Orthodontic Glossary

**Anterior**
Front.

**Appliances**
Any device, attached to the teeth or removable, designed to move the teeth, change the position of the jaw, or hold the teeth in their finished positions after braces are removed.

*Photos courtesy of Solutions by Design.*

**Arch**
Upper or lower jaw.

**Archwire**
The metal wire that is attached to the brackets and used to move the teeth.
*Photo courtesy of Solutions by Design.*

**Band**
The metal ring that is cemented to a tooth for strength and anchorage.
*Photo courtesy of Solutions by Design.*

**Braces**
A word commonly used to describe a fixed orthodontic appliance, usually comprised of brackets, bands and wires. The diagram below illustrates and names each part of a typical set of braces.
A. Ligature
The archwire is held to each bracket with a ligature, which can be either a tiny elastic or a twisted wire.

B. Archwire
The archwire is tied to all of the brackets and creates force to move teeth into proper alignment.

C. Brackets
Brackets are connected to the bands, or directly bonded on the teeth, and hold the archwire in place.

D. Metal Band
The band is the cemented ring of metal which wraps around the tooth.

E. Bracket Hooks
The bracket or band extensions that are used for the attachment of rubber bands.

Bracket
The small metal, ceramic, or plastic attachment bonded to each tooth with a tooth-colored adhesive. The bracket has a slot that the archwire fits into.

Photo courtesy of Solutions by Design.

Brushing
Brushing the teeth is part of an individual's daily home dental care. Patients with braces should follow the orthodontist's instruction on how often to brush.

Bruxism
Grinding the teeth, usually during sleeping. Bruxism can cause abnormal tooth wear and may lead to pain in the jaw joints.

Buccal
The cheek side of the back teeth in both arches or jaws.

Buccal Tube
A small metal part of the bracket welded to the cheek side of the molar band. The tube may hold an archwire, lip bumper, headgear facebow or other appliances an
orthodontist may use to move the teeth.

_Cephalometric Radiograph_
A lateral (side view) x-ray of the head.

_A cephalometric radiograph_

_Chip_
A stretchable series of elastic o-rings connected together and placed around each bracket to hold the archwire in place and move the teeth.

_Photo courtesy of Solutions by Design._

_Class I Malocclusion_
A malocclusion with the proper molar relationship and teeth that are crowded together, spaced apart, an overbite, an openbite, a posterior crossbite or an anterior crossbite.

_Class II Malocclusion_
A malocclusion with the upper front teeth protruding or due to the lower teeth and/or jaw positioned back relative to the upper teeth and/or jaw.

_A Class II malocclusion._

_Class III Malocclusion_
A malocclusion with the lower front teeth protruding or due to the lower teeth and/or jaw positioned ahead relative to the upper teeth and/or jaw.
A Class III malocclusion.

Closed Bite/Deep Bite
Also known as deep overbite, this occurs when the upper front teeth overlap the bottom front teeth an excessive amount.

A closed or deep bite.

Comprehensive Treatment
Complete orthodontic treatment performed to correct a malocclusion. Congenitally Missing Teeth
A genetic occurrence in which the expected number of permanent teeth do not develop.

Crossbite
Upper posterior (back) teeth are in crossbite if they erupt and function inside or outside of the arch in the lower posterior teeth. Lower anterior (front) teeth are in crossbite if they erupt and function in front of the upper anterior teeth. A crossbite can be individual teeth or groups of teeth.

A posterior crossbite.

DDS or DMD
DDS (Doctor of Dental Surgery) and DMD (Doctor of Dental Medicine) are equivalent degrees, according to The American Dental Association. All orthodontists educated in the U.S. or Canada will have either a DDS or DMD after their names. Orthodontists have an additional two to three years of specialty education in an accredited orthodontic residency program after dental school to become orthodontists.

Diagnostic Records
The material and information that the orthodontist needs to properly diagnose and plan a patient's treatment. Diagnostic records may include a thorough patient health history, a visual examination of the teeth and supporting structures, plaster models of the teeth, a wax bite registration, extraoral and intraoral photographs, a panoramic and a cephalometric radiograph.

Ectopic Eruption
Term used to describe a tooth or teeth that erupt in an abnormal position.
The process by which teeth enter into the mouth.

**Extraction**
The removal of a tooth.

**Elastics**
Rubber bands. During certain stages of treatment, small elastics or rubber bands are worn to provide individual tooth movement or jaw alignment.

![Photo courtesy of Solutions by Design.](image)

**Facebow**
A wire appliance used with a nightbrace, or headgear. Primarily used to move the upper first molars back, creating room for crowded or protrusive front teeth. The facebow has an internal wire bow and an external wire bow. The internal bow attaches to the buccal tube on the upper molar bands inside the mouth and the outer bow attaches to the breakaway safety strap of the nightbrace.

**Fiberotomy**
A surgical procedure designed to sever fibers of attachment around the tooth, usually performed to reduce the potential for relapse or post-orthodontic treatment tooth movement.

**Fixed Appliances**
An orthodontic appliance that is bonded or cemented to the teeth and cannot be or should not be removed by the patient.

**Flossing**
An important part of daily home dental care. Flossing removes plaque and food debris from between the teeth, brackets and wires. Flossing keeps teeth and gums clean and healthy during orthodontic treatment.

**Frenectomy**
The surgical removal or repositioning of the frenum, the lip and tongue attachment located between the upper and lower front teeth. A large frenum attachment can cause spacing between top front teeth or cause the tongue to be tied.

**Functional Appliances**
Appliances that utilize the muscle action produced when speaking, eating and swallowing to produce force to move the teeth and align the jaws. They are also known as orthopedic appliances with names such as orthopedic corrector, activator, bionator, Frankel, Herbst or twin block appliances.

**Gingiva**
Soft tissue around the teeth, also known as the gums.
Gummy Smile
Showing an excessive amount of gingival (gum) tissue above the front teeth when smiling.

Headgear
An appliance worn outside of the mouth to provide traction for growth modification and tooth movement. Herbst Appliance
This appliance is used to move the lower jaw forward. It can be fixed or removable. When it is fixed, it is cemented to teeth in one or both arches using stainless steel crowns. An expansion screw may be used simultaneously to widen the upper jaw.

Photo courtesy of Solutions by Design.

Impaction
A tooth that does not erupt into the mouth or only erupts partially is considered impacted.

Interceptive Treatment
Orthodontic treatment performed to intercept a developing problem. Usually performed on younger patients that have a mixture of primary (baby) teeth and permanent teeth.

Interproximal Reduction
Removal of a small amount of enamel from between the teeth to reduce their width. Also known as reproximation, slenderizing, stripping, enamel reduction or selective reduction.

Labial
The surface of the teeth in both arches that faces the lips.

Ligating Modules
A small elastic o-ring, shaped like a donut, used to hold the archwire in the bracket.

Photo courtesy of Solutions by Design.

Linguual
The tongue side of the teeth in both arches.
**Lip Bumper**
A wire appliance used to move the lower molars back and the lower front teeth forward, creating room for crowded front teeth. The lip bumper is an internal wire bow that attaches to the buccal tubes on the cheek side of the lower molar bands inside the mouth. The front portion of the bow has an acrylic pad or bumper that rests against the inside of the lower lip. The lower lip muscles apply pressure to the bumper creating a force that moves the molars back.

*Photo courtesy of Solutions by Design.*

**Lip Incompetence**
The inability to close the lips together at rest, usually due to protrusive front teeth or excessively long faces.

**Malocclusion**
The term used in orthodontics to describe teeth that do not fit together properly. From Latin, the term means "bad bite."

**Mandible**
Lower jaw.

**Maxilla**
Upper jaw.

**Mixed Dentition**
The dental developmental stage in children (approximately ages 6-12) when they have a mix of primary (baby) and permanent teeth.

**Mouthguard**
A removable device used to protect the teeth and mouth from injury caused by sporting activities. The use of a mouthguard is especially important for orthodontic patients.

*Photo courtesy of Solutions by Design.*

**Nightguard**
A removable appliance worn at night to help an individual minimize the damage or wear while clenching or grinding teeth during sleep.
Open Bite
A malocclusion in which teeth do not make contact with each other. With an anterior open bite, the front teeth do not touch when the back teeth are closed together. With a posterior open bite, the back teeth do not touch when the front teeth are closed together.

*An example of an anterior open bite.*

Orthodontics
The specialty area of dentistry concerned with the diagnosis, supervision, guidance and correction of malocclusions. The formal name of the specialty is orthodontics and dentofacial orthopedics.

Orthodontist
A specialist in the diagnosis, prevention and treatment of dental and facial irregularities. Orthodontists are required to complete college requirements, graduate from an accredited dental school and successfully complete a minimum of two academic years of full-time, university-based study at an accredited orthodontic residency program. Only those who have completed this education may call themselves "orthodontists." Orthodontists limit their practice to orthodontic treatment only unless they have training in another dental specialty. Only residency-certified orthodontists may be members of the American Association of Orthodontists.

Orthopedic Appliance
A removable functional appliance designed to guide the growth of the jaws and face.

Panoramic Radiograph
An x-ray that shows all the teeth and both jaws on one film.

*Panoramic radiograph (x-ray).*

Palatal Expander
A fixed or removable device used to make the upper jaw wider.

*An example of a palatal expander.*

Periodontal
Refers to the hard and soft tissue, or supporting structures, around the teeth.

Plaque
Plaque is a colorless, sticky film of bacteria, food particles and saliva that constantly forms in the mouth. Plaque combines with sugars to form an acid that endangers teeth and gums. Plaque causes tooth decay and gum disease.

**Posterior**
Back.

**Preventive Treatment**
Orthodontic treatment to prevent or reduce the severity of a developing malocclusion (bad bite).

**Removable Appliance**
An orthodontic appliance that can be removed from the mouth by the patient. Removable appliances are used to move teeth, align jaws and to keep teeth in their new positions when the braces are removed (retainers).

**Retainer**
A fixed or removable appliance worn after the braces are removed. A removable retainer attaches to your upper and/or lower teeth and holds them in their finished positions.

**Rubber Bands**
During certain stages of treatment, small elastics or rubber bands are worn to provide individual tooth movement or jaw alignment.

**Safety Strap**
The safety strap prevents the facebow of the headgear from coming loose and causing injury.

*Photo courtesy of Solutions by Design.*

**Separators**
An elastic o-ring or small wire loop placed between the teeth to create space for placement of bands. Separators are usually placed between the teeth a week before bands are scheduled to be cemented to the teeth.

*Photo courtesy of Solutions by Design.*
Serial Extraction
Selective or guided removal of certain primary (baby) teeth and/or permanent teeth over a period of time to create room for permanent teeth.

Space Maintainer
A fixed appliance used to hold space for an unerupted permanent tooth after a primary (baby) tooth has been lost prematurely, due to accident or decay.

Supernumerary Teeth
A genetic occurrence in which there are more teeth than the usual number. These teeth can be malformed or erupt in abnormally.

Tongue Crib
A fixed appliance used to help a patient stop habits or undesirable tongue forces exerted on the teeth and bone that supports the teeth.

Tongue Thrust
An individual's tongue pushes against the teeth when swallowing. Forces generated by the tongue can move the teeth and bone and may lead to an anterior or posterior open bite.

Wax
Wax is placed on the brackets or archwires to prevent them from irritating the lips or cheeks.

Wires
Also known as archwires, they are held in the brackets using small elastic o-rings or stainless steel wire ligatures. Wires are used to move the teeth.

Photo courtesy of Solutions by Design.

Smile Specialists - Orthodontists
An orthodontist is to teeth what a cardiologist is to the heart. Orthodontists are highly trained specialists who partner with your dentist to provide you with the best oral health care.

Orthodontists are qualified dentists, who after graduating from dental school, go on to additional full-time education in an accredited orthodontic residency program supervised by orthodontists. That training lasts at least two academic years—sometimes more. By learning about tooth movement (orthodontics) and guidance of facial development (dentofacial orthopedics), orthodontists are the uniquely trained experts in dentistry to straighten teeth and align jaws.
Orthodontists diagnose, prevent and treat dental and facial irregularities. The majority of members of the American Association of Orthodontists (AAO) limit their practices to orthodontics and dentofacial orthopedics. Orthodontists treat a wide variety of malocclusions (improperly aligned teeth and/or jaws). They regularly treat young children, teens and adults.

Selecting an orthodontist who is a member of the AAO is your assurance that you have chosen an orthodontic specialist: the dental specialist with at least two years of post-doctoral, advanced specialty training in orthodontics in a program accredited by the American Dental Association. Specialty education includes the study of subjects in biomedical, behavioral and basic sciences; oral biology; and biomechanics.

Only orthodontists may be members of the American Association of Orthodontists (AAO). Creating beautiful smiles through orthodontics is our business.

**Why Straighten Teeth?**

Straight teeth help an individual to effectively bite, chew and speak. Straight teeth contribute to healthy teeth and gums. Properly aligned teeth and jaws may alleviate or prevent physical health problems. Teeth that work better also tend to look better. An attractive smile is a pleasant “side effect” of orthodontic treatment.

An attractive smile is a wonderful asset. It contributes to self-esteem, self-confidence and self-image—important qualities at every age. A pleasing appearance is a vital component of self-confidence. A person's self-esteem often improves as orthodontic treatment brings teeth, lips and face into proportion. In this way, orthodontic treatment can benefit social and career success, as well as improve a person’s general attitude toward life.

There are psychological aspects that are also important. It has been clinically proven that a beautiful smile leads to higher self-esteem. Confidence generates success. People with beautiful smiles have a lot to be happy about.

**Early Warning Signs Indicating it is Time for an Orthodontic Exam**

1. Early or late loss of baby teeth
2. Difficulty in chewing or biting
3. Mouth breathing
4. Finger sucking or other oral habits
5. Crowding, misplaced, or blocked-out teeth
6. Jaws that shift, make sounds, protrude or retrude
7. Speech difficulty
8. Biting the cheek or biting into the roof of the mouth
9. Protruding teeth
10. Teeth that meet in an abnormal way or don't meet at all
11. Facial imbalance or asymmetry
12. Grinding or clenching of teeth

Today's Orthodontic Treatment

A study of mothers, conducted on behalf of the American Association of Orthodontists (AAO) finds 86 percent of mothers reporting that braces are cooler today than when they were children. Sixty-nine percent also said wearing braces
makes their children feel cool, and 81 percent reported their children's experience with orthodontic treatment as either positive or extremely positive.

Different color options and the ability to change colors, for example, provide exciting ways for young patients to customize appearances. That enthusiasm helps them feel good about their orthodontic treatment, and may contribute to the success of treatment.

Mothers Report Braces One of the Best Investments
While the perceptions and attitudes surrounding braces have changed over the years, the goal of orthodontic treatment remains the same - to help each patient achieve a beautiful smile. In fact, 78 percent of mothers who had braces as a child believe braces are one of the best investments their parents made for them.

More Comfortable and a Better Experience
A perception of orthodontic treatment is that it seems to be easier than ever and more enjoyable for today's patients. A majority of mothers reported that while wearing braces used to be a less comfortable and a lengthier process, new technologies and orthodontic options are making their children's experience more enjoyable. Most also described the experience of visiting the orthodontist office as fun, and 81 percent rated their child's experience of visiting the orthodontist as positive or extremely positive. Patient-friendly offices with entertaining video games, music and/or reading materials help young patients enjoy their visits to the orthodontist's office. And computer software that can predict the post-treatment appearance may help keep patients motivated.