflected in the name Biwa pearls , a phrase which was at one time nearly synonymous with freshwater pearls in general. Since the time of peak production in , when Biwa pearl farmers produced six tons of cultured pearls, pollution has caused the virtual extinction of the industry. Japanese pearl farmers recently [when? This industry has also nearly ceased production, due to pollution. Currently, the Belpearl company based out of Kobe, Japan continues to purchase the remaining Kasumiga-ura pearls. Japanese pearl producers also invested in producing cultured pearls with freshwater mussels in the region of Shanghai , China. China has since become the world's largest producer of freshwater pearls, producing more than 1, metric tons per year in addition to metric measurements, Japanese units of measurement such as the kan and momme are sometimes encountered in the pearl industry. Led by pearl pioneer John Latendresse and his wife Chessy, the United States began farming cultured freshwater pearls in the mids. National Geographic magazine introduced the American cultured pearl as a commercial product in their August issue. The Tennessee pearl farm has emerged as a tourist destination in recent years, but commercial production of freshwater pearls has ceased. For many cultured pearl dealers and wholesalers, the preferred weight measure used for loose pearls and pearl strands is the momme. Momme is a weight measure used by the Japanese for centuries. Today, momme weight is still the standard unit of measure used by most pearl dealers to communicate with pearl producers and wholesalers. Reluctant to give up tradition, the Japanese government formalized the kan measure in as being exactly 3. In the United States, during the 19th and 20th centuries, through trade with Japan in silk cloth the momme became a unit indicating the quality of silk cloth. Though millimeter size range is typically the first factor in determining a cultured pearl necklace's value, the momme weight of pearl necklace will allow the buyer to quickly determine if the necklace is properly proportioned. This is especially true when comparing the larger south sea and Tahitian pearl necklaces. The value of the pearls in jewelry is determined by a combination of the luster, color, size, lack of surface flaw and symmetry that are appropriate for the type of pearl under consideration. Among those attributes, luster is the most important differentiator of pearl quality according to jewelers. All factors being equal, however, the larger the pearl the more valuable it is. Large, perfectly round pearls are rare and highly valued. Teardrop-shaped pearls are often used in pendants. Queen of Italy, Margherita of Savoy , owned one of the most famous collections of natural pearls. She is wearing a multi-strand choker and a rope of pearls. Muslim "Pearl Trader" painting on mica in India. Pearls are generally of spherical shapes. Perfectly round pearls are the rarest and most valuable shape. Semi-rounds are also used in necklaces or in pieces where the shape of the pearl can be disguised to look like it is a perfectly round pearl. Button pearls are like a slightly flattened round pearl and can also make a necklace, but are more often used in single pendants or earrings where the back half of the pearl is covered, making it look like a larger, rounder pearl. Pear shaped pearls are sometimes look like as teardrop pearls and are most often seen in earrings, pendants, or as a center pearl in a necklace. Baroque pearls have a different appeal; they are often highly irregular with unique and interesting shapes. They are also commonly seen in necklaces. Circled pearls are characterized by concentric ridges, or

rings, around the body of the pearl. In general, cultured pearls are less valuable than natural pearls, whereas imitation pearls have almost no value. One way that jewelers can determine whether a pearl is cultured or natural is to have a gemlab perform an X-ray examination of the pearl. If X-rays reveals a nucleus, the pearl is likely a bead-nucleated saltwater pearl. If no nucleus is present, but irregular and small dark inner spots indicating a cavity are visible, combined with concentric rings of organic substance, the pearl is likely a cultured freshwater. Cultured freshwater pearls can often be confused for natural pearls which present as homogeneous pictures which continuously darken toward the surface of the pearl. Natural pearls will often show larger cavities where organic matter has dried out and decomposed.

There is a special vocabulary used to describe the length of pearl necklaces. While most other necklaces are simply referred to by their physical measurement, pearl necklaces are named by how low they hang when worn around the neck. Necklaces can also be classified as uniform, or graduated. In a uniform strand of pearls, all pearls are classified as the same size, but actually fall in a range. A uniform strand of akoya pearls, for example, will measure within 0. Freshwater pearls, Tahitian pearls, and South Sea pearls all measure to a full millimeter when considered uniform. Popularized in the United States during the s by the GIs bringing strands of cultured akoya pearls home from Japan , a 3. Earrings and necklaces can also be classified on the grade of the color of the pearl: saltwater and freshwater pearls come in many different colors. While white, and more recently black, saltwater pearls are by far the most popular, other color tints can be found on pearls from the oceans. Pink, blue, champagne, green, and even purple saltwater pearls can be encountered, but to collect enough of these rare colors to form a complete string of the same size and same shade can take years. The Hindu tradition describes the sacred Nine Pearls which were first documented in the Garuda Purana , one of the books of the Hindu scriptures. Ayurveda contains references to pearl powder as a stimulant of digestion and to treat mental ailments. According to Marco Polo, the kings of Malabar wore a necklace of rubies and pearls which was given from one generation of kings to the next. The reason was that every king had to say prayers every morning and every evening. The Pearl, which can be transliterated to "Moti", a type of "Mani" from Sanskrit , is also associated with many Hindu deities, the most famous being the Kaustubha that Lord Vishnu wears on his chest. According to Rebbenu Bachya , the word Yahalom in the verse Exodus means "pearl" and was the stone on the Hoshen representing the tribe of Zebulun. Yahalom is similar to a Hebrew word meaning hit hard, so some people [who? There is a wide range of views among traditional sources about which tribe the stone refers to. The twelve gates of the New Jerusalem are reportedly each made of a single pearl in Revelation , that is, the Pearly Gates. Holy things are compared to pearls in Matthew "Give not that which is holy unto the dogs, neither cast ye your pearls before swine , lest they trample them under their feet, and turn again and rend you. Pearls are also found in numerous references showing the wickedness and pride of a people, as in Revelation The Quran often mentions that dwellers of paradise will be adorned with pearls:, The metaphor of a pearl appears in the longer Hymn of the Pearl , a poem respected for its high literary quality, and use of layered theological metaphor, found within one of the texts of Gnosticism. From Wikipedia, the free encyclopedia. Hard object produced within a living shelled mollusc. For other uses, see Pearl disambiguation. This section needs expansion. You can help by adding to it. June Main article: Cultured pearl. Main article: Imitation pearl. Main article: Pearl hunting. See also: Oyster farming. This section does not cite any sources. Please help improve this section by adding citations to reliable sources. Unsourced material may be challenged and removed. December Learn how and when to remove this template message. This section needs additional citations for verification. Please help improve this article by adding citations to reliable sources.

Gemstones of the World. Robert Hale. Blue Chart Gem Identification. Archived from the original on October 6, Archived from the original on April 4, Retrieved April 3, May 30, Archived from the original on May 28, Retrieved July 17, Behind the Name. Retrieved August 25, Online Etymology Dictionary. Evolution of Immune Reactions. Critical Reviews in Immunology. Landman, et al. Archived from the original on March 20, Retrieved May 17, Burlington: Elsevier Science. Ruhle-Diebener-Verlag, , p. Zeitschrift der Deutschen Gemmologischen Gesellschaft. Retrieved on Archived PDF from the original on September 30, Archived from the original PDF on July 23, Retrieved July 30, Archived from the original on January 13, The Guardian. Archived from the original on August 24, Archived from the original on December 20, The book of the pearl. New York: The Century Co. Raghu Prasad and P. Ramachandran Nair Journal of the Marine Biological Association of India. Archived PDF from the original on July 18, Twentieth century impressions of Ceylon: its history, people, commerce, industries, and resources. Archived from the original on January 18, Peradeniya: Ceylon University Press. Archived from the original on December 6, Retrieved January 31, Archived PDF from the original on May 13, Switzerland: Palgrave Macmillan. Science and Civilisation in China. Cambridge University Press. Reaktion

consists of one main clause and at least one subordinate clause. Compound sentence is formed of two or more main clauses which are joined by conjunctions such as and, or, or but. Complex Compound sentence contains more than one main clause and several subordinated clauses. Four of them are main clauses and one is subordinate clause. This indicates that our sentence belongs to Complex-Compound type of sentence. If the grammatical relationship is paratactic, the clauses are coordinated. If the grammatical relationship is hypotactic, the clauses are subordinated. Parataxis is the grammatical arrangement of "equal" constituents clauses. It is a hallmark of Grammer 1. Every sentence has a subject and a verb. Who or what the sentence speaks about is called the subject. What the sentence says about the subject is called the verb. My best friend studies marine biology Sharks attack their prey. Michael works on a submarine. The linking verb is joins the subject show with a word that identifies or describes it documentary. Common linking verbs include am, are, was, were, feel, appear, look, become and seem 3. Many verbs consist of more than one word. Is writing, are studying etc. Words like not, just, never, always, and only are NOT part of the verb. No -ing word by itself is the verb of the sentence 5. Prepositions Used for Time and Place. Use on, in, and at to refer to time and place. The subject of a sentence never appears within a prepositional phrase. A prepositional phrase is simply a group of words that begins with a preposition and ends with an object. An interesting exhibit of a killer whale is very popular at the new aquarium. Prepositional phrases: of a killer whale at the new aquarium 7. Many verbs consists of more than one word. The extra verbs are called auxiliary, or helping, verbs Does work, is working, are working, were working, have worked, had worked, had been working, should work, will be working, could be working, Based on these commonalities, write TWO different synthesis papers and their outlines. The purpose of this synthesis is to convey the message to parents who abandon their children that there are legal and not life-threatening ways to refuse growing their children. The purpose of this synthesis is to convince the legislators that parents who abandon their children should not be prosecuted as criminals. The final project should include two outlines of the synthesis paper 1 page max for each outline and two synthesis papers 2 pages max for each paper. This kind of stress, known as word-level stress, is actually part of a word's pronunciation. It may also serve to differentiate words that are similar. For example, We're going to record a record, the two similar words are stressed differently so that the first record is stressed on the second syllable vowel reduction in the first syllable also assists in helping us to assign stress to the second syllable , whereas the second record is stressed on the first syllable with vowel reduction in the second syllable. All words of more than one syllable have a prominent or stressed syllable. If we pronounce a word with appropriate stress, people will understand us; if we use the wrong stress placement, we run the risk of being misunderstood. As we focus a camera on some item of interest, phonetic stress helps us focus our listener's attention on what is most important in our message. But the sound pattern of English does not make it an overriding necessity to adjust the lengths of syllables so as to enforce complete regularity. The interval between stresses is affected by the number of syllables within the stress group, by the number and type of vowels and The written piece presents the main topic and key information provided in both sources. Transition and reporting verbs are masterly used. No personal view is included. The written piece includes all the parts: introduction, two summaries, and conclusion. Make them true, grammatically correct sentences using punctuation, appropriate conjunctions, or subordinating words. In March, Harry was transferred to a new plant in Detroit, and then he was laid off in June. While it may take a little longer to finish a paper. Professional writers recommend putting it aside for a few hours before doing final proofreading. Many people believe in the curative powers of this water they have felt relief after bathing in it. The sun is 93 million miles away it can still burn a person's skin badly. My sister has over two thousand old record albums; she has very little storage space left. Students who write down their assignments in a calendar tend to manage time better. Unless they forget to check their calendars everyday. The CEO received a subscription to his favorite magazine; it arrived in the mail within two weeks. The jury members deliberated for over two months, the judge has asked to meet with them today. The new oil painting is very colorful it will look good with our bright furnishings. The weather forecaster asked everyone to I have learned so much in the short amount of time that I have spent here at Kennesaw State University. I feel as if I have grown, not only as a student, but as a person as well. I have met many new people, made many new friends, and learned many new things especially in my English class. I thought I knew everything there was to know about writing when I came in on my first day, but I was very wrong. My professor assured me that there is much more to writing than just putting words down on paper. Knowing all of this, I have now learned how to improve on my writing skills, how to write better grammatically correct sentences, incorporate quotes and research and give as well as get criticism. When I came into this semester as a freshman I was very confident in

the quality of my writing. However, my self-esteem was soon crushed shortly thereafter. Even though my writing skills had been very good compared to my classmates in high school, at the university level they were just average. I had to do something quick to learn how improve on my writing skills. With the help of my teacher, she made us a read a variety of articles that were very interesting, yet also very Home Page English and Literature. Free Essay. Submitted By gabiipenagos Words Pages Similar Documents Free Essay. Premium Essay. We are a participant in the Amazon Services LLC Associates Program, an affiliate advertising program designed to provide a means for us to earn fees by linking to Amazon. Plumbers always talk about plumbing traps. It seems grease traps, p-traps, s-traps, drum traps, etc. How many times has a plumbing tech stopped to explain what a plumbing trap actually does? Are the installation, products, and supplies a secret of the trade? When doing anything plumbing-related, you want to make sure you have a high level of precision. Let me bottle up some tips and tricks for you. Sewage disposal systems produce some pretty nasty odors while other can even come to a point where they are considered dangerous. In order to protect us from these risks, a barrier is placed between the plumbing fixture and sewage waste system. Sewage disposal systems start in the production phase of the shower, bathtub or toilet. Then it enters the disposal stage, sending the sediment waste through a series of inline steps. Having said that, any plumbing fixture directly connected to the sanitary drainage system must be equipped with a water seal trap. That means every single plumbing fixture used to evacuate waste from a building should have its own plumbing trap. By definition, a plumbing trap is a device that keeps a small amount of liquid every time the fixtures is used. The amount of retained liquid is called a trap seal. This trap seal prevents sewage system odors, gases, and vermin mice, insects, etc. Trap seal is the maximum vertical depth of liquid that a trap will retain measured from the crown weir and the top of the dip of the trap. The most common of all plumbing traps is the p-trap. This is used with kitchen sinks, lavatories, and laundry sinks. Most Plumbing Codes place restrictions on how a p-trap is used and manufactured. Here are some of those limitations, restrictions, and clarifications. The greater the velocity of the water rushing through the plumb fixture drain, the more likely the drain will siphon the trap seal. The shorter the vertical distance, the more efficient the trap functions. When a water closet has flushed, the velocity of wastewater removes the trap seal completely. Concealed traps used for bathtubs, showers, etc. Check out the diagram in Figure 6 to observe the v parts of a p-trap. They are used in a limited number of applications. There are some advantages to using deep seal traps. These benefits are specific to their respective application. A deep trap has a deeper seal with more liquid than others. Use a deep trap when you install a floor drain in a remote location. This can be a large warehouse. In these cases, the application needs very little water to reseal the trap. The deep seal trap has a much greater capacity for resealing. Because the trap is usually quite a bit larger than a traditional trap, it can handle a much greater flow of water. As a result, the trap is less likely to lose its seal because of the extra amount of water. Use a deep seal trap when a fixture or piece of equipment calls for an indirect waste connection. This can be a commercial ice maker, salad bar or in some cases a triple pot sink. Thanks to its depth, a deep seal trap is less likely to lose its seal due to the back pressure or trap siphonage. There are instances where a fixture or trap cannot be properly vented. In cases such as these, a deep primer seal trap would be ideal. All of the aforementioned advantages apply here as well. I think drum traps need a little bit more explanation. However, professionals simply choose not to use them in new construction anymore. Drum traps played their part when installing bathtubs and lavatories. A trap adapter is used in residential and commercial drain, waste and vents systems. A drum trap is a circular metal barrel canister with the inlet near the bottom of the trap. The waste outlet is at the top with a removable cover. Ideally, professionals install the drum trap in a place with easy access. This way, you can remove the cover to clean. In other cases, people have it hard to remove the cover which fused together by time. Therefore, when drum traps stop, they are extremely difficult to clear by rodding. Drum traps existed so that people could find jewelry or valuables if lost down the drain. The trap would catch and guard the ring or earring by sinking to the bottom. The likelihood that a valuable would flow into the waste opening at the top of the trap is highly unlikely. A sand trap also helps to separate sand and oxidized organics found in water supplies. Back in the day, before people used or understood system venting, vermin like rats or insects could move freely from building to building, house to house. Not to mention the sewer gas odor could be unbearable because of back pressure and trap siphonage. Health officials knew that this could pose as a serious health risk, especially in heavily populated, wet, and dry areas. Therefore, to combat the issues above a house, a building trap is required in each building. The building trap provided a secondary line of defense against the vermin and sewer gas. Most times, the building trap was a large diameter S-trap. Today, most codes do not require a building trap. In fact, in most cases, they are against

code. Trap siphonage can look as a low negative pressure within the fixture drain. However, you can grasp this concept more easily by describing it through a simple visual image. Picture a large amount of wastewater hitting a waste stack at one time. As the wastewater goes by the other fixtures connected to the stack, it can pull the water from their respective trap seals. Another scenario that could cause trap siphonage is a fixture using an S-trap. If the fixture is full and the wastewater is released, the water will rush through the trap, with the waste pipe carrying some of the trap water. What happens is that not enough liquid is left to form an adequate trap seal. A similar scenario can occur if people install a fixture on a long run of piping with no ventilation. If the water vacates a vent fixture into the trap, it could build up enough velocity to drain the trap. However, there are instances when water can blow of the trap into the fixture. Subsequently, the water enters the building. This can happen when a large amount of waste flows into the drainage system. The water will compress the air in front of it. If the fixture at the point of compression has no proper ventilation, it will blow out the trap. One of the responsibilities of owning a home is maintenance. Often, you may not realize there is a maintenance problem until you see the damage. A leaking shower is not only a nuisance, but can raise your water bill and result in costly repairs. The shower leaks that you can see are the ones that you quickly notice and are easier to repair. The leaks you cannot see are the ones that are most problematic. Shower leaks behind wall can do internal damage long before you detect them. Have you ever been in your bathroom on a windy day and seen the water level in the toilet bob up and down? The same action can compromise the traps in your home. The pressure or suction caused by the strong winds can cause the water to rise and fall into the trap. If the fluctuations are big enough, a small amount of trap seal may spill into the waste system. This incident is going to compromise the trap. As you can imagine, the seal is more susceptible to both back pressure and trap siphonage. This is a very common occurrence especially in instances where a fixture or drain has a sporadic activity. The water in the trap then evaporates when not in use, at least once a week. Laundry room floor drains, remote floor drains, fixtures and all traps in a summer home are all more vulnerable. Under these circumstances, evaporation has high chances to happen. I think an example will serve this concept better than a lengthy explanation. Maybe a cleaning person runs out of the clean water while mopping a large public toilet room. They may not want to fill up the bucket again. The alternative is that they flush one of the water closets a few times to make sure the water is clean. They rise the mop off in the toilet. One of the strands of the mop dislodges and gets stuck inside the trap seal. The piece stretches to the fixture branch and into the waste system. The water from the trap will pick up the string and into the waste piping, draining the trap seal. Please note, although these sizes are pretty universal they are still subject to local plumbing codes. Please note this includes combination tub and shower fixtures. Please note this size assumes there is no dishwasher or garbage disposal installed. Now that the plumbing traps are no longer a secret of the trade to you, you will be able to understand your system better and visualize how it truly works. You can now choose the right type of such a device for your home and make sure you leave no loopholes for a breakdown. Looking up at the basement ceiling, it looks like the bathroom sink and the kitchen sink also drain into this line, and I know both those sinks have p-traps directly under them. But now, with the basement P-trap leaking, sewer smell is present at the kitchen sink and in the bathtub. Seems that a deep seal lower P-trap and regular upper P-traps were doing the job. Hello I am Naveen. Our customer has done a core cutting with mm distance from the wall where as the S trap distance of the closet is just mm. Is there any way it can be brought to mm. Is there a product to cover the distance of 60 mm. That is such a tight offset. Is this a basement foundation core? What floor? If you can snap a few pictures so I can see the layout. I am planning to close a toilet and instead modify the plumbing to connect to a washing machine. Is it advisable to make the modification? I would say you should try and dump the laundry waste as close to the end of the waste run as possible. Just remove the toilet and closet collar if you can, stuff the pipe with newspaper or burlap and pour concrete over the top. Wanting to hook up a single line to a sink and washing machine. Was planning to have a P-Trap for both , the washing mashing is first in line and more then likely the most active of the twol Dan good question. Most codes read that each plumbing fixture shall be individually trapped so two traps is the right way to go. I do not believe if the fixtures are vented that you run the risk of siphoning a p-trap. Awesome thank you for the peace of mind. I have ran two P-Traps and so far so good as the washing machine line is also acting as a vent tooâ€¦. I have read some materials that e. There are several difference actually. When using European faucet in the U. I was wondering if a p-trap has to be set straight up and down or if it can be tipped onits side a little bit. So I dont have to cut hole in floor deck. The p-trap must be installed horizontally with the trap straight. If you do not you will almost certainly lose your trap seal. I installed a deeper kitchen sink and now my trap is about 2 inches lower that the outlet. What

can I do to reconnect it. If I dropped a ring down the sink, how long will it stay in the P-trap? It happened a month or two ago. I have been using the sink, and figured it was gone. The truth is if the ring is heavy enough it will probably still be in the p-trap. It really all depends on the weight of the ring and the speed of the water going down the drain. Hello, I have been told that for a tub you need a specific tub Trap, is this true? And if so what are they called? Thanks so much. You need a waste and overflow drain with a p-trap, The p-trap is a common p-trap nothing special. I am going to renovate the bathroom, but prefer to not rework any of the waste lines since all of the fixtures are going back into their original locations. You really have to check with your municipality. My tub drains into an elbow then into the waste line. I smell sewer gas whenever the shower is used. Several plumbers I have called in and they are adamant that the elbow joint is a trap, I know they are wrong, a downward bending Elbow can not be a trap. Who is correct? So the tub drains directly into a 90 and that connects to a branch waste line? My outlet pipe to my s bend in my kitchen is too shortâ€¦. How would you recommend fixing this â€" apart from getting another s bend? S-Traps are illegal in most areas in the US. The only way to fix this is to purchase a new S-trap. I am installing a shower in a first floor location that is cantilevered out from the house. The floor joists are 2 x 10s and the joist cavity is insulated. Problem is the P-trap almost touches the bottom of the joist cavity and is likely to freeze being very close to the exterior of the house. If I install a trap inside the house proper a running trap freezing will not be an issue. The run from shower drain to the trap would be about 4 feet. I do not know why codes do not allow running traps for this kind of application. What kind of problems would a running trap, in this application, be likely to create? Running traps are illegal in most municipalities. If this were my house I would install the p-trap where it is supposed to be and run heat tracing tape around the p-trap. Can anybody give me an answer, the p trap in my basement utility rm has a p trap with a 3 slotted vertical spacer in it. What is the purpose? Can you please take a picture and send to skavanaugh1 gmail. A slotted tail piece or indirect funnel interceptor on a p trap was used for something like a drip condensate drain or similar device. It is normally open to be able to visualize that the drain is plugged or stopped up. There is a natural air gap when an indirect waste is installed. I am removing a bidet can just cap the hot and cold copper water lines and the drain which joins the toilet drain line leading to the basement. Please check your local codes for the most accurate information. I know most shower drains are trapped directly below the drain, however, my application does not allow for this configuration, therefore, I want to find the appropriate codes to support my configuration. Does this make sense, or am I leaving out any relevant details? That is universal although you can read it in the Chicago Code. If I want to permanently remove a tub, would I have to cap off the drain under the p trapâ€¦. Remove the tub, cut the waste off flush to the floor, stuff burlap or newspaper into the waste opening and fill with concrete for a few inches. Remove the tub,pull out the tailpipe and screw a test plug in the pipe below the floor. Are there any kinds of bathtubs that have a p trap built in kinda like a toilet? Or do we need to put the tub on a platform highbenough for a p trap under it? Cutting the concrete is not an option. Thanks so much! This is a great question because we have always done the latter. We put the bathtub on a platform so the p-trap fits underneath. I did do a little research and to my knowledge there are still no manufacturers that make a bathtub with an integral trap. If you do run across one please leave a link in this thread. In just about half the cases, maybe 8 to 10 now over 3 years, we have found evidence that things being flushed that clogged the lines ie. We have easily remedied the backup by snaking at the house trap just inside the foundation wall which is buried in the basement floor, but the cap is accessible. We have had this property for going on eighteen years now and are beginning to wonder, ether the trap has deteriorated or become full of sediment or otherwise compromised. We are still trying to find the right equipment to maybe camera or scope out the trap, as this seems to be the area that once snaked, quickly relieves the back up. Any experience or suggestions welcome. You most certainly need to camera the sewer line. There is probably a dip or a separation in the piping that is causing things to hang up at the same spot. We use a Rigid Sea Snake. Thank you for the helpful info! We are in the middle of having a washer installedâ€¦the plumber installed most of the plumbing and left it over the weekend, to be finished later this week. Over the weekend, a distinct sewage smell and flow of air was coming out of the open standpipe and we noticed that no p-trap was installed at the bottom. Is this a legitimate practice, i. A washing machine standpipe should be trapped and be within 5ft of a vent. If not the line should be independently vented. That is a false statement. When the S trap is in place the water would back up into the dual sinks. I removed the S trap and plumbed directly into the waste pipe and never have a problem with water backing up. Is there another option or is there a reason this is happening? S-traps are almost completely obsolete. You should remove the s-trap and add a p-trap. It could be that the trap was obstructed. Is there a minimum or maximum distance required before increasing pipe size? Do

you need to change the trap? You can absolutely use the water supply that used to service your shower. You cannot, however, use the existing trap. The thing that is throwing me off is that you reference appliances in the bath and that there is raw waste in the water closet. They should both be independently trapped. Is there a problem with having a 4-foot vertical drop from a water closet before to starts to run horizontally. I cannot find where this is prohibited by code, but it seems like it could siphon the water out of the bottom of the toilet. Also seems like the liquids could out-run the solids and create buildup in the vertical section of pipe. All of the concerns you mention are valid for sure. Hey John, thanks for reaching out. Bottle traps are not allowed in many municipalities across the US. I will have an answer for you shortly. My Indian toilet has backwater from the septic tank as the toilet outlet pipe in below the septic tank level. What should i do? Should i install a Western toilet with some kind of backflow stopper? Will it help? And how should i seal my Indian toilet? Please help. May I ask where the heck did you purchase an Indian toilet in the US? To my knowledge, there are no toilets that have an integral check valve. You could install a water closet with an ejector pump that sits above the floor like this. And then pipe it back into the waste line. This way your water closet is divorced from the waste line. I am responsible for maintenance in an apartment building that is nearly 20 years old. Whenever a resident moves out, one of the many things I update is to switch the original chrome plated p-traps serving the kitchen 1. I have noticed that at least some of these plastic traps come loose over time and leak into the sink cabinet, causing serious damage to the cabinets and rollout drawers. This is an expensive problem, especially if it is widespread. Can anyone explain why plastic traps come loose over time? My experience with chrome plated metal pipes is that when they leak, it is due to physical damage or rusting out from the inside, hence the reason I have been switching to plastic. The domestic hot water in my building is communal and capped around F by the mixing valve so supply water is not particularly hot, although residents who regularly boil pasta, eggs, etc. I see this loose trap phenomena most often at the kitchen drainsâ€"which fits my theoryâ€"but it has also occurred in the bathrooms as well. I have been using basic plastic drains from HDSupply exclusively. Should I try a different brand of plastic drain? This is a great comment and observation. The joint is fine but the metal has corroded and worn away. The same is true for plastic fittings. Most plastic tubular p-traps you buy from the home centers are not heavy-duty which makes them way more susceptible to heat. Pay the extra money for commercial grade tubular p-traps. As people pull out and put back cleaning supplies and other things they hit the trap compromising the joint. Tell people to be careful if they are going to store things in the cabinets. Wow, this blog is so fantastic. I work in the grease trap industry, but this is such a great resource to send people for those that want more in-depth knowledge about drainage and plumbing. Thank you so much. Tell me more about your business. Rodding super grease traps are super fun. Your email address will not be published. We may also earn commissions on purchases from other retail websites. Brass P-Trap with Deep Flange for John M on December 22, at pm. Admin theplumbinginfo Reply. SJ Beltran on February 12, at am. What is wrong with a double P trap, and what is wrong with one of slightly larger diameter? Naveen on June 23, at am. Is there a product to cover the distance of 60 mm Reply. The Plumbing Info Guest on June 26, at pm. Sean K Reply. Chandrasekaran on April 27, at am. Sean Kavanaugh on December 3, at pm. April on January 7, at pm. Can a washing machine and a nearby sink share the same P trap? Thank you for your advice Reply. The Plumbing Info Guest on February 15, at pm. No each plumbing fixture or appurtenance shall be trapped individually. Pat Duffley on January 10, at am. Thanksâ€¦ Reply. Dan M on April 23, at pm. The Plumbing Info Guest on April 26, at am. Dan M on May 14, at pm. I have ran two P-Traps and so far so good as the washing machine line is also acting as a vent tooâ€¦ Reply. Shellie on May 29, at pm. The Plumbing Info Guest on May 30, at am. You can tie into it however the utility sink must be independently trapped. Sean Kavanaugh Reply. Janusz on June 7, at am. Have you heard anything about it? The Plumbing Info Guest on June 6, at am. Larry Crocker on August 2, at am. The Plumbing Info Guest on August 19, at am. Carlos on June 10, at am. Hi, I installed a deeper kitchen sink and now my trap is about 2 inches lower that the outlet. The Plumbing Info Guest on June 14, at am. Barbara Bauman on June 13, at pm. Barbara Bauman on June 14, at am. Daniel O'B on June 15, at am. The Plumbing Info Guest on June 15, at pm. Daniel O'B on June 15, at pm. Thanks, sir. The Plumbing Info Guest on June 16, at am. You are welcome. Thanks for stopping by. Sean Reply. Jim on June 16, at am. The Plumbing Info Guest on June 20, at am. George Smith on June 28, at am. The Plumbing Info Guest on June 29, at am. Angr on March 30, at pm. The Plumbing Info Guest on April 17, at am. Kiom on July 26, at pm. The Plumbing Info Guest on August 26, at am. Dave on August 2, at pm. Can I have any amount of straight pipe for the bottom of the trap for my kitchen sink? The Plumbing Info Guest on August 3, at am. Marty on August 3, at pm. The Plumbing Info Guest on February 13, at am. The Plumbing Info Guest on September 12, at pm. Yep you can cap all three.

Ken on January 30, at am. Thanks Reply. The Plumbing Info Guest on March 13, at am. Andrew on September 25, at am. Hello Sean, Thanks. The Plumbing Info Guest on September 26, at am. Sally Stamos on February 11, at pm. Ike on September 19, at pm. Mom T on March 5, at pm. Gary on March 14, at pm. Can you instal 2 50mm traps to another 50mm trap on the same line Reply. The Plumbing Info Guest on March 21, at am. No wasteline or plumbing fixture should be double trapped. Will Nehme on November 24, at am. Thanks for writing good information all about plumbing traps. Becky on December 12, at pm. The Plumbing Info Guest on December 18, at am. I have never heard of that term used before. It could possibly be referring to a drum trap. Mikey on January 15, at pm. The Plumbing Info Guest on February 13, at pm. Clueless Non-Plumber on February 20, at pm. Thanks again! Thanks for asking. Jeff on June 29, at pm. Cheers Reply. The Plumbing Info Guest on July 9, at am. Diesel on April 3, at am. Jim Wilson on September 9, at am. The Plumbing Info Guest on September 10, at am. The Plumbing Info Guest on September 23, at am. John on September 18, at pm. Are round bottle traps allowed by code in California? The Plumbing Info Guest on September 19, at am. John on September 19, at pm. Thank you for your follow up. Tom on November 2, at am. The Plumbing Info Guest on November 6, at pm. You could install a water closet with an ejector pump that sits above the floor like this And then pipe it back into the waste line. Jason on December 12, at am. Should I be performing a periodic trap inspection? If so, how often is recommended? Thank you for reading this; I appreciate any insight you can offer. The Plumbing Info Guest on December 13, at pm. Acopassavant on December 12, at pm. Submit a Comment Cancel reply Your email address will not be published. Search This Site Search for:. Menu Home Troubleshooting. Pin It on Pinterest. This website uses cookies to ensure you get the best experience on our website. Learn more. Got it! Buy on Amazon. We are a participant in the Amazon Services LLC Associates Program, an affiliate advertising program designed to provide a means for us to earn fees by linking to Amazon. Delve into our list of plumbing terminology to make your way in this complex yet necessary market. This article will make it easy for you to understand the core concepts that stand at the foundation of the plumbing world. ABS â€" Acrylonitrile-butadiene-styrene. Rigid black plastic pipe used for Drain, waste, and vent lines. Please check your local codes to see if this material is code approved. In most major metropolitan areas it is not a code approved material. The most common absorbent used in the plumbing world is activated carbon. Absorption Field â€" This is a seeping field designed to disperse the liquid waste from a septic tank through a filter bed. The septic tank fills with liquid and solid waste and the liquid waste drains off to the absorption field leaving the solid waste behind. In plumbing an access panel would hide control or shut off valves or cleanouts for rodding plumbing fixtures. Acid Dilution Basin â€" A plumbing appurtenance connected to waste piping servicing a part of a building receiving corrosive or acid waste. Most acid neutralizing basins use limestone as the neutralizing media. Here are some applications where an acid dilution should be used, school labs, hospitals, research facilities, pharmaceutical manufacturing, printing facilities, automotive service centers, film processing, etc. Acid Waste â€" Any waste water containing corrosives or acidic liquids that must be neutralized before entering the municipal sewer system. Most often fixtures receiving acid waste are connected to an acid dilution basin which neutralizes acid before the waste water enters the sewer. Acid Waste Piping â€" Simply put its waste piping and fittings that are resistant to acid waste. Examples of applications where this is used, laboratories, hospitals, photo labs and printing presses. Some of the materials used in making acid resistant pipe and fittings; glass, polypropylene and polyvinylidene fluoride for really harsh situations. Polyvinylidene fluoride is also fire retardant and when approved can be used in a plenum ceiling. Acrylic â€" A very strong and hard thermoplastic and in plumbing it is used as a surface material for bathtubs, shower bases, tub or shower surrounds. When used in bathtubs and showers acrylic is usually back with fiberglass to add strength and rigidity. Acrylic is also used to make plexiglass shower doors. It affects the height that water closets can be mounted, the types of handles you can install on a lavatory faucet, how much pressure it takes to push down a flush valve handle and those are just a few. Here is a link to the ADA Standards publication Adaptor â€" A fitting used to join dissimilar piping methods i. Adjusting Linkage â€" An adjustable rod or strap that forms the connection between the lift rod and the ball lever assembly of the drain. Aeration â€" a method to introduce air with water to help in releasing dissolved gasses that contribute to foul odors or unpleasant taste. Aeration can be done in several different ways, air can be bubbled up through the liquid, liquid can be sprayed into the air or the liquid can be agitated oxygenating it by bringing the surface water in to contact with the air. The best example we can give for the use and effects of aeration is the cleansing of the Calumet Sag River in Illinois. Large parks where created along the Calumet Sag River pumping millions of gallons of water through attractively created waterfalls. The results have been staggering. Aerator Fittings â€" a type of fitting installed on a plumbing fixture that mixes water

with air. These fittings help with water conservation and reduce splashing. Aerobic Bacteria â€" Bacteria living, active and occurring in the presence of oxygen. A - American Institute of Architects This is basically a self policing regulating body that promotes excellence in architecture. They are heavily involved in all facets of education for their members from internship, to mentoring to licensing and support. If you are familiar with all of the AIA forms are you probably have a head ache, they can be tedious but they are ultimately there to protect the Owner. It opens to allow air to equalize pressure in the drainage system but closes to stop sewer odors and gases into the living space. Air Chamber -A vertical air filled pipe or manufactured spring coil installed above the waterline in a potable water system that absorbs pressure fluctuations when valves are turned off i. The pressure absorbing devices reduce water hammer. Having air chambers on plumbing fixtures with water connections is code for most municipalities. The air gap protects the potable water system from cross contamination. Please see Backflow Prevention Device, Vacuum breaker, double detector check valves. All Thread Rod â€" a connecting rod used in almost every construction trade. In the mechanical trades it is mostly used to hang piping materials from the underside of a the structure of the building.. Threads are in one direction and standard hex nuts can easily be screwed on to secure a multitude of different hangers. Come in a variety of sizes and finishes. Anaerobic Bacteria â€" Bacteria that lives and grows in the absence of free oxygen. These bacteria get their oxygen by decomposing substances that contain oxygen. Angle Stop or Angle Valve â€" Angle stops are named because they are manufactured at a 90degree angle, they are used as shut off valves at the water intake of plumbing fixtures or appliances. They usually have an oval handle or can have a removable handle when vandalism or theft is an issue. They are not meant to be used in high pressure situations. The lesson was followed by a video of a man caught in a cave in. He broke most of the bones in his body amongst other gruesome things. This is the greatest angle above ground level at which backfill or debris will lie without sliding. ANSI is compromised of government agencies, academic institutions, manufacturers and contractors and their purpose is to enhance the US global position and to create regulations, norms and guidelines. Those regulations affect almost all businesses from every sector. Anti Microbial plumbing definition â€" Any plumbing fixture or plumbing accessory that is manufactured with anti-microbial characteristics integral to the product. An anti-microbial plumbing product is one that kills or hinders the growth of bacteria, mold, etc. Anti-scald Valve â€" please see pressure balanced and thermostatic mixing valve. Americast â€" A patented process from American Standard that uses a porcelain surface, an enameling grade steel material and a structural composite backing bonded together to create a sink that is similar to cast iron in durability, heat retention and sound deadening but weighs considerably less therefore it is cheaper to install. Annealing â€" In plumbing the process by which rigid copper is made soft and pliable. The process consists of heating the metal to a certain temperature and holding that temperature for a set amount of time then allowing the metal to cool slowly to room temperature. Simply put, through electrolysis the anode rods will corrode before the exposed metal in the tank. If the anode rod has been corroded the water begins to attack the exposed metals in your water heater which will eventually cause it to fail. Anti-Siphon Valve Vacuum Breaker â€" The simple definition is an anti-siphon valve is a device installed on a water supply line that prevents water from backing up into the potable water system. Vacuum breakers are an example of an anti-siphon valve. Anti-siphon valve are most commonly spring loaded one way valves. When the direction of flow is going in desired direction all works well, if the direction of liquid changes the valve slams shut prevent back siphonage. Apron or Skirt â€" The decorative portion of a bathtub that covers the rough-in area of the tub. It is most easily recognized on a whirlpool tub, the apron is most often removable to be able to service the tubs plumbing and or motor. ASA â€" American Supply Association Formally founded in December of the ASA is an organization that represents wholesale distributor and their supplier in the plumbing, heating, cooling, industrial and mechanical pipe, valve and fittings industries. ASME â€" American Society of Mechanical Engineers A professional member ship group founded in , this group originally came together to test steam vessels because of the numerous failures. Now it is the premiere standards development organization. Setting codes and standards throughout the mechanical trades. This group consisted of plumbing engineers, plumbing inspectors and installers all with the common idea of making plumbing safer and more universal though out the United States. They also have quite a bit of influence as to the adoption of plumbing code and the vital testing of plumbing product and theory. Organized a new set of standard that they expected their suppliers to follow. Back Flow â€" The circumstance of water traveling from one system back into any part of the main distribution system, usually by siphoning. Back Flow Preventer â€" The two most common types of back flow prevention devices are a double detector check assembly and an RPZ. A double detector check assembly is one device that houses two check

valve assemblies in the line of flow. The check valves are spring actuated and are designed to open with 1 pound of pressure. The double detector check assembly is installed with one 1 gate valve on the inlet of the valve and one 1 gate valve on the outlet side of the valve. These assemblies prevent back flow or back pressure in nonhazardous situations and are most used to protect the potable water system of a building from the water in a fire prevention system. A detector check is made with a by-pass assembly and meter to detect any unauthorized or illegal taps, test cocks are also present so that required yearly testing can take place. Each check valve can be isolated and tested independently to see if they are leaking and operating properly. An RPZ â€" is very similar to the double detector check in that it houses two testable check valves. It has two gate valves one 1 on the inlet and one 1 on the outlet. Here is where things change, an RPZ is used in high hazard situations, where contamination of the water supply would pose a significant health hazard. Backpressure in a Plumbing System â€" Pressure that is less than atmospheric pressure. This negative pressure can pull a water seal from a trap causing sewer gas or vermin into the living space. Extremely high winds can also pull the air from the plumbing vent pulling the trap seals with it. Backup Sewer â€" The overflow of water usually combined with waste from a plumbing fixture caused by a blockage in the fixture drain or waste line servicing the aforementioned plumbing fixture. Back-up Sump Pumps â€" Literally any pumping device that acts to back-up the primary sump in case of power failure or primary pump failure. There are back-up sump pumps that use no electricity and function on incoming water pressure. The Backwash cycle is a process a water softener or water filter goes into, usually pre-programmed for off hours, whereby the water flow is reversed cleaning the filter media. The waste water is sent to an open site drain. Backwater Valve â€" A valve that is installed on the house sewer that prevents water from backing up into the house. The most common use for a backwater valve is in situations where the city sewer is combined waste and storm. In these cases during torrential rain the city sewer runs full with only one place to go, back into the house or businesses connected to it, a backwater valve is installed in this situation. Smith Backwater Valves. Baffle â€" An object or screen placed in a plumbing fixture or appurtenance to change the direction of or retard the flow of water or flue gasses. The most common baffles used in plumbing are the ones found in a grease separator. The baffles are used to slow down the incoming waste water, allowed the suspended grease and solids to cool and rise to the top for easy removal. Balancing Cocks or Valves â€" A valve with an adjustable partition or gate which can be used to increase or decrease flow. They also have self sealing ports in which thermometers can be inserted to check the temperatures of the liquids. Ball Cock â€" The valve by which the water enters a tank type toilet water closet , fills the tank and shuts the flow of water off when the water reaches a predetermined height in the tank. Barrier Free â€" This relates to ADA and handicap access, the easiest to understand is the barrier free shower base. A barrier free shower base has little or no threshold to encumber a wheelchair from entering or exiting. A basin wrench actually looks like a steel bar with a curved head with teeth on one end. The other end ends with a T handle. Obviously turn the water off before using. Go under the sink and position the head at a 90 angle catching the nut, turn in the appropriate direction to remove and your all set. If the sink faucet is too high to reach you may have to pull out the extended handle. Standard Basin Wrench. Basket Strainer â€" A device shaped like a cup or a basket with holes or slots that fits inside a drain that allows water to drain out but catches debris before it enters the waste piping. Basket Strainer. Beam Clamps â€" A clamping device used when beams are the only thing used for support. They are used in conjunction with pipe hangers to ensure proper support and pitch. The beam can be c-clamp type or can span the entire beam. Bench Mark â€" It is a known elevation set throughout a building or job site that all trades can use to locate proper elevations for doors, windows, plumbing fixtures etc. An elevation will be set usually by the general contractor in accordance with the engineer and all trades can measure from that elevation. It can also be a mark on a permanent flat service whereby it is used to lay out walls, columns, stairwells, etc. Bends â€" A generic term given to all elbows made from all types of piping material. Bidets â€" A plumbing fixture about the same height as a seat of a chair that is most often used for the bathing of the external genitals and the posterior parts of the body. Biodegradable â€" Any material subject to degradation to simpler substances by way of biological action i. Substances that are considered biodegradable are detergents, human waste, organic matter. Black Water â€" Waste water from toilet, urinals, bidets or food prep receptacles or waste water from drains receiving chemical waste. Bleed Water System â€" To drain a pipe or piping system of excess air by opening plumbing valves or appurtenances exposed to the atmosphere i. Blind Plug â€" A plug or cap used on no-hub piping to end a drain line. It is affixed to the end of the pipe by a no-hub coupling. Body Sprays â€" For all practical purposes these are shower heads. Some are hand held, some are on a sliding bar so that the can be moved up or down and some are positioned throughout a shower

to spray on different parts of your body while showering. Brackish Water â€" Any water containing bacteria between 1, and 15, ppm of dissolved solids. Braided Supplies â€" A flexible pressure tubing usually made of synthetic material that is encased in braided threads of steel or stainless steel. The braided covering protects the synthetic tubing from damage due to abrasions and crimping. Branch Vent â€" A vent connecting one or more individual vents with the vent stack. Branch Water Piping â€" The local domestic water piping that extends from the vertical risers or other mains and supplies water to plumbing fixtures or equipment. Brass Seats and Seals â€" In a plumbing valve the surface area on the moving part of a valve and the stationary part of the valve. When the moving part of the valve comes in contact with the non-moving part the flow of water stops completely. The most common material used for valves seats is brass. Brass seats eventually have to be repaired or replaced because with continual use the seating surface degrades over time. Brazing â€" uses How To Similar to soldering, brazing is the process of filling a void for plumbing in a pipe joint with a filler metal to join pieces of pipe or fittings. Brazing filler metals generally have melting temperatures above 1, degrees Fahrenheit. Most brazing filler metals contain some amount of silver, copper and phosphorus. Break Tank â€" A type of vessel that holds a supply of water that is to be used for a specific purpose mainly heating other than for consuming or flushing plumbing fixtures. It is filled through an air gap to prevent contamination of the domestic water system and the water supplying the tank shuts off, when filed to a predetermined height, by an automatic shut off valve. Bubbler â€" The word bubbler has a rather interesting back story. Check out this article for more on this strange little regional phenomenon. Building Drain â€" The lowest point of a drainage system where all of the interior drainage piping meets and is discharged into the sewer. Bushing â€" A pipe fitting used to join two pieces of dissimilar sized piping. There are many different joining methods but the most frequently used is threaded on both ends. Butterfly Valves â€" The butterfly valve has some similar features to that of the wafer check valve. It is very thin and lightweight so space and support are not issues. It is closed using a wafer or disc that is mounted on a rod that is secured in the middle of the valve. The rod exits the valve at the top and ends with a handle that incrementally controls the internal disc. In the open position the disc is parallel to the pipe in the closed position the disc is perpendicular to the pipe closing off flow. These types of valves can be used to control flow and are especially affective in tight spots. Most times the handles are spring loaded and allow you to lock the valve into a certain position. There are still changes in the field but those changes are always relayed to the engineer and are updated on the master CAD files. Cast Iron Pipe and Fittings â€" Plumbing sewer and vent pipe and fittings that are made from cast iron. It is manufactured in two 2 typesâ€"hub and spigot, and no-hub. The hub and spigot pipe and fittings are manufactured as either service weight or extra heavy. This relates to the wall thickness of the pipe and fittings, the extra heavy having a thicker wall thickness. The extra heavy pipe and fittings are rarely used today and availability of various fittings is limited. The hub and spigot type pipe is manufacture in three 3 lengthsâ€"five 5 and ten 10 foot single hub, five 5 double hub and thirty 30 inch double hub. Single hub means the pipe has one 1 end that is plain and the other has a hub and double hub means there are hubs on both ends. The no-hub pipe and fittings are manufactured in service weight and the pipe only comes in 10 foot lengths. The hub and spigot pipe and fittings are joined by using either neoprene gaskets or lead and oakum. The no-hub pipe and fittings are joined by using a stainless steel band with neoprene gasket that is manufactured specifically for the no-hub pipe. Ceramic Discs â€" similar to brass seating material, ceramic is the hardest material you can use in seating material. One ceramic disc rotates and slides against the other. As the holes or notches in the discs align the water passes through. Ceramic discs are completely unaffected by water temperature so the neither expand nor contract, they are not damaged by debris in the water line. Check Valves â€" A check valve is a one way valve in that is has one inlet and one outlet that allows the a liquid to travel in one direction. It is used to halt the flow of the aforementioned liquid in case of a drop in pressure or reverse in directional flow. The majority of check valves used in the plumbing industry work automatically meaning when the pressure or direction changes the valve slams shut. Circuit Setter -A circuit setter is a balancing type valve used in an HVAC or plumbing system to regulate pressure in the whole system or within part of the system. In a plumbing system it is used to regulated pressure between hot and cold water inside the potable water system. Many years ago a check valve and a ball valve where used, the check valve would shut down a hot or cold water supply if there was a sudden drop in pressure and the ball valve with a memory stop was used to regulate flow. This prevented cold or hot water bleed over if the pressure was increased or decreased in either supply piping. Circuit Vent â€" A branch vent that serves two or more fixtures with integral traps like a water closet or fixtures with p-traps installed in a battery fixtures grouped together. The vent extends from the top of the horizontal waste branch in front of the last fixture waste to

the main vent stack of a building drainage system. Cleanout Cover â€" An esthetically pleasing cover usually chrome plated that hides a cleanout. The cleanout cover is usually furnishing with a chrome center screw that threads into the cleanout plug. Closet Flanges â€" A flanged fitting that is connected to the sanitary drainage system that is used to bolt a water closet toilet to the floor. They are made of different materials, I. It is simply this, a metal cover that is inserted onto an empty hole in your kitchen sink or counter top. They come in different finishes like chrome, brass, white and stainless steel. Say you replace your old kitchen sink faucet that has a side spray with an updated model that has a pull out spout. The faucet with the side spray used a four hole sink. Coffee Station â€" In a commercial tenant space, a place for employees to get coffee, ice, or have lunch or take a break. Coffee stations typically consist of a kitchen sink, faucet, coffee maker, and refrigerator. Depending on the municipality the coffee station may require a grease interceptor and a floor drain. The coffee maker and the refrigerator will require a backflow preventer. Cold Chisel â€" A steel hardened tool that is manufactured in various lengths and diameters with a beveled end that is used for chipping and breaking concrete, cast iron, steel and other hard material. Combined or Combination Sewer â€" piping that is designed to carry both rain water with sewage. This method of evacuating waste water is being phased out around the country in favor separating the storm sewer from waste. Composite Material â€" A material used to manufacture counter tops and and sinks. Composite materials usually have an acrylic base that is colored and different aggregate materials are introduced to give the surface a unique look and in some instances adds strength. Quartz composite sinks are a great example of composite material were quartz is added to give it a unique look and adds strength and resists corroding and chipping. Compression Fittings â€" A kind of tubing or pipe connection where a nut, and then a sleeve or ferrule is placed over a copper or plastic tube and is compressed tightly around the tube as the nut is tightened, forming a positive grip and seal without soldering. Also a flexible connector that has a nut and gasket designed to attach directly to an SAE standard compression thread, without the use of a sleeve or ferrule. Copper Pipe and Fittings â€" Copper pipe and fittings are material used in drainage, waste and vent pipe as well as potable water piping. Copper is fairly easy to work with, has excellent thermal conductive properties and it is very durable. Copper comes in a wide variety of pipe sizes and can handle water, oil and gas. These toilet rooms are usually designed to accommodate a certain number of workers or guests per floor or per area of a building. If core toilet rooms are in a multi-level building they are usually stacked on top of one another using a common wet column. It also improves its fire rating as well. Cross Connection â€" Any connection in plumbing that allows potable water to be connected to a non potable water source. Cross connections can be a potentially serious health hazard. Here is an example of a cross connection : a good number of utility sink faucets come with a threaded hose connection at the end of the spout. This is used to attach a hose so a floor or room can be washed down. If the spout or faucet is not installed with a vacuum breaker and the hose is dropped into the utility sink filled with water and a cleaning chemical you have a cross connection. The tube forces the incoming water to the bottom of the heater, closest to the heating elements whereby the water is more evenly heated throughout the tank. Dishwasher Air Gap â€" An apparatus that is usually mounted next to your faucet, either on the counter or in a knockout on the kitchen sink. This device connects from the waste outlet of the dishwasher to the airgap and from there it connects to a waste opening in the p-trap of the kitchen sink. It allows waste water to flow into the waste piping however of the waste piping should ever back up, the waste water will not back up into the dishwasher because of the aforementioned air gap. Please see our diagram for further clarification. Double Detector Check Valve â€" The double detector check assembly is installed with one 1 gate valve on the inlet of the valve and one 1 gate valve on the outlet side of the valve. Downspout Piping â€" Also known as storm water piping. It is the piping system that handles the discharge of rain and melted snow water to the city sewers, retention ponds, or ground level pavement or grassy areas. On the interior of buildings the piping material is usually made of cast iron, copper or PVC. When it is installed on the exterior of the building the piping material is usually sheet metal like the downspouts on a private residence. Drain Piping Pitch Slope â€" In plumbing the grade at which the drain piping is installed to assure that the waste water flows at a speed that allows the piping to be self scouring. Meaning the turbulence and movement of the water cleans the inside of the pipe. We like to say a lazy sewer is a good sewer, if the water is moving too fast it may move past the suspended solids leaving them behind. If enough waste is left behind you have the potential for a build up and an eventual blockage. Drain Tile System â€" A system of pipe usually made of corrugated plastic, PVC or clay tile that collects subsoil drainage and allows it to dump into a sewer or water retention area. Drain tile is usually perforated to allow water to seep into the pipe and it is widely used under basement floors or under concrete footings, this keeps water from getting into

basements or washing out backfilled soil. Drain tile is also used in athletic fields, farm fields and in any situations where water needs to be removed quickly. Drainage Fittings Cast Iron â€" This a true plumbing professional term. Obviously all Drainage, Waste and Vent DWV are types of fittings used for drainage however cast iron drainage fittings are threaded fittings that are specifically used for drainage piping. These fittings are a dying breed and are only used in certain areas or in repair situations. These fittings are made with pitch built in to assure proper flow. Anvil Corp is one of the last companies to continue making CI drainage fittings. You can find them here. Drop in Bath Tub â€" A bathtub that is built with an integral lip or ledge that is meant to fit into or be dropped-into a pre-framed area that is to receive the bathtub. Drop-in Anchor â€" These are anchors that are inserted into a pre-drilled hole in concrete. Drop-in anchors are threaded on the inside to accept all thread rod or bolts and they are commonly used in conjunction with a clevis hanger to hang piping from the underside of a deck. Drum Traps â€" Very rarely used, a drum trap is a circular metal canister with the inlet near the bottom of the trap and the waste outlet is at the top with a removable cover. Ideally the drum trap is installed in a place with easy access so you can remove the cover to clean. So when drum trap stop they are extremely difficult to clear by rodding because of their inlet and outlet configuration. Drum traps were installed so people could find jewelry or valuables if lost down the drain. The trap would catch the ring or earring by sinking to the bottom, the likely hood that a valuable would flow into the waste opening at the top of the trap is highly unlikely. Duplex Pumps Ejector or House Pumps â€" This is simply a pumping system that uses two pumps instead of one. These pumps are usually equipped with an alternator that alternates pumping cycles to minimize wear on one particular pump. The alternator can be set to alternate the pumps in a variety of ways i. Ejector Pits â€" A round, square or rectangular pit collection vessel that can be made from cast iron, steel, PVC, fiberglass, concrete or clay tile. They are used in applications where the sanitary waste that flows into them is lower that the main sewer and by mean of an ejector pump s the waste is pumped up and out to the main sewer. They must always have a gas tight cover and be properly vented. Ejector Pumps â€" A device manufactured to elevate water, sewage suspended solids or liquid waste from a lower level to a point of discharge where it can be drained away by gravity into a sewer or drain. Yep, the reason for this is a person cannot take a hose and stretch to place it above the vacuum breaker rendering the vacuum breaker useless. I know how about we just step on a chair? Elevated vacuum breakers are slowly dying. Epoxy Pipe Lining â€" Epoxy lining of plumbing pipes is used when the cost of digging and or tearing walls and ceilings apart proves to be too cost prohibitive. There are several different types of epoxy pipe lining and they are used based on application type. Expansion Tank â€" A tank usually installed on a closed hot water line used to absorb excess pressure due to thermal expansion. Because water expands when heated, the water needs a place to expand to hence the expansion tank. For a high rise building maintaining water pressure suitable to proper fixture function is critical. An express riser is a water riser thats sole purpose is to bypass lower floors and service upper floors so adequate water pressure is maintained. Extension Tailpiece â€" A length of tubular brass or PVC piping used to extend the waste on a kitchen, lavatory or service sink. Connections or usually Slip Joint or threaded. Extra Heavy Soil Pipe â€" Cast iron soil has been used for drainage, waste and vent piping for hundreds of years. Extra heavy soil pipe is specified for extreme conditions and has a very high crush strength. It was not uncommon to see extra heavy soil pipe used in schools, hospitals and prisons. Faucet Types â€" A faucet is any device that controls the flow of water. The most common types of faucets used in plumbing are kitchen, lavatory, bar, service sink, hose bibbs, shower valve, tub filler and yard hydrants. Fill Valve â€" Most commonly referred to as a Ball Cock, the fill valve controls water to the tank of a tank type toilet. The fill valves is operated by means of a float. Fixture Carriers â€" A device that is installed behind a finished wall and anchored to the floor to mount and off the floor plumbing fixtures i. It is most commonly used in commercial and institutional applications due to increases wear and tear. Fixture Units Drainage â€" The quantity of load producing effects a plumbing fixture has on a plumbing drainage system. The number is based on the probable discharge of waste water into the plumbing drainage system by different fixtures for a single operation and on the average time between operations. The rate of discharge through a plumbing fixture of 7. Fixture Units Supply â€" The measure of how much water a plumbing fixture needs for proper function. The plumbing valve used by a particular fixture and its function is based on the volume of water it uses on a single occasion and on the average time between operations. Floor Cleanouts â€" A readily accessible opening installed in the floor off of a horizontal waste line to accommodate drain cleaning equipment to remove potential blockages. Floor Drains â€" An opening in the floor used to drain potential liquid waste from the floors into the drainage system. Floor Sinks â€" A receptor installed in a floor that receives drainage from indirect waste lines. Floor sinks

are often glazed with porcelain or epoxy to inhibit bacterial growth and to make it easier to clean and maintain. However all flushometers are designed to do the same thing and that is to deliver a measured amount of water to a fixture to flush out waste, i. Both a diaphragm and a piston type flush valve operate by using water pressure to actuate the valve. Flux Plumbing â€" Plumbers flux comes in the form of paste and it is brushed on copper or brass pipe and fittings to remove oxides and other coatings for the metals before joining. Oxides make soldering difficult. Friction Water Piping â€" It is the resistance between to objects in contact with one another. In a water piping system it is the friction that occurs between water and the walls of the piping. Water that comes in contact with the walls of the pipe actually moves slower than water in the center of the piping. We call that friction loss in the piping trades. The hanger device is place around the piping and tightened with bolts which prevents the piping from slipping. Riser clamps have wings or ears that extend out from the pipe to span the opening in the floor to accommodate the piping being braced. The Riser Clamp is one of the most used pipe hangers in construction. Frost Proof Hose Bibbs or Sillcocks â€" A faucet that delivers water to locations usually outside for watering landscaping or grass, washing vehicles or general cleaning. However, at some point the owner may want to divide the building to accommodate possible tenants or expansion of existing office space. Futures would minimize the contruction to rehab, expand or reconfigure the existing plumbing systems. Garbage disposal are manufactured in several different price points which include better build quality, sound deadening materials and features. Commercial versions are also available. Gate Valves â€" The gate valve is typically operated by a wheel handle and that handle lifts and lowers a metal disc or wedge cutting off or opening the flow of water. A gate valve should not be used to throttle or regulate the flow of water. General Liability Insurance GL Insurance â€" A standard insurance policy issued to businesses but in this case plumbing and mechanical businesses to protect against liability claims generating from the operations the business performs this includes employee negligence. This is usually coupled with Workers Compensation Insurance to form a firms commercial insurance package. Gravity Sewers â€" All sewers work by by gravity. However this term is used by plumbers to describe a house drain which runs under the basement floor and receives the discharge from soil, waste and other drainage from pipes within the building. It is almost always used to describe a sewer when a home is affected by sewage backing up from the city sewer during extreme rain fall. The solution to a gravity sewer would be to run the sewer over head. See Over Head Sewers. Gray Water â€" is defined as water generated by sinks, showers, bathtubs and clothes washers. It does not contain waste water from water closets, urinals, kitchen sinks or waste from dishwashers. Gray Water Waste Pipe System â€" Is the piping and storage system that collects waste water generated from hand sinks, showers, bathtubs and clothes washers. Graywater piping is purple in color so it will standout amongst other piping systems. There are three separate steps in the graywater recycling process and they are as follows:. Grease separators are most commonly used in commercial kitchens, restaurants or apartment buildings. Periodic grease removal maintenance needs to be done in order to maintain performance levels. Green Plumbing â€" Is any type of plumbing that promotes conservation of water and or electricity. Hair Separator or Hair Trap â€" these are installed on lavatories or sinks in beauty salons or barber shops and they catch link or hair from entering the waste piping. They are equipped with a removable basket that must be cleaned regularly to maintain proper flow. They also have a secondary purpose as they safeguard against losing jewelry if dropped down the drain. Hand Held Shower with Slide Bar â€" A shower head that is attached to a flexible hose and can be moved up or down on a stationary slide bar or removed from a holder and used to rinse the hair and body. Originally designed as necessary item for the elderly and handicapped it has now become a premium upgrade in home showers. Hand or Sink Auger â€" This is a coiled flexible cable that is contained inside a metal cannister and has a self feeding auger bit to dig through blockages in small diameter piping. The cannister is usually equipped with a handle and a knob so you can turn the rod cleaning the pipe of debris. Hard Water â€" Hard water is a condition caused by minerals dissolved in water. There are many minerals that can be dissolved in water but the primary are Calcium and Magnesium. S is considered hard water. Some of the symptoms a homeowner will experience if they have hard water will be spots on their dishware, rings around the bathtub, scale build-up on shower heads and aerators on sink faucets. Hard water treatment comes in several forms the most common is an ion exchange based water softener. Head Pressure â€" It is the difference in elevation between two points of water expressed in weight of a given height of a column of water. The pressure at the bottom of the column of water is greater than at the top of the column and that pressure is independent of the volume of water present. Heat Exchanger â€" A heat exchanger is an apparatus such as coiled copper or stainless steel tubing that is submerged in a tank of water. That coil is used to transfer the heat

from the liquid in the tubing to the water in the tank by way of the metal surface. Heat Traps â€" On water heaters a heat trap allows cold water to flow into the the heater but prevents hot water from flow out of the tank when not in use. Hoar Frost â€" In plumbing it is the frost that forms on vent stacks from water vapor coming in direct contact with air that is below freezing. The thought is that with continual sub freezing temperatures that layer upon layer of hoar frost can eventually close off vent stacks compromising the proper function of the waste system in a home or building. Hose Bibbs or Sillcocks â€" A faucet that delivers water to locations usually outside for watering landscaping or grass, washing vehicles or general cleaning. Hot Tap â€" The process of tapping into water main or water supply line while the line is still active and in use. The process was developed to minimize down time to other homeowners or building tenants during maintenance, rehab or new construction. The alternative to hot tapping or pressure tapping would be to shut down and drain down the affected section of piping so the work could be completed. Most times a hot water return line is installed with a recirculating pump to insure hot water is always recirculating through the hot water supply piping. Keeping hot water recirculating through the line dramatically cuts down on the time it takes to get hot water to a fixture. The average family wastes 12, gallons per year waiting for hot water. House Drain â€" The House Drain is the lowest part of the drainage system piping that receives all of the soil and waste discharge from other drainage piping within a home or building and discharges it to the house sewer that begins 5ft outside of the building. Uses in commercial and residential. Most plumbing fixtures and equipment need a minimum amount of water pressure to function properly, a house pump or booster pump takes incoming water and increases the pressure to accommodate the water demands of a private residence or a commercial building. House Trap â€" Although there are many homes that still have a house trap in use they are generally frowned upon. A house trap is a trap installed on the house drain to prevent sewer gases and vermin from entering a residence or commercial building. The biggest issues with house traps are that if the trap is ever compromised the entire building is susceptible to sewer gases. Hub and Spigot Soil Pipe â€" Hub and spigot soil pipe is usually made of cast iron and is used in sanitary drain, waste and vent, sewer and storm drainage applications. The pipe and fittings have a bell on one end and are plain on the other. The plain end is inserted into the bell or spigot end and the joint is sealed using a rubber soil gasket or braided oakum and lead. Hydraulic Pressure â€" The pressure applied by a liquid against an object. Most liquids cannot be compressed into a small area like air can. It includes installations for potable water, building water supply and distribution, waste drainage and vent piping, sewer mains and plumbing fixtures. It also defines material and code approved joining methods. Ice Maker â€" A plumbing appurtenance that can be stand alone or part of a refrigerator and is used to make ice for beverages or for therapeutic uses. An ice maker needs both a water connection and a waste connection for the discharge of condensate waste. Instantaneous Water Heaters â€" An instantaneous water can be broken down into the following two categories. A tankless heater flash heats water on demand by pulling water through a heat exchanger. There is no hot water storage although one can be added if the application calls for additional capacity. Tankless heaters are generally thought of to be much more efficient than traditional tank type water heaters. However, real world use has clouded that belief. The IPC was established to set standards to adequately protect the public health and safety but not necessarily increase the cost of building and fabrication. There are several states and municipalities that have adopted the IPC as their plumbing code. The IPC can be adopted internationally. Invert â€" The lowest point of the inside of any type of horizontal waste, vent or water piping. Invert Elevation â€" Closely associated with the above, the invert elevation is really the cornerstone elevation for the mechanical and in particular the plumbing trade. It is the lowest inside point of any pipe at a certain location. Knowing invert elevations are extremely important for laying out waste piping runs. Mistakes can cause mistakes ranging from sewer piping not having enough pitch to waste piping being removed because it is above the ground or hanging below a drop ceiling. Iron Filter Tank â€" Any device that removes disolved or undissolved iron from potable drinking water. Some smaller units can be installed in line with your water main and need to be maintained by changing a removable media. There are also iron filters that can handle removing iron for the whole house using media that can be recharged relieving the homeowner of having to change the filter once a month. See Charger Water Treatment for their solutions on treating potable drinking water. Island Vent â€" See Loop Vent. Isolation Valves â€" Any type of valve installed on the potable water system that isolates a section of a building, a battery of bathrooms or plumbing mechnical equipment i. Isolation valves allow plumbers positively shut down the water supply to the aforementioned so work can be performed without shutting down the water supply to the entire building. J-Hooks â€" J type hooks are used in just about every industry. In the plumbing industry they are made of plastic, steel or copper plated and come in

different sizes to accommodate different sized pipe. In the last 20 years most of the faucet manufacturers have come out with kitchen faucets with a sprayer that pulls out from the spout. The spray head will have a function button that when depressed will switch the function between hard spray or aerated flow. Lead â€" A soft and extremely heavy metal was used in almost every aspect of the plumbing industry at one time or another. Most major cities in the US used water services made of lead piping because of its durability and malleability. Until very recently lead was being used in trace amount for faucets, flush valves, hose bibbs etc. Lead Flashings â€" thin sheets of lead used to water proof vent stacks through the roof. A tube of lead is made slightly larger in diamter than the piping being flashed, that tube is welded on to flat piece of lead. The lead flashing is installed over the vent through roof increaser and the end of the lead is pounded down inside the piping. The roofing material is placed over the flashing and around the pipe and is sealed. Vent flashings are also made of rubber membrane. As a durable malleable material to use to water proof a shower or mop basin where stone or tile is being used as flooring, as a drain pan used to catch water from a water heater should it start to leak. You being with a flat piece of sheet lead. Lead Pot and Ladel â€" Used primarily to pour lead and oakum joints for waste and vent piping. A lead pot is made of cast iron and lots similar to a cooking pot. It is made to sit securely on top of furnace that attaches to plumbers propane tank. Lead is placed inside the lead pot and is heated until melted. A cast iron ladel is used to extact the molten lead from the pot so it can be poured into a hub. Molten lead does not stick to cast so it can be poured easily. Because lead is malleable and utterly non-corrosive it was a go to for plumbers for the better part of a century. Liquid Waste â€" Any liquid discharge from a plumbing fixture that does not contain human or animal waste matter. A island loop vent begins at the discharge from island sink using a sanitary tee. The vent rises up above the discharge of the drain then drops back down and connects back to the drainage system below the floor. A loop vent in a commercial application has a different meaning; it is a single vent pipe connected to the horizontal drainage piping that receives the discharge from one or more unvented fixtures. The single vent pipe rises above the overflow level of the highest unvented fixture and the single vent is connected back to the vent stack. Basically this is a way to vent a battery of fixtures using a single vent pipe. Main Pipe â€" The central pipe line to which all other branches are connected. This covers all plumbing piping systems I. Man Hole â€" A circular cover usually manufactured from cast iron that is part of a larger concrete structure used for easy excess to any number of below grade plumbing equipment. A manhole can also be used as an access point for rodding and drain cleaning equipment on storm and sewer lines. Mechanical Joints â€" definition, materials used, types of mechanical joints. Any type of pipe and fitting joining method that ensures a water tight seal using the following: gaskets, couplings, grooved fittings and couplings, nuts and bolts, etc. The following are examples of mechanical joints:. Mechanics Lien â€" A form of legal protection afforded to contractors and suppliers obtained as collateral against unpaid bills. When enforced any real estate or property such as a home or commercial building can be sold to pay off past due bills. As a mechanical contractor you should always protect your lien rights. The time for filing an Intent to Lien is different from state to state but usually you have 90 days from the performance of work to file an Intent to Lien. Once that time passes you will be forced to litigate but your lien rights will expire. Mixing Valve â€" A plumbing valve that mixes hot and cold water and delivers them at a specific temperature. Molded Stone â€" Molded stone is most commonly used for laundry tubs and it is really used to describe a fiberglass product impregnated with a calcium resin. National Plumbing Code â€" This is a standard code book for the plumbing industry that covers BOCA Building Officials and Code Administrator International and UPC codes highlighting specifications and best practices and procedures for installation and standard plumbing materials. Nipples -A short piece of pipe threaded on both ends used to join two threaded fittings. No Hub Soil Pipe â€" A type of pipe normally made of cast iron, without hubs, joined with no hub couplings. This allows for a fixture to drain however, if the drain experiences a backup the waste will not back-up into the fixture itself. It will spill on to a floor so as not to contaminate the fixture. An example of a fixture that would use an open site drain would be kitchen prep sink. Substance must contain carbon. The sewer exits the building over head and then drops down outside the building to a municipal sewer. It includes representation from both Labor Management and Contractors and promotes the highest standards of the plumbing craft and supports the training of plumbing tradesmen and apprentices. They also keep members up to date on the latest trends in the industry. PEX was originally used for radiant heating inside concrete floors. When PEX was first introduced there were numerous complaints that it deteriorated over time. It was discovered that the chlorine used to disinfect potable water attacked and slightly deteriorated the material. Since then improvements have been made to alleviate those issues. Because of the improvements in PEX manifolds you can literally control water to every fixture in the house or building. Gone are

the day of shutting the entire water down to fix one leaky lavatory or toilet. Now the PHCC is comprised of charter organizations encompassing 3, union and open shop businesses. The PHCC is dedicated to furthering education and professional excellence throughout the mechanical trades. If enough condensation forms on the cold water piping it can drip down on to ceiling tiles, desks etc. Cold water lines are frequently insulated to shield the piping from the air surrounding the piping. Insulation can also absorb any potential condensation preventing potential damage. Pipe Insulation â€" Insulation made of foam or fiberglass that wraps around domestic water piping to eliminate condensation from forming and possibly dropping on ceilings or people below. This makes is easier for the building engineers or service contractors to identify what they are working on. Certain pipes have readily identifiable colors for instance Domestic Cold Water is printed on a green label with an arrow to denote flow direction, Domestic Hot Water is printed on a yellow label with an arrow to denote flow direction. Pipe labels are not exclusive to water piping. Waste, Vent and mechanical water piping are also labelled as well. The Plumbing Council was responsible for the collection of monies from the industry fund responsible for advertising the union plumbing industry in Chicago. The PCA is an entity comprised of signatory contractors that negotiate with the union for wage increases and education. Recently they have combined staffs and resources and work together for the common good of the industry. You can read all about it in the link. In a homes across the US the water pressure is too low to ensure proper function of the plumbing fixtures and equipment so a booster pump is installed. These can be simple or complex. Meaning there are pumps that you can turn on when extra demand is called for or they are automatic and turn on when extra demand is needed. In commercial Hi-Rise or industrial building the incoming water pressure can be adequate however because of the size and demand of the building the pressure will diminishes as it gets to the fixtures. The plumbing fixtures closest to the incoming water main will function fine but as you get further and further away from the source the water pressure goes down. The booster pump will ensure all fixtures and equipment have adequate pressure. These booster systems are usually designed by an engineer using specifications denoting how much water is needed. Ice makers come in many sizes and shapes but they can be divided into two basic types. Consumer versions that most commonly built into a refrigerator and commercial which is usually stand alone and produces high volumes of ice. Plumbing Trap â€" A fitting placed in a drain line from a plumbing fixture for the purpose of holding water or other fluid to form a trap seal that prevents the passage of gases, odors or vermin from the drain pipe into the building. Click on the link for a much more detailed account of Plumbing Traps. Plumbing Valve â€" is any valve used to regulate the flow of water in a potable or human waste water system. Point of Use Water Heaters â€" A point of use water heater is usually of tankless design however some do hold some water. These heaters are made to be used for a single fixture or a battery of fixtures at a single location. Point of use water heaters are usually powered by electricity rather than gas. The water pressure is further increased by the type of nozzle at the end of the jetter hose. Power jetters come in many different sizes and configurations. You can use small walk behind units that can double as power washers or they can be tow behind units that are much more powerful and can be used in a variety of applications or they literally be full trucks with their own water source. Each type of jetter has their place in the plumbing service space. For can find more on topic on my sewer rodding and jetting article. Power Rodder â€" A rodder or auger consists of a tightly coiled steel cable think of a very long, very strong spring usually made in precut lengths or coiled in self contained canisters. They come in a variety of sizes and types mostly based on the type of job. Most service plumbing contractors have a variety of units at their disposal. As water enters the tank it pressurizes the air inside it and then a valve closes. Now you have a tank filled with pressurized water. When you engage the tank lever the air pushes the water into the bowl evacuating the contents. The Flushmate was the first product designed for pressure assisted toilets and it was used in many manufacturers pressure assisted line. Recently several companies have designed their own pressure assisted systems. Priming the trap is the act of refilling the water in trap creating a trap seal. It is strong, smooth and cost effective and it is code approved for waste and vent throughout the United States. The process allows metals to adhere to a base metal and is much more durable than traditional electo-plating. Most finishes produced by the major plumbing manufacturers are now PVD finishes and they are usually guaranteed for life. Private Sewer â€" Any sewer that serves one or more buildings that is privately owned and is not directly controlled or maintained by a public entity. Public Sewer â€" Any common sewer controlled and maintained by a city, county, state or federal government. The water or freeze proof liquid depending on application is warmed by a boiler or water heater. The heat radiates from below warming a room or melting the snow if used in drive way. Rate of Flow â€" This is a term used to describe the volume of moving water as it related to a time period. Roman Tub

Filler Roof Drain â€" a roof drain is a plumbing appurtenance installed on a building roof, inside a gutter or in a parapet wall to receive rain water. The water is routed to the building or structures downspout piping and discharged to a storm sewer or is allowed to splash on the ground. Please check your local plumbing codes to find out acceptable methods for the discharge of rain water. Sanitary Sewer â€" A house drain or a house sewer designed and used to remove only sewage. Storm water need not apply. Believe it or not there are places around the country that separate the storm and sewage systems in a building only to let them combine outside the building to a combined sewer. Septic Tank â€" A tank designed to receive raw sewage. Through aerobic and anaerobic bacterial action and sedimentation the sewage is allowed to break down. After a period of detention the remaining liquid is allowed to discharge into the soil. Sewage â€" A combination of water carried wastes from a residence, business buildings, institutional and industrial buildings together with ground surface and storm water. Soil Pipe â€" Any piping which transports the discharges of one of more water closets or bedpan washers with or without the discharge from other fixtures to the house drain. Sub-Soil Drain â€" The part of the drainage system which transports subsoil ground or seepage water to the house drain or house sewer. Tempering Valves â€" A valve used to control temperature to a constant temperature. Hot and cold water flow is controlled by the internal ports. Thermostatic Mixing Valves â€" A pressure balanced valve used to control temperature of water based on both the hot and cold water supply temperatures and changes in water pressure. A valve that is pressure balanced only operates on just thatâ€¦. Toilets â€" A plumbing fixture designed to receive human excrement from the user of the fixture to the sanitary sewer system. Trap â€" A device for a plumbing drain, sewer, etc. Trap Primers â€" A device used to prime a p-trap, preventing the evaporation of water form the trap. Trap Weir- The highest point of water held in a trap either p-trap or s-trap before it leaves the trap and drains. Urinals â€" A plumbing fixture that is flushed by potable water that is designed to receive human urine, the discharge is disposed into the sanitary system. Velocity â€" The rate of speed at which water moves through piping. It is measured in feet per second. A wafer

peugeot 207 compact
2017 ktm 300 xc specs
refrigerator parts diagram

valve is made using a thin disc that can be fastened in the center or the top or can be spring loaded in the center. This valve is meant to placed between two flanged fittings and secured between the two fittings with all thread rod. The valve is notched in the same positions as the bolt pattern of the flanges so the rod can pass by the valve. The valve is secured at both ends by the flanges. Nice work. This must have taken some time. Thanks for adding value to customers questions! Very thorough. Thanks a ton Bruce. I appreciate the feedback. Your email address will not be published. We may also earn commissions on purchases from other retail websites. Bruce Beakus on March 19, at am. The Plumbing Info Guest on March 21, at am. Sean Reply. Submit a Comment Cancel reply Your email address will not be published. Search This Site Search for:. Menu Home Troubleshooting. Pin It on Pinterest. This website uses cookies to ensure you get the best experience on our website. Learn more. Got it!