

# Kientzler Associates LLC. Dental Dictionary

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**Abraded-**

1. To wear away by friction
2. To wear away; ground down or scoured to prepare, shape, refine or polish.

**Abrasion-**

1. The abnormal wearing a way of a substance or tissue by a mechanical process or means. The grinding or wearing away of the tooth substance by mastication, incorrect brushing methods, bruxism, or similar causes.
2. The grinding or wearing away of the tooth substance by mastication, incorrect brushing methods, bruxism, or similar causes

**Abrasive-**A substance used for grinding or polishing that will wear away a material or tissue.

**Abscess-**A localized accumulation of puss in a cavity formed by tissue disintegration

**Absorption-**The passage of a substance into the interior of another by solution or penetration

**Abutment-**The teeth, root, or implant on either side of a missing tooth (pontic) in a three or more-unit bridge which is used to support

**Accelerator-**

1. That which increase rapidly the process or function
2. A catalyst or other substance that hasten a chemical reaction

**Acid-**

1. A chemical substance (typically, a corrosive or sour-tasting liquid) that neutralizes alkalis, dissolves some metals, and turns litmus red
2. A solution containing acid or having the properties of an acid, have a pH of less than 7

**Acid Etch (Enamel Etching Gel)-** (Also called etchant or conditioner.) A gel or solution of 32-40% phosphoric acid used to etch tooth enamel and or dentine in preparation for bonding. Irregularities are created on the surface, which can be filled by the bonding material to form a physical bond.

**Acrylic Resin-** Any resinous material containing various esters of acrylic acid chiefly used in the manufacture of temporary, dentures and synthetic resin teeth.

**Activator-**

1. That which activate a process or function
2. A chemical or other substance that starts a chemical reaction

**ADA-**The abbreviation for the American Dental Association- the national professionally organization of dentists in the United States

**Addition Reaction Impression Materials (Polyvinyl Siloxane (VPS))**-They are elastomers impression material which were first introduced in the 1970s. Since that time and especially in the past decade, these materials have gained in their acceptance and account for a largest share of the world-wide impression material market; which are also known as Polyvinyl Siloxane (VPS) impression materials. These impression materials are used for fixed and removable prosthodontics, operative dentistry, and implant dentistry. They are a two-part system in the form of two pastes (a base and an accelerator) which can be hand spatulated or auto-mixed (Auto-Mix) from a dual cartridge, and mixed in equal quantities for use. They have achieved a high level of dentist and patient acceptance because they are clean, odorless and tasteless.

**Adjustment**-The modification of restoration, implant or of a denture after insertion in the mouth

**Adsorbent**-A substance that will absorb liquids (blood) or solution- i.e., clay, cotton

**Alkaline-**

1. A chemical substance (typically a solution that is slippery or soapy to the touch and due to the caustic reaction will dissolve the surface of the skin and fingerprint) that will neutralize acids and turns litmus blue
2. A solution containing an alkali, or having properties of an alkaline; have a pH greater than 7.

**Alveolus**-An opening in the jaw-bone in which a tooth is attached

**Amalgam**-An alloy used for dental restorations (fillings). Most contain a mixture of silver, copper, and mercury.

**Anatomy-**

1. The arrangement of the bones in your skeleton.
2. Dental- The science of the structure of the teeth and the relationship of their parts

**Anesthetic**-A drug which a doctor or dentist uses to put the mouth, or some other part of the body to sleep so you do not feel any pain during a dental or medical procedure.

**Anesthetic (Topical)**-A local anesthetic agent in the form of a gel or ointment, usually made of benzocaine which is placed on the gums prior to an injection of "Novocain" to numb the area; i.e., LollisCaine

**Anterior**-A point of reference describing an area towards the front of the mouth

**Anterior Teeth**-The centrals, laterals, and cuspids-These are the teeth in the front portion of the mouth.

**Antiseptic**-A chemical agent which can be applied to living tissues to destroy germs

**Apex**-The very bottom of the root of a tooth

**Approximal (Proximal)**-Describing the area of the mouth- next to, adjoining; used to describe the surfaces between the teeth. It is an umbrella term which includes both mesial and distal, such as when referring to the proximal surfaces of teeth.

**Arch**-Collectively, either the teeth or the basal bone of either jaw

**Arteriole**-A small diameter blood vessel that extends and branches out from an artery and leads to capillaries

**Articulator**-A special holder for dental models of the teeth; that will hold the models in the same alignment as the nature jaw

**Artifact**-A blemish or image in a radiograph or on a dental model that is not present in / on the subject tooth

**Asepsis**- The avoidance of potentially pathogenic microorganisms; in practice, it refers to those techniques that aim to exclude all microorganisms.

**Aspiration**-Removal of fluids from the mouth with an aspirator

**Aspirator**-A straw-like tube, which the dentist uses to remove (suck up) saliva from the mouth

**Astringents**-An agent that limits the secretions of the mucous membranes and contracts and hardens tissue, limiting the secretions of glands

**Autoclave**-A mechanical device used for effecting sterilization of dental instruments and etc by the use of steam and pressure

**AutoMix**-A dispensing and mixing system where by a dual cartridge of dental material i.e., impression material, is dispensed and mix at the same time

**Avulse (Evulsed Tooth)**-The act of tearing by force, when a tooth is lost in an accident.

**Alveolar Bone**-Is a specialized type of bone which is designed to 'hold' the teeth; it is especially thick and dense when compared to other types of bone so that it can provide adequate support for the teeth

**Axial Walls**-The walls of the tooth that is parallel to the long axis of the tooth in cavity preparations

**Basic**-Silver fillings, composite fillings, perio, endo and oral surgery are classified as basic procedures.

**Barium Sulfate**-A white, finely ground tasteless powder that is insoluble in water, solvents and solutions of acids or alkalis; which is used in dental materials as a contrast medium to make the material viewable in radiography; i.e., gutta percha

**Base**-A support or formation of resin, cement and or other chemical materials used to protect and or support the pulp or pulp chamber.

**Benzocaine**-A local anesthetic agent used to minimize pain on the soft tissue of in the mouth. Topical Anesthetics with 20% Benzocaine are commonly used prior to 'the needle' and deep scaling.

**Bevel**-In a cavity preparation, a cut that produces a finish line angle of more than 90° with the cavity walls

**Bicuspid**-Any one of eight adult teeth with two pointed crowns-the premolars

**Bifurcation**-The division into two parts or braches such as any two roots of a tooth

**Binder**-A substance, usually sticky, that holds the solid particles in a mixture together, thus aiding in the preservation of the physical form of the mixture.

**Bitewing**-An x-ray that shows the upper and lower teeth's biting surfaces on the same film. This x-ray shows the portion of the teeth above the gum line.

**Bleaching**-The use of chemical oxidizing agents on anterior teeth (sometimes in combination with heat) to lighten tooth discoloration into whiter looking teeth

**Blockout**-The elimination of undercuts on teeth, casting and / or restorations prior to making an impression or placing a restoration

**Blush (Dentine)**-The red to pink discoloration of dentin due to pupil hemorrhages, usually a result of a trauma

**Bonding**-Connect or hold together; to solidify by a bond; in dentistry, composites are bonded onto the tooth surface through a process called polymerization.

**Boxing Impression**-The placing of boxing wax or similar material around the shallow ends of impressions prior to pouring the die material; this keeps the die material from running out.

**Bridge**-A composite however usually porcelain permanent 2 or more-unit dental laboratory made restoration; also, a colloquial expression for a fixed partial denture

**Bruxism**-Clenching or grinding of your teeth usually an unconscious activity, whether the individual is awake or asleep; often associated with fatigue, anxiety, emotional stress or fear, and frequently triggered by occlusal irregularities usually resulting in abnormal wear patterns on the teeth, periodontal breakdown and joint or neuromuscular problems.

**Buccal**-The tooth surface that is located next to the cheeks; normally, only posterior teeth touch the cheeks, so usually the term “buccal” is used only when referring to the posterior teeth.

**Bur**-A rotary cutting instrument made of steel or tungsten carbide, supplied with cutting heads of various sizes and shapes for the cutting application of the natural tooth, composite resin, porcelain restoration and etc designed to fit into a handpiece

**Bur Carbide (Carbide Bur)**-A rotary cutting instrument made of tungsten carbide, supplied with cutting heads of various sizes and shapes for the cutting application of the natural tooth, composite resin, porcelain restoration and etc. designed to fit into a handpiece.

**Bur Finishing- (Finishing Bur)**-A rotary cutting instrument made of steel or tungsten carbide with numerous fine-cutting blades placed closely together for the purpose finely contouring and shaping usually on a composite or porcelain restoration; which is designed to fit into a handpiece

**Burnishing**-A process related to contouring and polishing of metal restorations

**Calculus (Tarter)**-It consists of hard deposit of mineralized plaque that is attached to the teeth.

**Canal**-

1. The narrow chamber inside the root of the tooth that contains the pulp (pulp- the nerve and blood vessels inside the tooth) which is bound by the dentine
2. A lateral branching of the main root canal, usually occurring in the apical third of the root

**Canine (Cuspid)**-One of the four sharp pointed single-cuspid teeth between the incisors and the bicuspids; the term canine is increasing preferred to cuspid

**Carbide Bur (Bur Carbide)**-A rotary cutting instrument made of tungsten carbide, supplied with cutting heads of various sizes and shapes for the cutting application of the natural tooth, composite resin, porcelain restoration and etc. designed to fit into a handpiece.

**Capping Direct Pulp (Direct Pulp Capping)**-the application to expose the pulp to a drug, chemical, or material for the purpose of simulating repair of the injured pulp tissue

**Capping Indirect Pulp (Indirect Pulp Capping)**-the application of a chemical (usually calcium hydroxide) placed over a layer of carious dentine remaining over the potentially exposed pulp to protect the pulp from external irritants

**Capping Pulp (Pulp Capping)**-the covering of an exposed dental pulp with a material that protects it from external influences

**Caries (Cavity / Decay / Tooth Decay)-**

1. A condition caused by caries, trauma, abrasion, erosion or attrition which results in the loss of hard tissue.
2. An infectious disease with a progressive destruction of a tooth's substance; it begins on the external surface by demineralization of the enamel or exposed cementum

**Carving**-the shaping and forming of a restoration with a carving hand instrument

**Cavosurface**-The angle in a prepared cavity, formed by the junction of the wall of the cavity with the surface of the tooth

**Case Core**-A metal casing, usually with a post in the canal or a root, designed to retain an artificial crown.

**Casting**-A metallic object formed in a mold.

**Cavity (Cavity / Decay / Tooth Decay)**

1. A condition caused by caries, trauma, abrasion, erosion or attrition which results in the loss of hard tissue.
2. An infectious disease with a progressive destruction of a tooth's substance; it begins on the external surface by demineralization of the enamel or exposed cementum

**CEJ (Cemento enamel Junction)**-Is an anatomical border which is the located where the enamel, and the cementum meet. Informally; it is known as the neck of the tooth.

**Cement**-A material that produces a mechanical interlocking effect upon hardening /setting.

**Cementation**-The process of attaching a restoration to the natural teeth with the use of cement

**Cemento enamel Junction (CEJ)**-Is an anatomical border which is the located where the enamel, and the cementum meet. Informally; it is known as the neck of the tooth.

**Cementum**-A connective tissue that covers the anatomic root of the tooth giving attachment to the periodontal ligament

**Central**-The two upper and lower teeth in the very center of the mouth

**Central (Incisor)**-Single-rooted tooth with a cutting or shearing edge located in the center of the dental arch



**Cervical**-Pertaining to the neck, or the cervical line of the tooth

**Chamfer**-In a cavity preparation, a cut that produces a finish line a curve from the axial walls to the cavosurface

**Chemical Cure (Self Cure/Curing)**-A type of setting reaction (polymerization) that happens when mixed chemical ingredients are completely mixed; the setting time depends on the temperature and any added accelerator.

**Class I**-A descriptive term referring to a type of cavity classification; a cavity in a pit and fissure and / or on the occlusal surfaces of bicuspid and molars, occlusal or incisal 2/3 of buccal, lingual surfaces of molars, or lingual surfaces of incisors.

**Class II**-A descriptive term referring to a type of cavity classification; a cavity on the mesial, distal, and occlusal surfaces

**Class III**-A descriptive term referring to a type of cavity classification; a cavity on the proximal surface of incisors and cuspids that do not involve the incisal angles

**Class IV**-A descriptive term referring to a type of cavity classification; a cavity on the proximal surface of incisors and cuspids involving the incisal angles

**Class V**-A descriptive term referring to a type of cavity classification; a cavity on the gingival or cervical 1/3 of the tooth that is not a pit and fissures which is on the buccal, lingual or labial surfaces only

**Coagulum**-A means of coagulation, a clot of blood

**Coefficient of Thermal Expansion**-The amount of expansion and contraction a material undergoes in relationship to temperature. A high rate of expansion of a dental material may result in poor marginal adaptation, since a tooth also expands and contracts with these changes. The greater the difference in the coefficient from the natural tooth structure and the restorative, the greater the leakage. The coefficient of thermal expansion for enamel is 11.4 and for dentine 8.

**Colloid**-Material, such as silicate cement or hydrocolloid impression material, in which particles remain in uniform suspension

**Complete series**-X-rays showing all the teeth-Includes 14 peripical s and 2 or 4 bitewings; also known as Full Mouth X Rays

**Compomer (Polyacid Modified Resins)**-They are dental restorative materials which were introduced in the early 1990s as a hybrid of two other dental materials; i.e. dental composites and glass ionomer cement. They are also known as polyacid-modified resin composites and are used for restorations in low stress bearing areas

**Composite (Composite Resin)**-A tooth-colored restorative materials made up of resins and fillers. The resin is often in a semi-solid state, capable of being molded into place to fill cavities and then cured. Added to these resins are various types of fillers, inorganic materials such as quartz, borosilicate glass, strontium glass, and color pigments. The addition of fillers produces a reinforced or “filled resin,” commonly called a composite resin or simply a “composite.”

**Compressive Strengths**-The maximum amount of stress that a material can withstand without undergoing fracture or rupture in compression; this is the amount of force a material can support in a single impact test before breaking. It is one of the easiest tests to perform and often cited in advertisements for dental materials. Compressive strength is such a commonly used physical property that it has developed a greater respectability in the profession than its actual clinical relevance. There is no direct correlation between compressive strength and clinical performance; however, compressive strength does measure strength and gives an indication of a materials resistance to creep and plasticity.

**Conditioner**-A substance like chemical that is applied to a tooth to allow for better adhesions properties of a material to be placed and cured on the tooth.

**Contact Angle**-This is a measurement on how a liquid wets a solid. As the angle becomes smaller there is the increased ability of wetting the surface, which is preferred in pouring impression materials, or improves the penetration of the bonding material into micromechanical porosities of a substance.

**Contact Area (Proximal)**-The area of the teeth where the mesial surface of one tooth touches the distal surface of another; called also proximal

**Contact Surface (Proximal)**-The area of the teeth where the mesial surface of one tooth touches the distal surface of another; called also proximal

**Coolant**-Air or liquid directed on to the tooth, tissue or restorative to neutralizes the heat effect of a rotary instrument

**Core**-The foundational replacement of a badly mutilated tooth crown whose purpose is to provide a rigid base for the retention of a cast crown restoration; it may be part of a cast post and core or prefabricated core system; constructed from a cast made by a dental laboratory or amalgam, glass ionomer cement or composite resin and retained by pin fixation. When correctly shaped is used for the substructure for a partial or full veneer crown.

**Coronal**-Pertaining to the crown of the tooth

**Crazing**-The formation of small cracks on the surface of a structures induced by the release of internal stress.

**Creep**-The time dependent plastic deformation that a composite resin, amalgam or glass ionomer cements may go through over a period of time under normal or abnormal forces in the mouth

**Crevicular Fluids**-A clear and unnoticeable fluid that can serve as a defense mechanism against infection by carrying antibodies and other therapeutic substances between the connective tissue or pockets.

**Cross contamination**-The transfer of bacteria, viruses or AIDS indirectly from one patient to another via the improper use of sterilization procedures, unclean instruments, or “recycling” of dental products via a fomite

### **Crown**

1. That portion of the tooth which is exposed above the gum and covered by enamel.
2. An artificial tooth or an artificial replacement for the covering on a tooth.

**Cure (Chemical)**-A type of ‘setting’ reaction that happens when the mixed dental materials are completely mixed; the setting time depends on the temperature and any added accelerator.

**Cure (Light)**-A type of ‘setting’ reaction that happens when a visible light source comes in contact with a light cured dental material; the setting time depends on the light source and the material being cured- usually between 10- 40 seconds

**Curettage**-The scraping of the walls of a tooth cavity with a curette (cutting dental hand instrument) to remove chronically inflamed tissue and or bone

**Curing (Polymerization)**-The process of solidifying a composite (or other materials i.e., dental cements and impression materials); it is the process which alters the material from a semi-solid state to a solid state (also known as polymerization). The curing process is activated by exposure to chemicals, light or both.

**Cuspal**-The chewing or tearing points of the cuspids, bicuspid and molars

**Cusp**-Describing the area of the tooth that is tapering projection upon the crown of the tooth; the high points on the chewing surfaces of the back teeth (posterior teeth)

**Cuspid (Canines)**-The pointy teeth just behind the laterals; these teeth have one cuspal (or point)-are called canines

**Decalcification**-The loss of calcium salts from your calcified tissue

**Decalcified Enamel**-Enamel from which the calcium has been removed.

**Decay (Caries / Cavity / Tooth Decay)**-

1. A condition caused by caries, trauma, abrasion, erosion or attrition which results in the loss of hard tissue.
2. An infectious disease with a progressive destruction of a tooth's substance; it begins on the external surface by demineralization of the enamel or exposed cementum

**Deciduous Teeth (Primary)**-The first set of teeth which come in also called primary, or “baby teeth”

**Demineralization**-The breaking down of inorganic salts minerals in the human tissue substances.

**Dental Handpiece (Drill / Handpiece)**-A rotary instrument for the use of making ‘holes’

**Dentine**-The portion of the tooth that lies subjacent to the enamel and cementum; it consists of an organic matrix on which mineral (calcific) salts are deposited; pierced by tubules containing filamentous protoplasmic process of the odontoblasts that line the pulpal chamber and canal.

**Dentine Bonding**-The process of bonding dental materials-i.e., composite resin to dentine

**Dentine Bonding Agents**-A tissue compatible adhesive that adheres to the dentine

**Dentine Blush**-The red to pink discoloration of dentin due to pupil hemorrhages, usually a result of a trauma

**Dentinal**-Pertaining to the dentine

**Dentinal Fluids**-The tissue fluids in the dentinal tubules that surround the odontoblasts which form the dentine

**Dentine Smear Layer**-In cases of tooth preparation where the enamel and underlying dentine are removed by rotary instruments, such as burs, a layer of debris is created. This layer of debris is called a smear layer. At present, there is controversy surrounding the desirability of removing the smear layer from the dentine prior to application of the bonding agent, to allow a better bond. Some believe that as tubules are opened, the risk of bacterial infection and sensitivity is increased.

**Dentine Tubules**-

1. They are microscopic canals that run from the enamel and cementum of the dentin to the pulp cavity-inside the tooth
2. Minute channels in the dentin, extending from the pulp cavity to the cementum and enamel.

**Dentition**-The natural teeth in the dental arch

**Denture-**

- 1) A synthetic replacement for all your teeth in either your upper or lower jaw.
- 2) An artificial substitute for missing teeth and adjacent tissue

**Diagnostic-**Procedures performed by the dentist to identify what's going on in the mouth; the most common procedures are the exam and x-ray which are classified as preventative.

**Diametrical Tensile Strength**-This is a theoretical tensile strength measurement that is mathematically calculated from measuring the compressive strength of a disc of material. This test is easier to perform than the test done to measure tensile strength, and is more consistent and relevant.

**Diamond Bur**-A rotary instrument such as a round or wheel shape and etc, which is used as an abrasive cutting tool having commercial or synthetic diamond grit embedded in its metal surface which is used in a dental handpiece.

**Direct Capping Pulp (Capping Direct Pulp)**-The application to expose the pulp to a drug, chemical or material for the purpose of simulating repair of the injured pulp tissue

**Direct Contamination**-Direct contact with impurities or germs; i.e., a patient sneezing on the assistant.

**Disinfectant**-A chemical that is usually used on hand instruments that will destroy most pathogenic microorganisms.

**Disinfection**-The cleaning process of destroying pathogenic organisms or of rendering them inert

**Disposable Materials**-Materials intended for one use and discarded; i.e., gloves, cotton rolls, and etc)

**Distal**-The direction towards the last tooth in each in each dental arch, as opposed to mesial, which refers to the direction towards the anterior midline; each tooth can be described as having a distal surface. A point of reference describing an area away from the median line of the tooth

**Drill (Dental Handpiece / Handpiece)**-A rotary instrument for the use of making 'holes'

**Dry Field**-The isolation of liquid and fluids (i.e., blood saliva water) from the 'dental working site' in the mouth; a dry field is imperative for most placement of most dental materials and procedures.

**Dry Heat**-A method of sterilization with the use of a special calibrated and time-controlled convention oven.

**Dual-Arch Impression Technique**-An impression taking technique where the final Impression of the prepared teeth, the opposing teeth and bite registration are taken simultaneously

**Dual-Arch Impression Tray**-A disposal impression tray which an impression, counter impression and bite registration are taken at the same time.

**Edentulous-**

1. Without or missing teeth
2. Teeth are missing in either the upper or lower arch.

**Edge Strength**-The term used as an indication of the ability of the restorative margins to withstand fracture or abrasion. There is no test available to assess this property

**Elastomer (Impression Material)-**

1. A soft rubberlike material; a synthetic rubber
2. An impression material

**Embrasure**-Space partially bounded by two adjacent teeth; the space between the curved proximal surfaces of the teeth.

**Enamel**-The hard outer most layer of the tooth, it covers the anatomical crown of a tooth; it is the hardest tissue in the body, it is 96% inorganic, and is not sensitive.

**Enamel Etching Gel (Acid Etch)**- (Also called etchant or conditioner.) A gel or solution of 32-40% phosphoric acid used to etch tooth enamel and or dentine in preparation for bonding. Irregularities are created on the surface, which can be filled by the bonding material to form a physical bond.

**Endodontist**-A dentist who specializes in root canals and the treatment of diseases or injuries that affect the root nerves in the tooth.

**Epinephrine**-A natural substance that causes vasoconstriction of the arterioles of the mucous membranes; this chemical is used in local anesthetics gingival retraction cords.

**Epithelium**-The structural arrangement of various cellular components

**Erosion**-The chemical or mechanical/chemical destruction of the tooth; which leads to the creation of concavities of many shapes at the cemento-enamel junction of the teeth-acid from foods and gastric fluid are thought to be the most common sources of erosion.

**Erupt (Eruption)**-A new tooth breaking through the gum tissue; the tooth is said to erupt when the tooth breaks through the surface of gums when it can be seen in the mouth.

**Eruption (Erupt)**-A new tooth breaking through the gum tissue; the tooth is said to erupt when the tooth breaks through the surface of gums when it can be seen in the mouth.

**Etchant (Acid Etch)**- (Also called enamel etching gel or conditioner.) A gel or solution of 32-40% phosphoric acid used to etch tooth enamel and or dentine in preparation for bonding. Irregularities are created on the surface, which can be filled by the bonding material to form a physical bond.

**Etching**-Process by which the tooth structure (usually enamel and / or dentine) or porcelain is exposed to a mild acid which dissolves the surface creating an irregular, rough surface of many small pores. This irregular surface allows a physical bond between tooth and composite. The composite bonding agent fills the pores and forms minute tags of the resin as the composite is solidified during polymerization. (The same process applies to etching porcelain)

**Eugenol**-It is a clear to pale yellow oily liquid extracted from certain essential oils especially from clove oil, nutmeg, cinnamon, basil and bay leaf; it is used in dentistry to sedate irritated tissue; i.e. the gum tissue and pulp. They will inhibit the setting of most restorative and impression materials. Thus, if used they must be completely cleaned from the oral cavity prior to using any other dental materials.

**Evulsed Tooth (Avulse)**-The act of tearing by force, when a tooth is lost in an accident.

**Excision**-The act of cutting away or taking out

**Extraction**-The removal of a tooth from the oral cavity by means of elevator and or forceps

**Facial**-The side of a tooth that is adjacent to (or the direction towards) the inside of the cheek or lips, as opposed to lingual or palatal, which refer to the side of a tooth adjacent to (or the direction towards) the tongue or palate, respectively. This term is an umbrella term for both the term buccal and labial.

**Festooning**-The process of carving the base material of denture or denture pattern to stimulate the contours of the natural tissue being replaced by the denture.

**Filler**-A substance or material added most commonly to a composite resin to increase its physical properties.

**Finishing Bur (Bur Finishing)**-A rotary cutting instrument made of steel or tungsten carbide with numerous fine-cutting blades placed closely together for the purpose of finely contouring and shaping usually on a composite or porcelain restoration; which is designed to fit into a handpiece.

**Finish Line (Margin)**-The area of the tooth where the prepared tooth margins start and stop.

**First Bicuspid**-The teeth located just behind the cuspids; these teeth have two cuspal points.

**First Molar**-The teeth located just behind the second bicuspid; these teeth have a level surface with four cuspal points-another name is 6-year molars.

**Fluoride**-A chemical that is added to water or applied to the teeth to prevent dental decay

**Fluoride (Varnish)**-A sticky yellowish or tooth color protective coating usually 5% sodium fluoride in a resin base that is painted of the teeth to prevent caries in children and adults

**Fomite** is any inanimate object or substance capable of carrying infectious organisms, such as germs or parasites, and hence transferring them from one individual to another.

**Frenum**-A small piece of pink colored skin that attaches the lips, cheeks and tongue to the mouth

**Furcation**-The region of division of the root portion of a tooth

**General anesthesia**-Relieves that sensation of pain on the whole body; it renders the patient unconscious.

**Gingivae**-

1. Another name for the gums
2. The fibrous tissue covered by the mucous membrane that immediately surrounds the teeth

**Gingival (Sulcus)**-Pertains to or in relation to the Gingivae. Is an area of potential space between a tooth and the surrounding gingival tissue and is lined by sulcular epithelium. The depth of the sulcus (Latin for *groove*) is bounded by two entities: apically by the gingival fibers of the connective tissue attachment and coronally by the free gingival margin.

**Gingival Retraction**-The moving or lying back of the free gingival tissue to expose the gingival margin area of the prepare tooth by mechanical, chemical, or electrical means

**Gingival Retraction Cord (Retraction Cord)**-They resemble yarn; pieces of cotton or polyester are braided together to create a specific diameter. Some brands of gingival retraction cords are pre-soaked in chemical used to retraction the tissue.

They are used during the preparation of the teeth during dental crown and bridge procedures. The retraction cord is inserted gently below the gumline into the gingival sulcus, around the tooth that has been prepared for a crown or bridge. Retraction cords are primarily used in order to create an accurate impression; they push the gum tissue away from the prepared margins of the tooth; this will leave a space for an impression material to record the finish line margins of the tooth.

**Gingivitis**-The inflammation of the gingival tissue; considered as the first sign of periodontal (gum) disease.



**Glass Ionomer**-A dental cement of low strength and toughness produced by mixing a powder prepared from a calcium aluminosilicate glass and a liquid prepared from an aqueous solution of prepared polyacrylic acid. The cement is used chiefly for small restorations on the proximal surfaces of anterior teeth and for restoration of eroded areas at the gingival margin. Some may be AutoMix or light activated.

**Gums**-The pink areas around the teeth; the fibrous and mucosal covering of the alveolar process or ridges

**Gutta Percha**-The coagulated juice of various tropical trees that has certain rubberlike properties; used in the form of cones or melted for the permanent filling of root canals

**Gypsum (Plaster of Paris)**-Its powder form is mixed with water to form a paste that subsequently sets into a hard mass. This is usually poured into an impression in its liquid form that once set it is used as a diagnostic cast and as investing material.

**Halogen Light**-A dental curing light that uses a halogen bulb as its power

**Hand Instrument**-A tool or instrument used principally with hand force.

**Handpiece (Dental Handpiece / Drill)**-A rotary instrument for the use of making 'holes'

**Hemorrhage**-The escape of a large amount of blood from the blood vessel in a short period of time; excessive bleeding

**Hemostasis**-The arrest, stopping the escape of blood

**Hemostatic**-An agent used to reduce bleeding from minute vessels by hastening the clotting of blood or the formation of an artificial clot.

**Hydrofluoric Acid**-The type of acid used to etch porcelain.

**Hydrophilic**-Having an affinity for water. The contact angle of water to a surface is used to measure wettability; the lower the angle the more hydrophilic. For impression materials the lower the contact angle makes them more easily poured in gypsum die stone. This is considered to be an advantage of an impression material.

**Hydrophobic**-Having an aversion to water. The contact angle of water to a surface is used to measure wettability; higher angles are more hydrophobic. For impression materials the higher the contact angle makes them more difficult to pour them in gypsum die stone. This is considered being a disadvantage with impression materials.

**Immediate Denture**-a removable prosthesis (denture) constructed for the placement immediately after removal of the remaining natural teeth

**Impact Strength**-The ability of a material to withstand a striking force

**Impacted Tooth**-An unerupted tooth that will not fully erupt because it is obstructed by another tooth, bone, or soft tissue and cannot 'come in'

**Implant**-A device that is surgically inserted into or onto the jawbone; a replacement for one or more of missing teeth. A crown, bridge or denture is then placed over the implant. The implant is different in that the implant is placed in the jaw.

**Impression Material**-A material used to take an impression

**Impression Tray**-A metal, plastic or resin tray used to carry control and support an impression material before it sets in the mouth.

**Incipient Decay**-Tooth decay that is just beginning to develop

**Incisal**-The biting surface of an anterior tooth; this is the sister term for occlusal, which related to the corresponding location on posterior teeth.

**Incisor**-Another name for the centrals and laterals

**Incisor (Central)**-Single-rooted tooth with a cutting or shearing edge located in the center of the dental arch

**Indirect Pulp Capping (Capping Indirect Pulp)**-The application of a chemical (usually calcium hydroxide) placed over a layer of carious dentine remaining over the potentially exposed pulp to protect the pulp from external irritants

**Inlay**-A restoration of gold, composite resin or porcelain which is made by the casting process to have a precise fit into a tooth preparation, being cemented into position.

**Interproximal**-the space between the proximal surfaces of two teeth

**Intraoral**-Within the mouth

**Investing**-The process covering or enveloping an object wholly or in part

**Investment**-The material used to enclose or surround a pattern of dental restoration for casting or molding or to maintain the relations of metal parts during soldering.

**Investment Casting**-The material from which casting molds are made in the fabrication of gold or cobalt-chromium castings

**Irrigation**-The technique of using a solution- usually water-to wash or flush debris from the mouth

**Isolation of a Tooth**-A technique to protect a tooth against contamination from oral fluids during a surgical or restorative procedure; usually through the placement of rubber dam and or cotton rolls

**In Vitro**-Occurring- usually clinical studies in a laboratory- not in the mouth

**In Vivo**-Occurring usually clinical studies within a living organism- alive- in the mouth

**Jacket**-a complete crown made of composite or porcelain

**Jaw**-A common name for either the maxillary and or mandible; the meaning is usually extended to include the soft tissue covering

**Labial**-

1. The side of a tooth that is adjacent to (or the direction towards) the inside of the lip, as opposed to lingual or palatal, which refer to the side of a tooth adjacent to (or the direction towards) the tongue or palate, respectively. Although technically referring only to anterior teeth (where the lips are present instead of cheeks), use of the term buccal may extend to all teeth, anterior and posterior.
2. Pertain to the lips

**Laminate Veneer Restoration**-A conservative esthetic restoration of the anterior teeth to mask discoloration; to restore malformed teeth

**Laser (Light Amplification of Stimulated Emission Radiation)** - A device that concentrates energy into an intense and extremely concentrated beam of light; a laser beam that is used in surgical and diagnostic procedures.

**Lateral**-The teeth just adjacent to the centrals

**Lateral Incisor**-A single-rooted tooth with a cutting or shearing edge situated on each side of the central incisors.

**Lentulo**-A flexible spiral-wire instrument used in a handpiece to apply paste filling material into a root canal

**Ligate**-The binding or tying with a ligature or suture

**Light Cure**-A type of 'setting' reaction that happens when a visible light comes in contact with a light-cured dental material; the setting time depends on the light source and the material being cured- usually between 10- 40 seconds

**Lingual**-

1. The side of a tooth adjacent to (or the direction towards) the tongue, as opposed to buccal, labial or facial which refer to the side of a tooth adjacent to (or the direction towards) the inside of the cheek or lips, respectively; although this term is technically specific to the mandible, it sometimes is also used in reference to the maxilla as well
2. Pertaining to the tongue

**Local Anesthesia** A drug which a doctor or dentist uses to put the mouth, or some other part of the body to sleep so you do not feel any pain during a dental or medical procedure.

**Luting**-To cement together, to seal.

**Mandible**-The lower jaw

**Mandibular**-Pertaining to the lower jaw

**Mandrel**-A shaft that holds and supports any object to be rotated; which is held in a handpiece

**Margin (Finish Line)**-The area of the tooth where the prepared tooth margins starts and stops.

**Mastication**-The process of chewing food in preparation for swallowing and digestion

**Maxilla**-The irregularly shape bone forming half of the upper jaw; the upper jaw is made up of the two maxillae.

**Maxillary**-Pertaining to the upper jaw

**Median Line**-Describing the area of the mouth; an imaginary line between where the two centrals are located

**Mesial**-The direction towards the anterior midline in a dental arch, as opposed to distal, which refers to the direction towards the last tooth in each quadrant; each tooth can be described as having a mesial surface- a point of reference describing an area towards the median line of the tooth.

**Midline**-A plane through the very center of your mouth perpendicular to the nose

**Mixed dentition**-When both deciduous and permanent teeth are present

**Molars**-Posterior grinding teeth with broad multi-cuspal occlusal surfaces

**MPa (Megapascals)-**

1. A force; a unit of measure for stress, used in dentistry in place of PSI
2. It is a unit of measure mostly referring to the measured strength of composite resins.
3. One MPa is equal to 145.03778 psi (pounds per square inch).

**Mucosal**-Also known as mucosa or the mucous membrane, lines all body passages that communicate with the air, such as the respiratory and alimentary tracts, and have cells and associated glands that secrete mucus. The part of this lining that covers the mouth is called the oral mucosa

**Nanometer (nm)**-A unit of measure used to describe light.

**Occlude**-To close together, to bring together, to close; to bring the mandibular teeth into contact with the maxillary teeth

**Occluding Teeth**-Teeth that oppose each other on occlusion, or closing.

**Occlusal-**

1. The direction towards the biting surface of posterior teeth; this is the sister term to incisal, which related to the corresponding location on anterior teeth.
2. Pertaining to the masticating surfaces of the posterior teeth

**Occlusal Plane**-The imaginary surface on which upper and lower teeth meet

**Occlusion**-The act of closure or the state of being closed; any contact between the incising or masticating surfaces of the upper and lower teeth

**Odontoblasts**-One of the cells forming the outer surface of dental pulp that produces tooth dentin

**Operative Dentistry**-The branch of dentistry that deals with esthetic and functional restoration of the hard tissues of individual teeth

**Onlay (Overlay)**-A restoration of gold, composite resin or porcelain designed to cover the occlusal, or incisal, surface of the tooth and cemented into a tooth preparation.

**Oral Surgery**- Surgery of the mouth

**Overdenture**-a complete or partial denture supported by retained roots that is intended to provide improved support

**Overlay (Onlay)**-A restoration of gold, composite resin or porcelain designed to cover the occlusal, or incisal, surface of the tooth and cemented into a tooth preparation.

**Oxalate**-Any salt of oxalate acid

**Oxidation**-the combination of oxygen with other elements to form oxides

**Oxide**-A compound of oxygen with another element or radical such as iron

**Packing**-The act of filing

**Packing (Cord)**-The process of placing retraction cord into the sulcus between the gingival and the prepared tooth finish line margin

**Palate**-Roof of the mouth

**Palatal**-The side of a tooth adjacent to (or the direction towards) the palate

**Panorex**-An x-ray taken from the outside the mouth that shows all the teeth in one film

**Partial Denture**-A removable appliance (prosthesis) that replaces some of the teeth in either the upper or lower jaw

**Pedodontist (Pedo)**-A dentist who specializes in the treatment of children's teeth.

**Periapical-**

1. Pertaining to the tissues around the apex of a tooth root, including the periodontal membrane and the alveolar bone.
2. An x-ray of individual teeth or groups of teeth that shows above and below the gumline

**Periodontist (Perio)**-A dentist who specializes in the treatment of diseases the gums.

**Permanent Dentition**-The adult teeth; also known as permanent teeth

**Permanent First and Second Molars**-The adult first and second molars, they are the sixth and seventh teeth from the center of the mouth to the back of the mouth

**Permanent Molars**-The adult first, second, and third molars

**Permanent Teeth**-The adult teeth; also known as permanent dentition

**Pit & Fissure Cavities**-Those cavities which are made up of small holes and cracks in the occlusal surfaces of the posterior teeth

**Plaster of Paris (Gypsum)**-Its powder form is mixed with water to form a paste that subsequently sets into a hard mass. This is usually poured into an impression in its liquid form that once set it is used as a diagnostic cast and as investing material.

**Plaque**-A colorless, odorless, sticky substance containing acids and bacteria that causes tooth decay; clinically it occurs supragingival and subgingival and may also be found on other solid surfaces such as restorations and oral appliances.

**Pocket**-A diseased gingival attachment characterized by gingival discoloration, retraction of the gingivae from the tooth, bleeding and the loss of the presence of stippling

**Polyacid- Modified Resin (Compomer)**-They are dental restorative materials which were introduced in the early 1990s as a hybrid of two other dental materials: dental composites and glass ionomer cement. They are also known as compomers and are used for restorations in low stress-bearing areas

**Polymerization (Curing)**-

1. Curing of a mixture of polymer powder and monomer liquid to form an acrylic resin
2. The process of solidifying a composite (or other materials i.e., dental cements and impression materials); it is the process which alters the material from a semi-solid state to a solid state (also known as polymerization). The curing process is activated by exposure to chemicals, light or both.

**Polyvinyl Siloxane (VPS) Addition Reaction Impression Materials**-They elastomers impression material which were first introduced in the 1970s. Since that time and especially in the past decade, these materials have gained in their acceptance and account for a largest share of the world-wide impression material market; which are also known as Polyvinyl Siloxane (VPS) impression materials. These impression materials are used for fixed and removable prosthodontics, operative dentistry, and implant dentistry. They ate a two-part system in the form of two pastes (a base and an accelerator) which can be hand spatulated or auto-mixed (Auto-Mix) from a dual cartridge, and mixed in equal quantities for use. They have achieved a high level of dentist and patient acceptance as they are clean, odorless and tasteless.

**Pontic**-The suspended member of a fixed partial denture; an artificial tooth on a fixed denture or an isolated tooth on a removable partial denture; it replaces a lost tooth, restores function and usually occupies the space previously occupied by the natural tooth.

**Posts**-They are general prefabricated or cast which are made from metal, fiber, or ceramic that are sized to fit into a pre-shaped root canal for the only purpose in aiding in retention of the core material to be placed over them

**Post & Core**-A procedure where a post-either prefabricated or cast is placed in the root canal of a badly broken down tooth and a laboratory made crown is placed over the post after a core of dental material is placed over the post. Both of these systems employ a post that is placed within the root canal of the tooth being restored.

**Posterior**-A point of reference describing an area towards the back of the mouth; as opposed to anterior, which refers to the directions towards the front of the mouth; the term posterior teeth refers to premolars and molars, as opposed to incisors and canines, which are anterior teeth.

**Posterior Teeth**-The bicuspid and molars; these are the teeth in the back of the mouth

**Premolar**-One of eight teeth, four in each jaw; they located between the canines and molars

**Preventative**-Procedures performed to prevent tooth decay and gum disease such as exams, x-rays, and cleanings.

**Primary Teeth**-The first set of teeth which come in; primary teeth are also called “baby teeth” or deciduous teeth.

**Prophylaxis**-A series of procedures whereby calculus, stain, and other accumulations are removed from the clinical crowns of the teeth and the clinical crown is polished.

**Prosthetic**-A fixed or removable appliance to replace missing teeth; i.e., bridges, dentures, and partials, sometimes a single crown is considered as a prosthetic

**Provisional (Splint / Temporary Crown / Temporary Provisional)**-

1. Usually, a full crown made of aluminum, resin, stainless steel or acrylic resin to protect a tooth preparation and the soft tissue surrounding it; it is easily removed, maintains the occlusion and is placed in position while a permanent restoration is being constructed.
2. Pertaining to a temporary prosthesis splint which protects the prepared tooth while the final restoration is being made

**Proximal (Approximal)**-Describing the area of the mouth- next to, adjoining; used to describe the surfaces between the teeth. It is an umbrella term which includes both mesial and distal, such as when referring to the proximal surfaces of teeth.

**Proximal (Contact Area)**-The area of the teeth where the mesial surface of one tooth touches the distal surface of another; called also contact area or surface

**Pulp**-The soft inner structure of a tooth, consisting of nerve and blood vessels

**Pulp Capping (Capping Pulp)**-the covering of an exposed dental pulp with a material that protects it from external influences

**Pulp Chamber**-The very inner part of your tooth containing nerve cells and blood vessels; also called the pulp canal

**Pulpal**-Pertaining to the pulp



**Quadrants**-The four parts of the mouth; the upper left, the upper right, the lower left, and the lower right.

**Radiograph**-Another name for an x-ray

**Radiolucent**-Referring to a material or tissue such as gum tissues or cavities that allows the passage of radiant energy; they appear from shades of grey to black or near black on conventional x-rays film depending on their degree of radiolucency

**Radiopaque**-Referring to a material that obstructs the passage of radiant energy; they appear from shades of light grey to white on conventional x-rays film depending on their degree of radiopaqueness; the area of an amalgam filling will appear white or light on x-ray film whereas a composite will sometimes appear light grey similar the shade of a dental cavity. It is desirable for a material to be radiopaque.

**Reamer**-An instrument with a loosely spiraled metal taper shaft used to shape clean and enlarge a root canal

**Resin**-A broad term used to include organic substances that are usually translucent or transparent used in making dental filling materials. They are soluble in ether, acetone and similar substances but not in water

**Restoration**-A board term used to define the end result any dental procedures carried out to restore the form, function and appearance of teeth; i.e., any filing, inlay, crown, bridge, implant and etc.

**Retarder**-A chemical used to slow a chemical reaction

**Retraction (Gingival)**-The moving or lying back of the free gingival tissue to expose the gingival margin area of the prepare tooth by mechanical, chemical, or electrical means

**Retraction Cord (Gingival Retraction Cord)**-They resemble yarn; pieces of cotton or polyester are braided together to create a specific diameter. Some brands of gingival retraction cords are pre-soaked in chemical used to retraction the tissue. They are used during the preparation of the teeth during dental crown and bridge procedures. The retraction cord is inserted gently below the gumline into the gingival sulcus, around the tooth that has been prepared for a crown or bridge. Retraction cords are primarily used in order to create an accurate impression; they push the gum tissue away from the prepared margins of the tooth; this will leave a space for an impression material to record the finish line margins of the tooth.

**Root**-That part of the tooth, below the crown, which is normally invested in cementum

**Root canal**-A procedure where the nerve of a possible heavily decayed tooth is removed from the tooth and replaced with a material; i.e., gutta percha

**Rotated Teeth**-Teeth that are mal-positioned incorrectly turned or twisted about their natural axis.

**R.P.M.**-The speed “revolution per minute” of a handpiece – high speed-100,000- 00,000—low speed - 6,000- 10,000 rpm

**Rubber Dam**-A thin sheet of latex rubber used to isolate a tooth or teeth to keep them dry during a dental procedure

**Salvia**-This clear mucous like secretion is formed mainly by the major glands of the mouth; it has lubricative, cleansing, microbial, excretory and digestive function and also aid to deglutition (swallowing).

**Sanitation**-A cleaning process which reduces germs to a “safe” level

**Sealant**-A clear, sometimes colored application of a material placed over the biting surface of the tooth to prevent tooth decay; i.e., Champ Sealant

**Second Bicuspid**-The tooth just behind the first bicuspids; these teeth have two cuspal points

**Second Molar**-The tooth just behind the first molars; these teeth also have a level surface with four cuspal points- another name is 12-year molars.

**Secondary Dental Carious**-Defined as dental caries developing in a tooth already affected by the caries; often a new lesion is formed adjacent to or beneath a restoration

**Secondary Teeth**-The permanent teeth; the second group of teeth to ‘come in’

**Self-Cure/Curing (Chemical Cure)**-A type of setting reaction (polymerization) that happens when mixed chemical ingredients are completely mixed; the setting time depends on the temperature and any added accelerator.

**Setting Time**-The amount of time it takes for a material (such as composite) to completely set, become hard or to cure.

**Shear Strength**-The resistance to a tangential force; the resistance to a twisting motion

**Smear Layer (Dentine)**-In cases of tooth preparation where the enamel and underlying dentine are removed by rotary instruments, such as burs, a layer of debris is created. This layer of debris is called a smear layer. At present, there is controversy surrounding the desirability of removing the smear layer from the dentine prior to application of the bonding agent, to allow a better bond. Some believe that as tubules are opened, the risk of bacterial infection and sensitivity is increased.

**Space Maintainer**-A device used to maintain a space in the mouth; would be used maintain a space when a 'baby tooth' is lost. The space maintainer will keep a space in the mouth until a permanent tooth can fill the space.

**Splint (Provisional / Temporary Crown / Temporary Provisional)**-

1. Usually, a full crown made of aluminum, resin, stainless steel or acrylic resin to protect a tooth preparation and the soft tissue surrounding it; it is easily removed, maintains the occlusion and is placed in position while a permanent restoration is being constructed.
2. Pertaining to a temporary prosthesis splint which protects the prepared tooth while the final restoration is being made

**Stippling**-An orange peel appearance of the gingivae

**Steam Sterilization**-The destruction of all forms of microbial life on an object by exposing the object to moist heat steam under pressure for 15 minutes at 121°C

**Sterilization**-A process where a medical object is treated to remove all possible germs and other forms of life

**Subgingival**-Describing the area of the mouth that is located below the gum (tissue) line

**Sulcus (Gingival)**-The area of potential space between a tooth and the surrounding gingival tissue and is lined by sulcular epithelium. The depth of the sulcus (Latin for *groove*) is bounded by two entities: apically by the gingival fibers of the connective tissue attachment and coronally by the free gingival margin.

**Sulci**-Describing the area of the tooth that a depression appears in the occlusal surface of the tooth

**Supernumerary Teeth**-Extra teeth

**Supragingival**-Describing the area of the mouth that is located above the gum (tissue) line

**Surfactant**-A liquid or chemical the acts as a wetting agent

**Tarter (Calculus)**-It consists of hard deposit of mineralized plaque that is attached to the teeth.

**Temporary**-Pertaining to an interim crown used to protect patients between appointments.

**Temporary Crown (Provisional / Splint / Temporary Crown / Temporary Provisional)-**

1. Usually, a full crown made of aluminum, resin, stainless steel or acrylic resin to protect a tooth preparation and the soft tissue surrounding it; it is easily removed, maintains the occlusion and is placed in position while a permanent restoration is being constructed.
2. Pertaining to a temporary prosthesis splint which protects the prepared tooth while the final restoration is being made

**Tensile Strength-**

1. Refers to the amount of tensile (stretching) stress a material can withstand before breaking or failing
2. The ability of a dental material (i.e., a composite) to resist forces tending to stretch or lengthen the object
3. The ability to resist tension (pulling and stretching forces)

**Thermal Expansion**-Expansion caused by heat.

**Third Molar**-The tooth just behind the second molars; these teeth also have a level surface with four cuspal points- also referred to as the 'wisdom teeth'.

**Thixotropic**-A characteristic of a material to flow under pressure; i.e., impression materials

**Tooth Decay (Caries / Cavity)-**

1. A condition caused by caries, trauma, abrasion, erosion or attrition which results in the loss of hard tissue.
2. An infectious disease with a progressive destruction of a tooth's substance; it begins on the external surface by demineralization of the enamel or exposed cementum

**Topical (Anesthetic)**-A local anesthetic agent in the form of a gel or ointment, usually made of benzocaine which is placed on the gums prior to an injection of "Novocain" to numb the area; i.e., LollisCaine in the form of a gel or ointment, usually made of benzocaine which is placed on the gums prior to an injection of "Novocain" to numb the area.

**Tray Impression**-A receptacle or device used to hold or carry a dental impression material to the mouth prior to the setting of the impression material; some are prefabricated made of plastic or metal some are custom made use self cure acrylics- most are disposable.

**Tub and Tray System**-A system of instruments and supplies for a particular task that are prearranged on a tray and the accompanying tub; the prepared tray and tub are appropriately sterilized, stored and delivered to the dental operatory at the time of the procedure

**Tubules (Dentine)-**

1. They are microscopic canals that run from the enamel and cementum of the dentin to the pulp cavity-inside the tooth
2. Minute channels in the dentin, extending from the pulp cavity to the cementum and enamel.

**Undercut**-The portion of the prepared cavity preparation or prosthesis that creates a mechanical lock or area of retention; may be desirable in a cavity preparation but is undesirable for a restoration to be cemented

**Ultimate Strength**-Is the maximum amount of stress that a material can withstand without undergoing fracture or rupture. It can be applied to compressive, tensile, or shear stresses (i.e., compressive strength is the maximum amount of stress that a material can withstand without undergoing fracture or rupture in compression

**Varnish (Fluoride)**-A sticky yellowish or tooth color protective coating usually 5% sodium fluoride in a resin base that is painted of the teeth to prevent caries in children and adults.

**Vasoconstrictor**-An agent that causes a rise in blood pressure by constricting the vessels; usually added to local anesthetic and gingival reaction cords-will increase the patient blood pressure

**Veneer**-A thin, tooth-shaped plastic, composite or porcelain material used with a filled resin and an acid etching technique to cover and mask discolored or malformed teeth.

**Virgin Teeth**- Teeth that have no decay or fillings.

**Viscosity-**

1. The ability or inability of a material to easily flow; high viscosity material is slow flowing; i.e., heavy body impression and posterior composite materials
2. Resistance of composite or impression material to flow with or without pressure; i.e., if a material has a very low viscosity, it will not stay in place; it will float or slide. If a composite has a high viscosity, the force needed to seat a composite or porcelain veneer may break the veneer or if an impression material has a high viscosity, it may not flow into the gingival margins

**Visible Light**-The wave length of light which cover 390 to 780 nm

**Visible Light Cure**-A type of 'setting' reaction that happens when a visible light usually 400 to 500nm, comes in contact with a light cure dental material; the setting time depends on the light source and the material being cured- usually between 10- 40 seconds

**VPS (Addition Reaction Impression Materials / Polyvinyl Siloxane)**-They elastomers impression material which were first introduced in the 1970s. Since that time and especially in the past decade, these materials have gained in their acceptance and account for a largest share of the world-wide impression material market; which are also known as Polyvinyl Siloxane (VPS) impression materials. These impression materials are used for fixed and removable prosthodontics, operative dentistry, and implant dentistry. They ate a two-part system in the form of two pastes (a base and an accelerator) which can be hand spatulated or auto-mixed (Auto-Mix) from a dual cartridge, and mixed in equal quantities for use. They have achieved a high level of dentist and patient acceptance as they are clean, odorless and tasteless.

**Water Sorption**-The ability of a dental material to absorb water; this can cause the material to weaken or discolor over time.

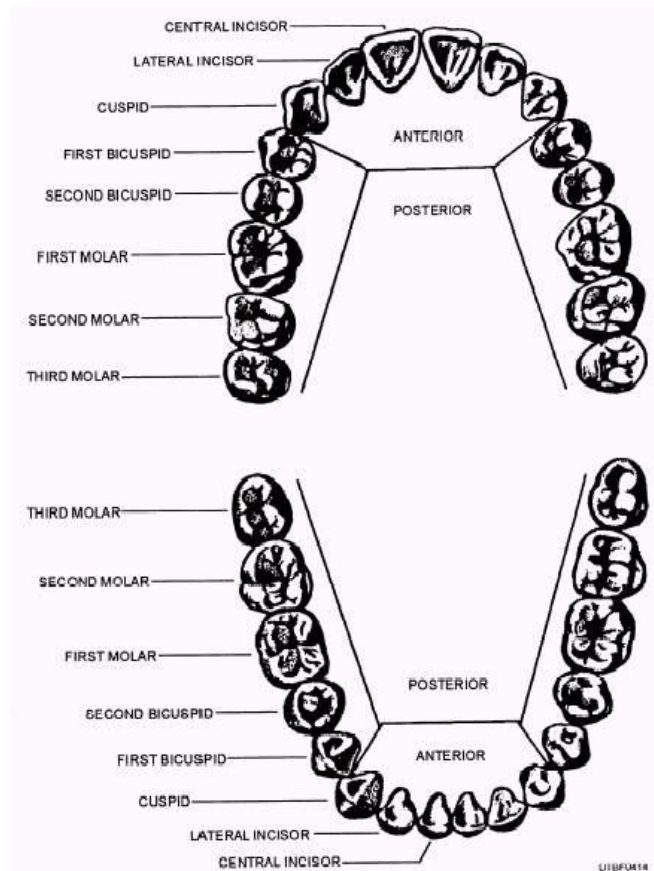
**Wetability**-The quality or state of being wettable or the degree to which something can be wet; this is also the ability of any solid surface to be wetted when in contact with a liquid whose surface tension is reduced so that the liquid spreads over the surface of the solid.

**Wisdom Tooth**-A lay term for the 3<sup>rd</sup> molar; this is the eighth tooth from the center of the mouth to the back of the mouth. Wisdom teeth are often impacted (obstructed from erupting) and have to be extracted.

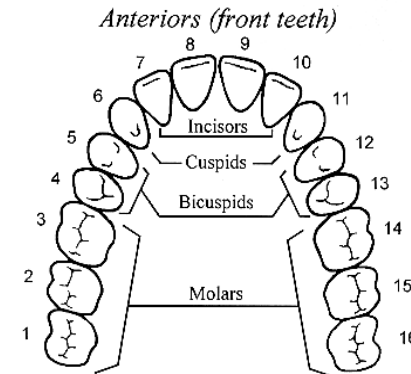
**Working Time**-The amount of time a material can be 'worked'- mixed, placed in the mouth, contoured, packed or manipulated before the material begins to set; i.e., composites, cement and or impression materials.

**ZOE (Zinc Oxide and Eugenol)**-The least irritating of all cements; they are very sedative to the pulp and can be easily manipulated; however, these cements have very low strengths, are highly soluble in the oral environment and will inhibit the setting of most restorative and impression materials. Thus, if used they must be completely cleaned from the oral cavity prior to using any other dental materials.

### Anterior & Posterior Teeth



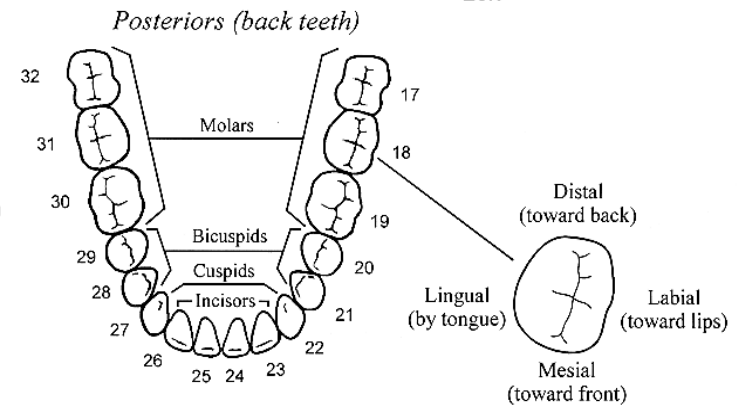
Uppers  
(maxillary)



Right

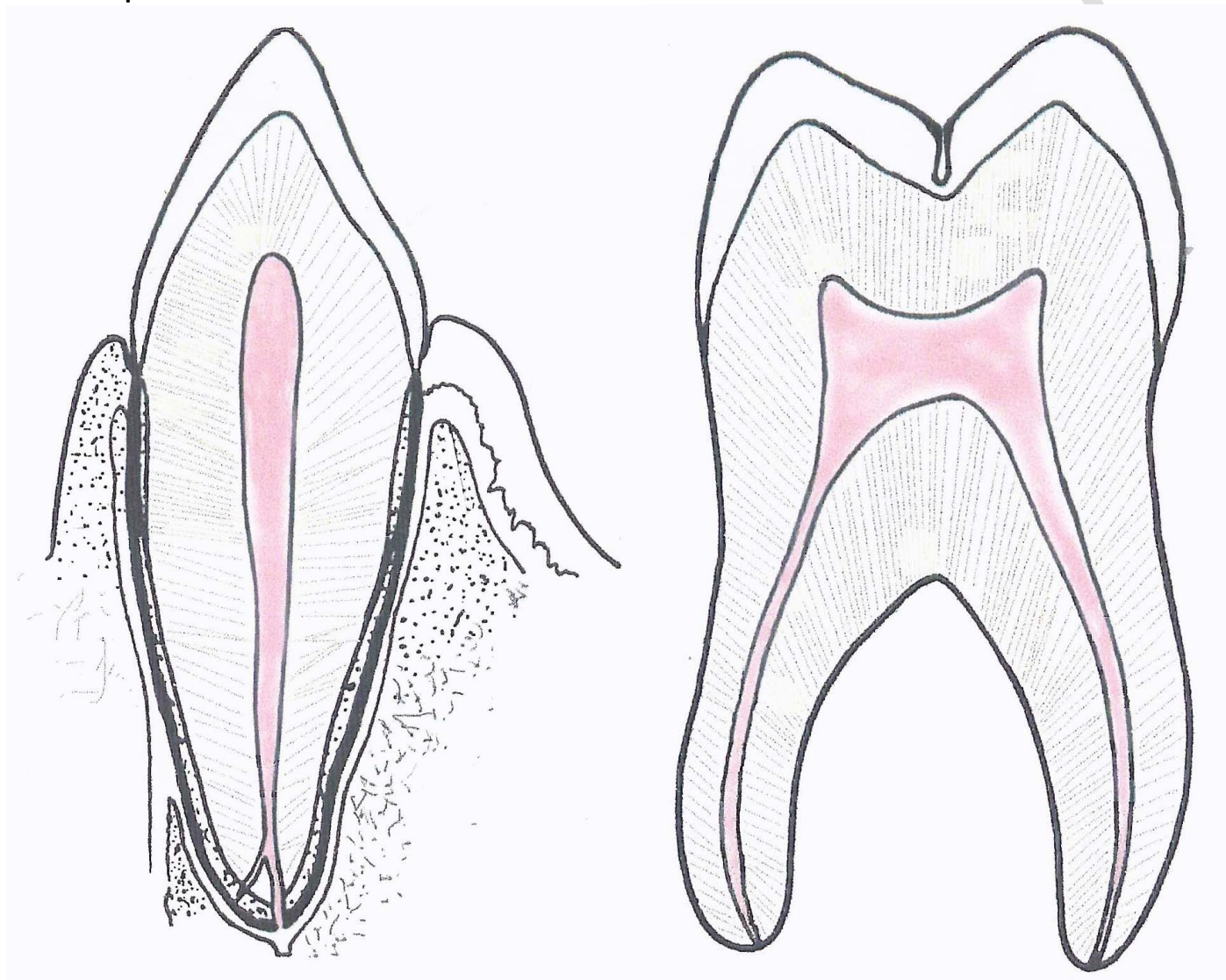
Left

Lowers  
(mandibular)





Mister Pulp





### Cross Section of a Tooth

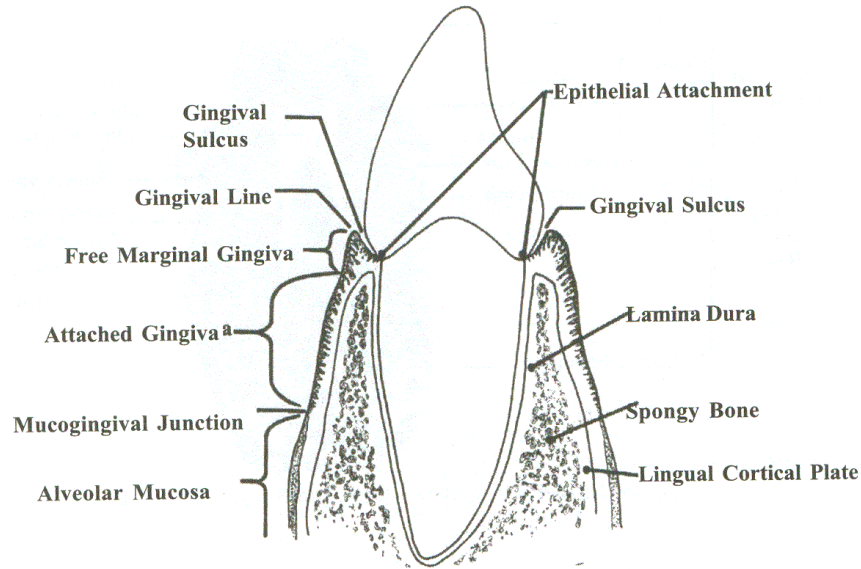
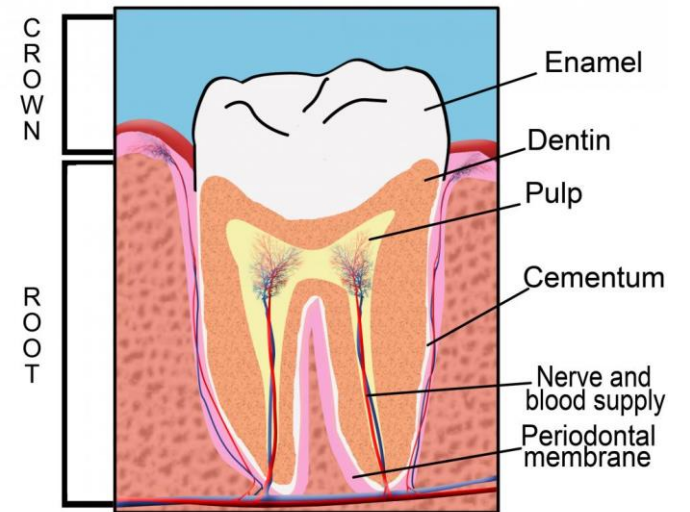
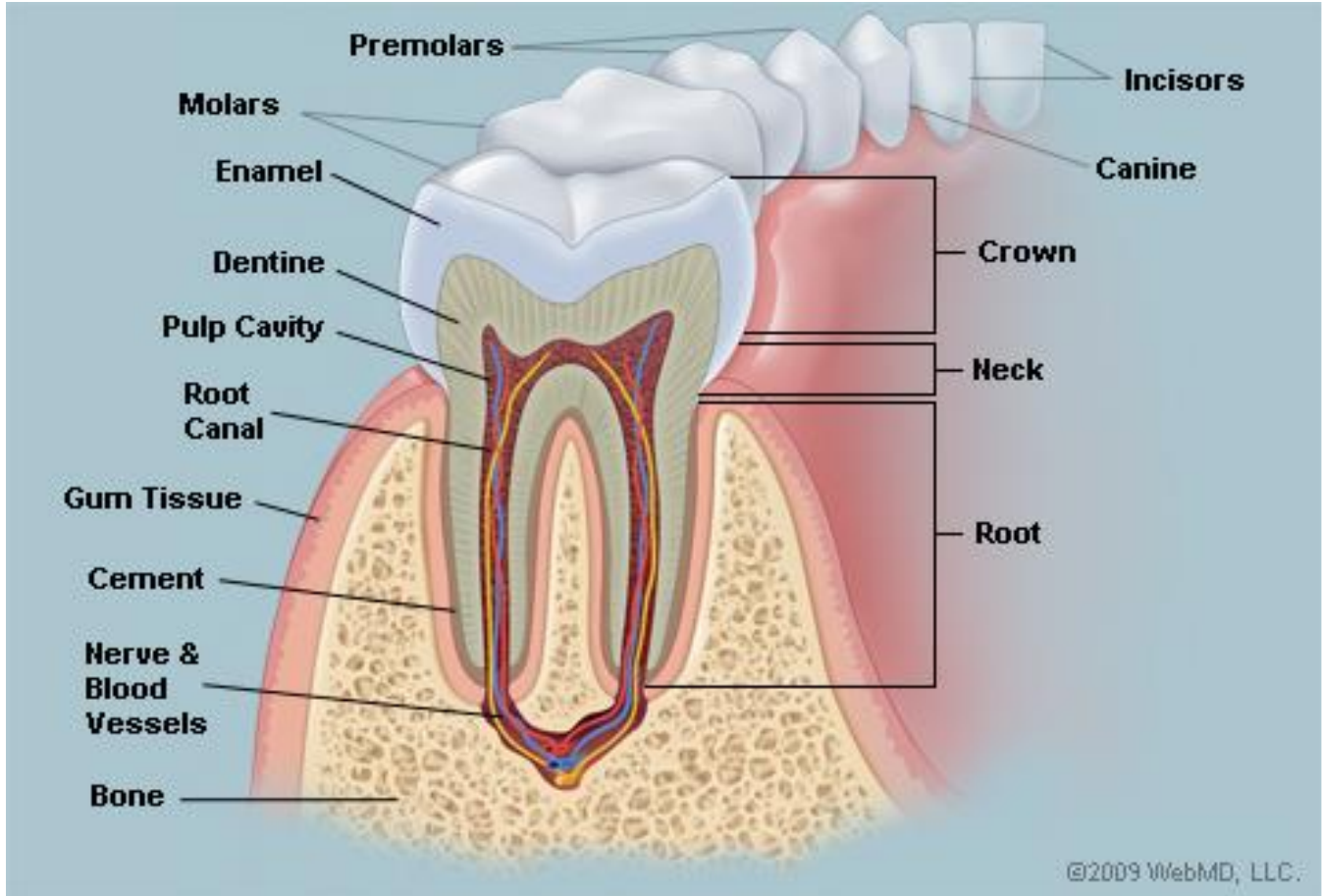


Figure 2-6. Free and Attached Gingiva

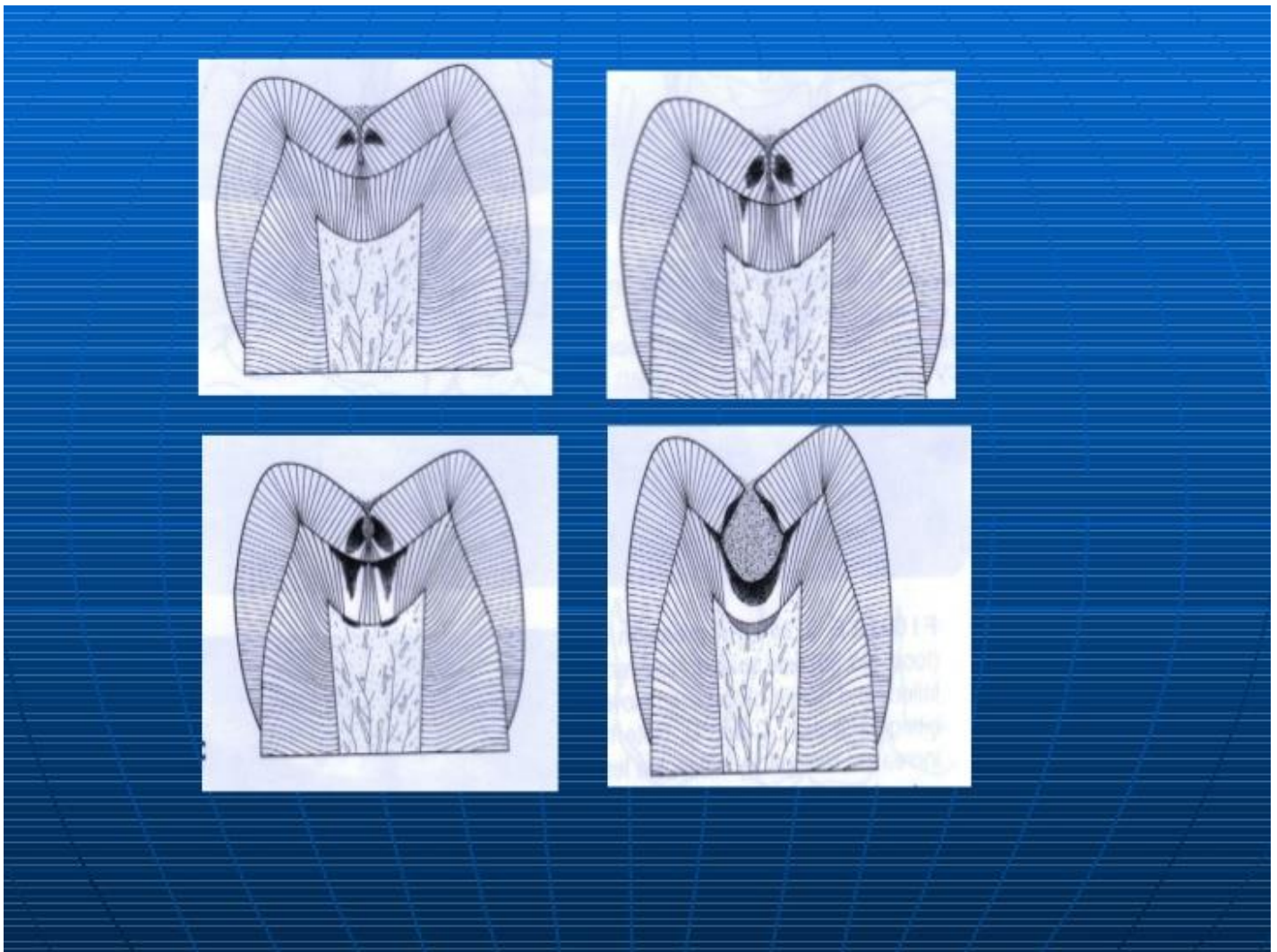
### SECTION OF TOOTH



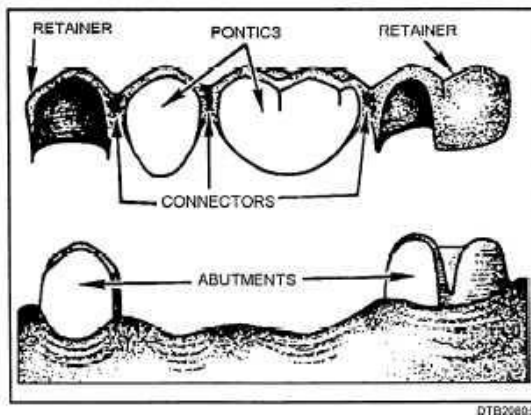
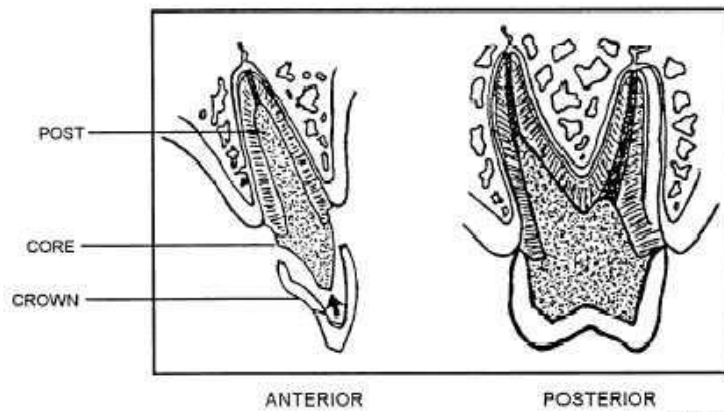
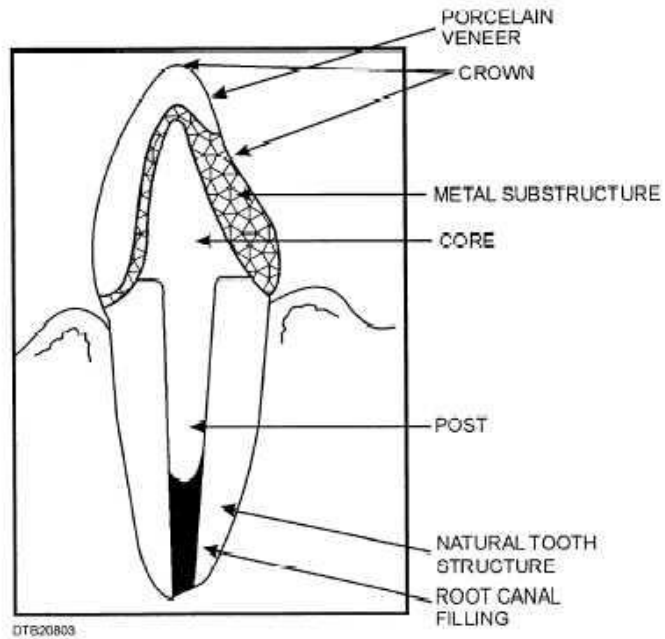
**Tooth Anatomy**



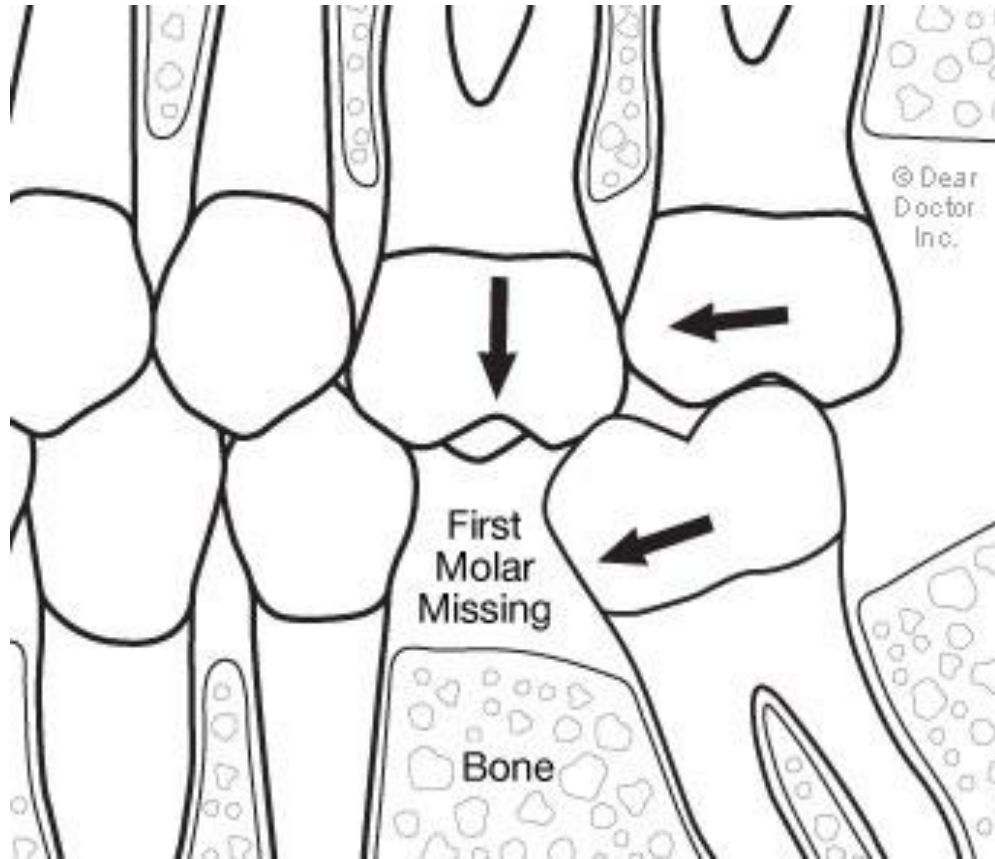
Pit & Fissure Lesion



Post & Core  
Pontic / Abutments



**One Loose Tooth**







Notes: