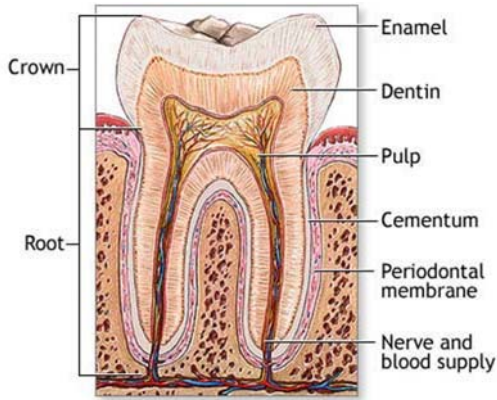


3 Anatomy

Tooth (cross section)



Enamel – The hard outermost layer of teeth. It does not grow once developed. It can, however, become more resistant to attack from bacterial acid from sugars by absorbing fluoride found in products such as toothpaste.

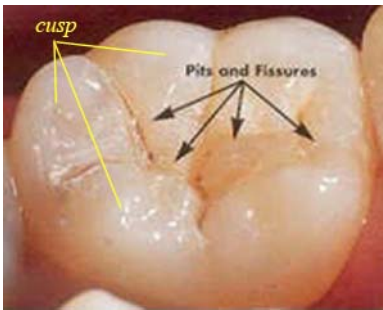
Dentin – The softer, flexible, inner layer of teeth. It becomes sensitive to cold, hot, and sweet when exposed to the oral cavity due to loss of overlaying enamel or gums.

Pulp – The inner, hollow, core of the tooth that contains the tooth's nerve and blood vessels. Once infected by bacteria, it becomes painful, and cannot heal on its own.

Crown – The part of the tooth that is above the gum line.

Root – The part of the tooth that is below the gum line and holds the tooth to the jaw bone.

Tooth (crown)

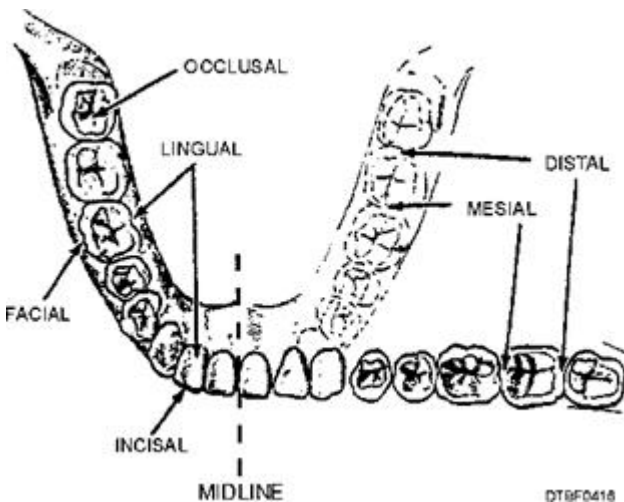


Cusp – The elevated points on the chewing surface of a molar or premolar.

Fissure – The valley formed where the bases of two cusps meet.

Pit – The point where two or more fissures meet. Along with fissures, these are the easiest places for decay to begin.

Tooth (surfaces)



occlusal – The chewing surface of a premolar or molar.

Incisal – The sharp cutting edge of an anterior tooth.

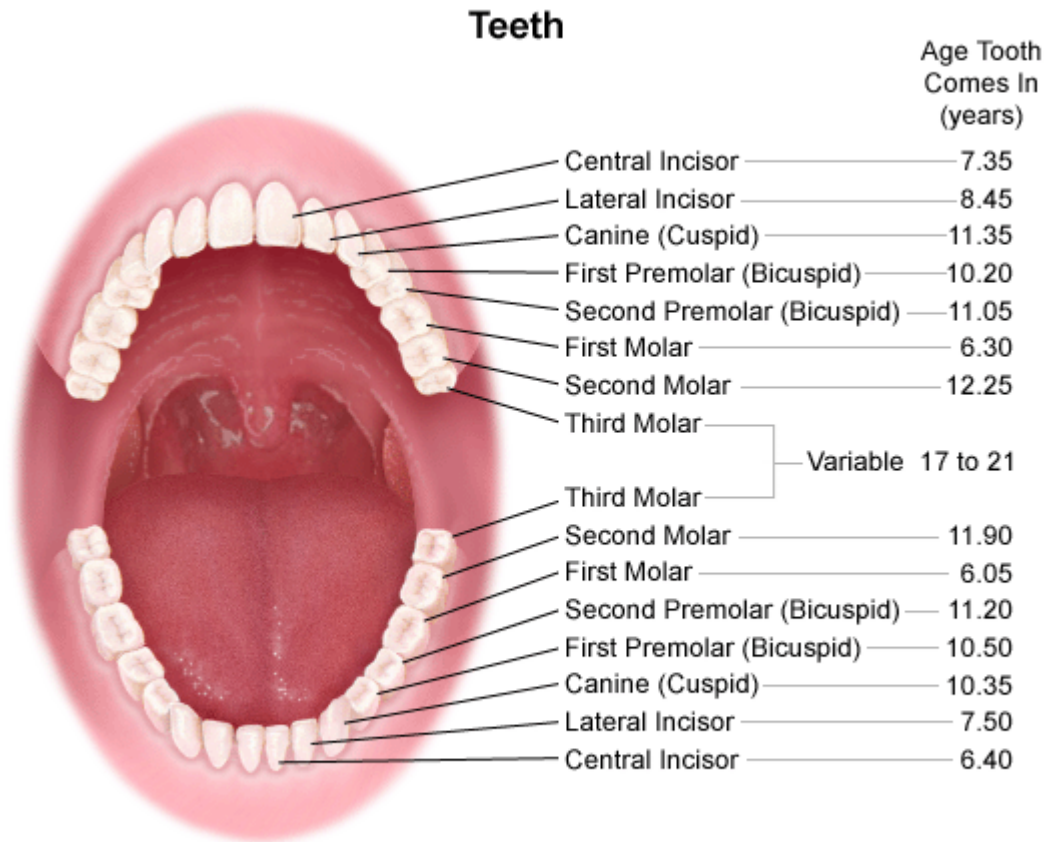
Facial – The surface of a tooth that is closest to the cheek or lip.

Lingual – The surface of a tooth that is closest to the tongue or roof of mouth.

Mesial – The surface of a tooth that is more toward the midline of the dental arch.

Distal – The surface of the tooth that is more away from the midline of the dental arch.

Arch (Adult)



The above picture shows the common names of adult teeth. There is also a method of numbering the teeth to simplify communication of specific teeth. Under the international system, each tooth is given two numbers. The first number identifies the quadrant of the arch.

ADULT TEETH

Upper right = 1
 Upper left = 2
 Lower left = 3
 Lower right = 4

BABY (MILK) TEETH

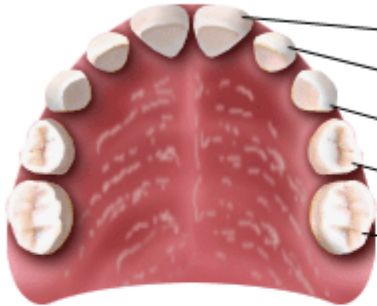
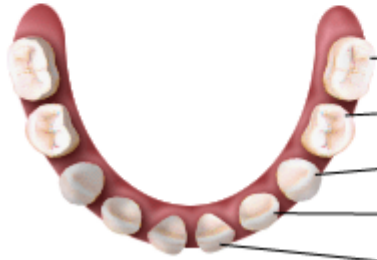
Upper right = 5
 Upper left = 6
 Lower left = 7
 Lower right = 8

The second number identifies the tooth in each quadrant in sequence beginning with “1” for the central incisor, and ending with “8” for the third molar in adults, or “5” for the baby second molar.

Adult teeth (International)

Upper right						Upper left									
18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
Lower right						Lower left									
48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38

Teeth (child)

Baby Teeth		Age Tooth Comes In (months)	Age Tooth Is Lost (years)
Upper Teeth			
	Central Incisor	9.6	7.0
	Lateral Incisor	12.4	8.0
	Canine (Cuspid)	18.3	11.0
	First Molar	15.7	10.0
	Second Molar	26.2	10.5
Lower Teeth			
	Second Molar	26.0	11.0
	First Molar	15.1	10.0
	Canine (Cuspid)	18.2	9.5
	Lateral Incisor	11.5	7.0
	Central Incisor	7.8	6.0

Baby (milk) teeth (International)

Upper right					Upper left				
55	54	53	52	51	61	62	63	64	65
Lower right					Lower left				
85	84	83	82	81	71	72	73	74	75

Dentists from the United States use a different system.

They number the adult teeth beginning with “1” for the upper right third molar, and count sequentially through the arches, ending with “32” the lower right third molar.

Childrens’ teeth are lettered, starting with “A” for the upper right second molar, and finishing with “T” for the lower right second molar.

Adult Teeth (US system)

Upper right								Upper left							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Lower right								Lower left							

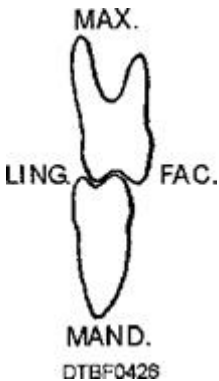
Baby Teeth (US system)

Upper right					Upper left				
A	B	C	D	E	F	G	H	I	J
T	S	R	Q	P	O	N	M	L	K
Lower right					Lower left				

Occlusion

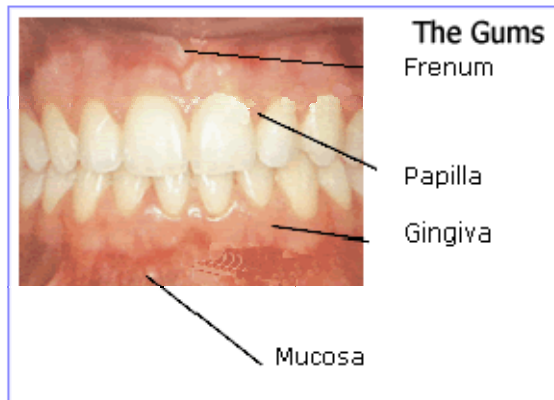


The way peoples' upper and lower teeth come together is called **occlusion**. In general the upper teeth are slightly more toward the cheek and lips than the lower teeth. The lingual cusps of upper teeth fit into the central fissure of lower teeth.



However, throughout the world there is much variation. The important thing for us to know is to **not change occlusion** when placing fillings. The way the teeth feel as they come together should be the same after a filling is placed as they did before. If a patient senses that a filling is too high, or being bitten on too hard, it will make the tooth hurt. Make sure to adjust the filling as best as possible so that the tooth will be comfortable.

Gums



Frenum – The attachment from the upper and lower lip to the mucosa.

Papilla – The unattached fleshy part of the gums that are between two teeth.

Gingiva – The firm, lighter pink part of gums that is firmly attached to the bone.

Mucosa – The loose, darker red part of gums that is loosely attached to the bone.

Gum line – The line formed from where the gums meet the teeth.

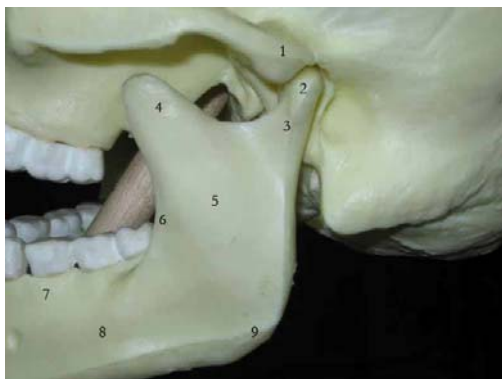
Sulcus – The pocket between the gum line and gum attachment to the tooth.

Tongue

The tongue normally has short, rough hair called *papilla* on the top surface.

Occasionally, these papillae can die and fall off. Usually, this is not a serious problem, and they will grow back on their own. However, if it does not improve after two weeks, the patient should see a dentist or physician.

Bone



Mandible (exterior view)

1. Eminence (on skull)
2. Condyle
3. Neck
4. Coronoid process
5. Ramus
6. Coronoid notch
7. Alveolar process (holds teeth)
8. Body
9. Angle



This is an interior view of the mandible as if taken from inside the mouth. The mandibular foramen is the hole in the lower jaw bone where the nerve that gives feeling to the lower teeth (inferior alveolar nerve) goes into. This is the area where anesthetic should be injected to make the lower teeth numb.