

Tooth numbering system

Teeth notation is used by dentists to identify the number, location and name of each tooth. There are three tooth numbering systems as follows:

1. Universal notation system:

A. Permanent teeth:

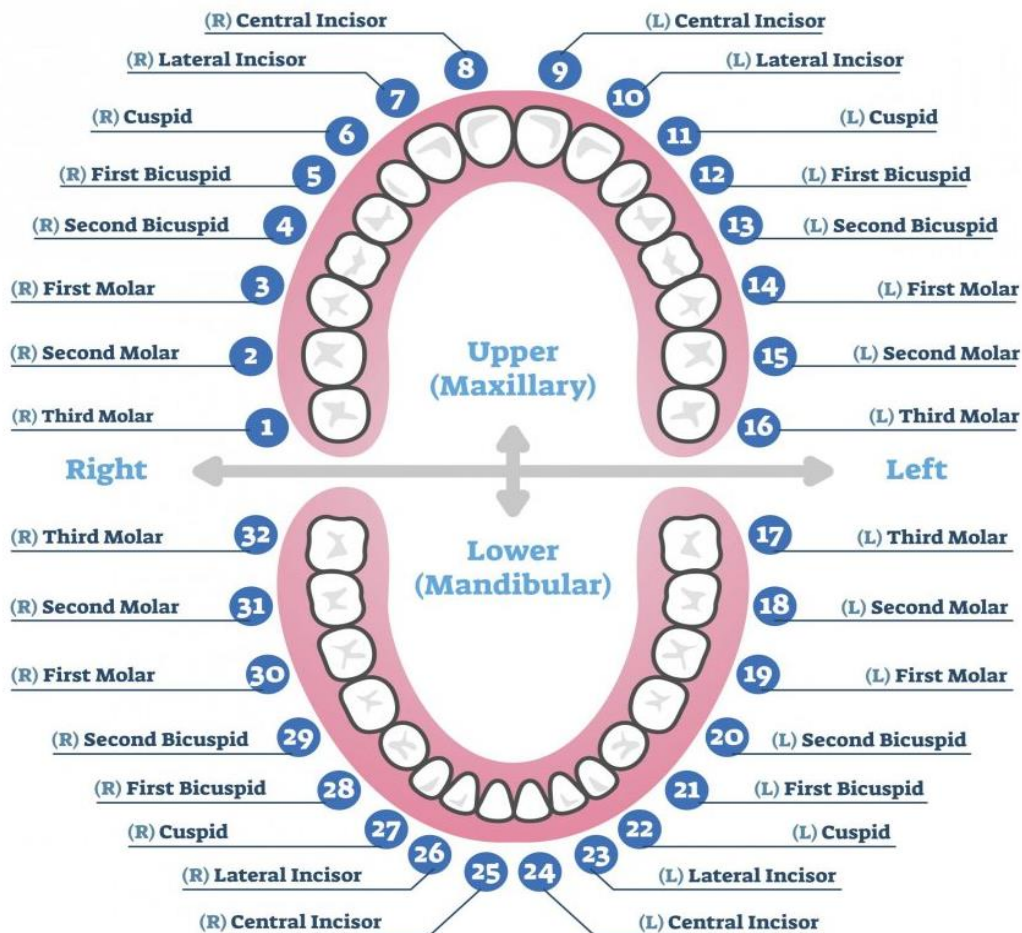
Maxillary															
Upper right								Upper left							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Mandibular															
Lower right								Lower left							

#12: Permanent maxillary left first premolar.

#7: Permanent maxillary right lateral incisor.

#18: Permanent mandibular left second molar.

#30: Permanent mandibular right first molar.



B. Deciduous Teeth:

Maxillary														
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							
Mandibular														

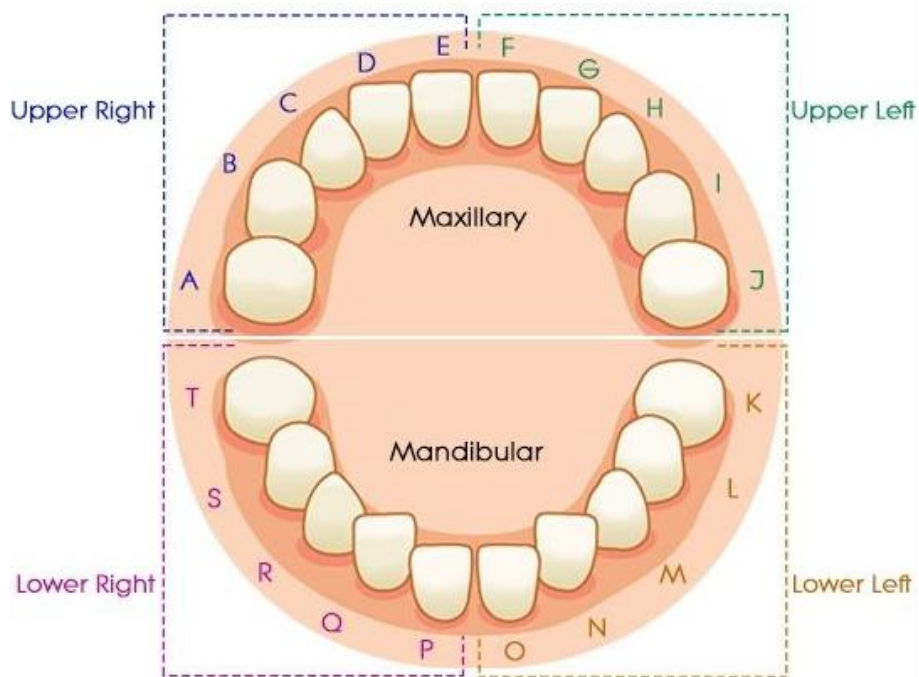
Examples:

#C: Deciduous Maxillary right canine.

#I: Deciduous Maxillary left first molar.

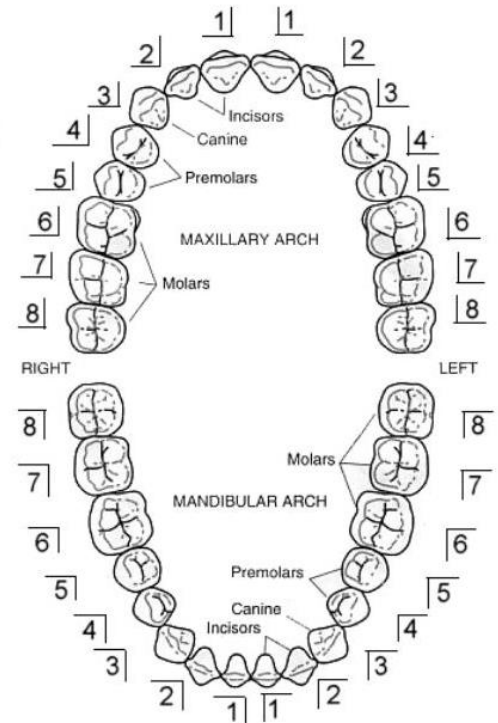
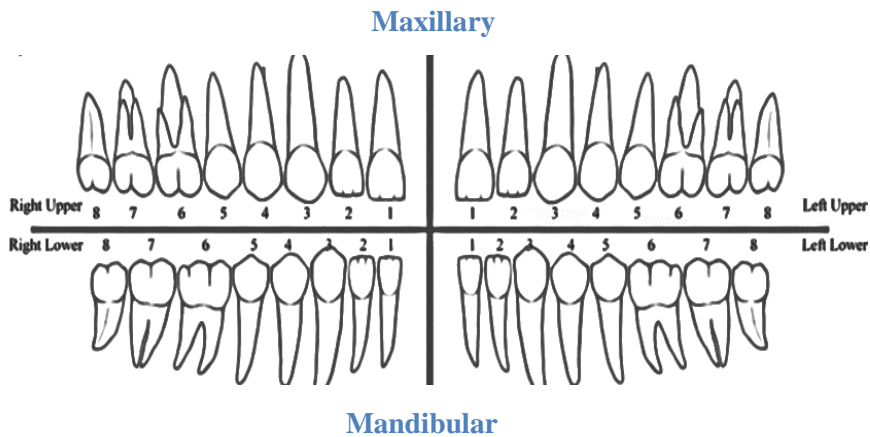
#Q: Deciduous Mandibular right lateral Incisor.

#K: Deciduous Mandibular Left second molar.



2. Palmer notation system:

A. Permanent Teeth:

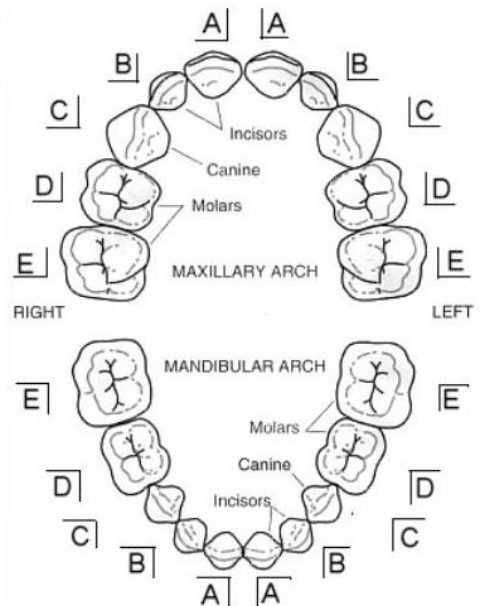


Examples:

- $\overline{6}$ Permanent Maxillary Right First Molar
- $\overline{3}$ Permanent Mandibular Left Canine
- $\overline{8}$ Permanent Maxillary Left Third Molar

B. Deciduous Teeth:

		Maxillary											
		Upper right					Upper left						
		E	D	C	B	A	A	B	C	D	E		
		E	D	C	B	A	A	B	C	D	E		
		Lower right					Lower left						
		Mandibular											



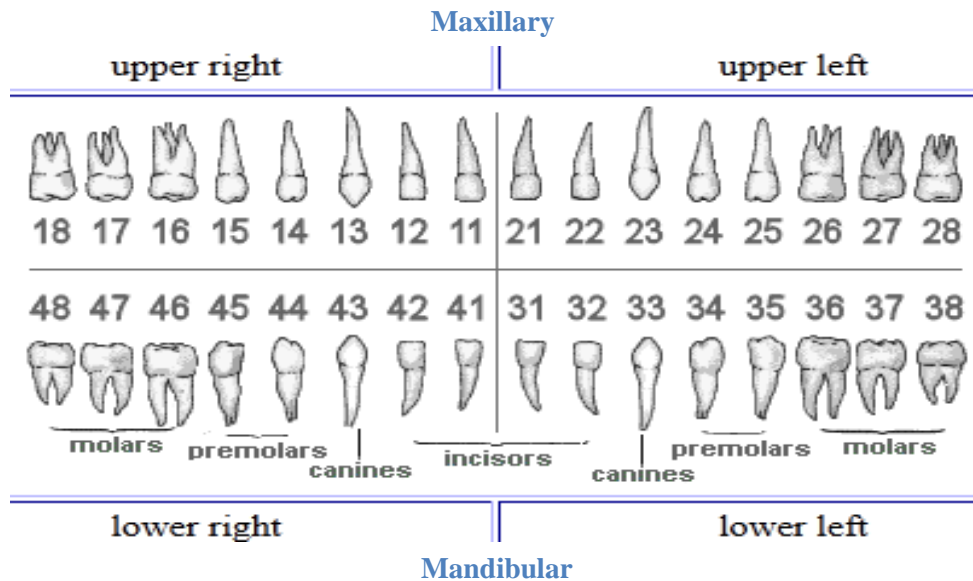
Examples:

- \overline{B} Deciduous Mandibular Left Lateral Incisor
- \overline{E} Deciduous Maxillary Right Second Molar
- \overline{C} Deciduous Mandibular Right Canine

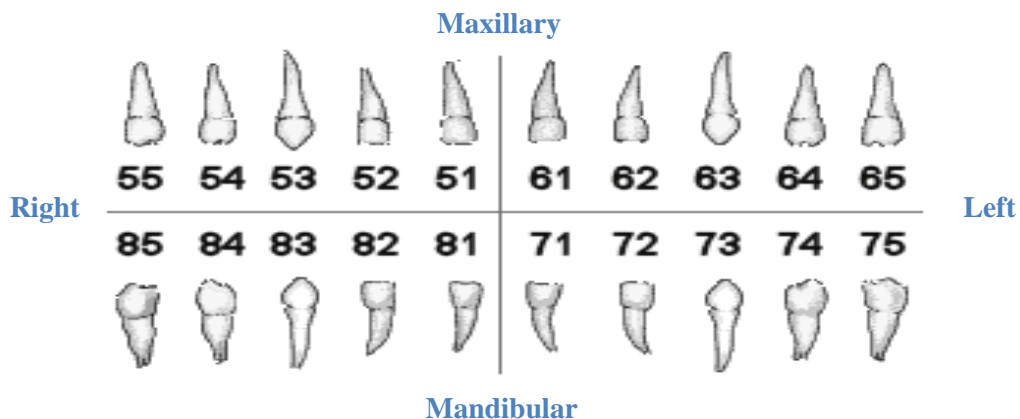
3. FDI (Federation Dentaire International):

The FDI system uses a two-digit numbering system in which the first number represents a tooth's quadrant and the second number represents the number of the tooth from the midline of the face. For permanent teeth, the upper right teeth begin with the number, "1". The upper left teeth begin with the number, "2". The lower left teeth begin with the number, "3". The lower right teeth begin with the number, "4". For primary teeth, the sequence of numbers goes 5, 6, 7, and 8 for the teeth in the upper left, upper right, lower right, and lower left respectively.

A. Permanent teeth:



B. Deciduous Teeth:



Crown and Root

Each tooth has a crown and root. The crown is covered with enamel while the root is covered with cementum and they join at the cemento-enamel junction (CEJ) or cervical line.

The enamel, cementum and dentin are the hard tissues of the tooth. The major bulk of the tooth is dentin.

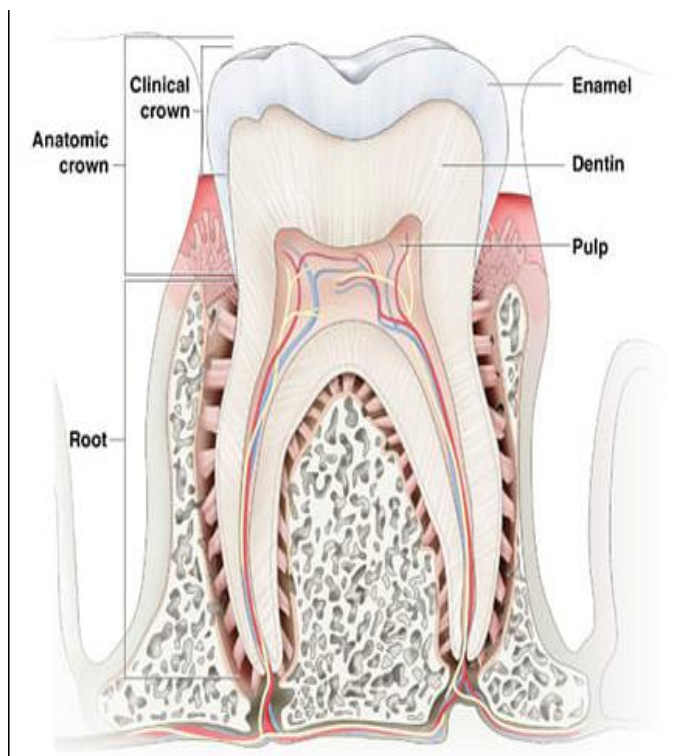
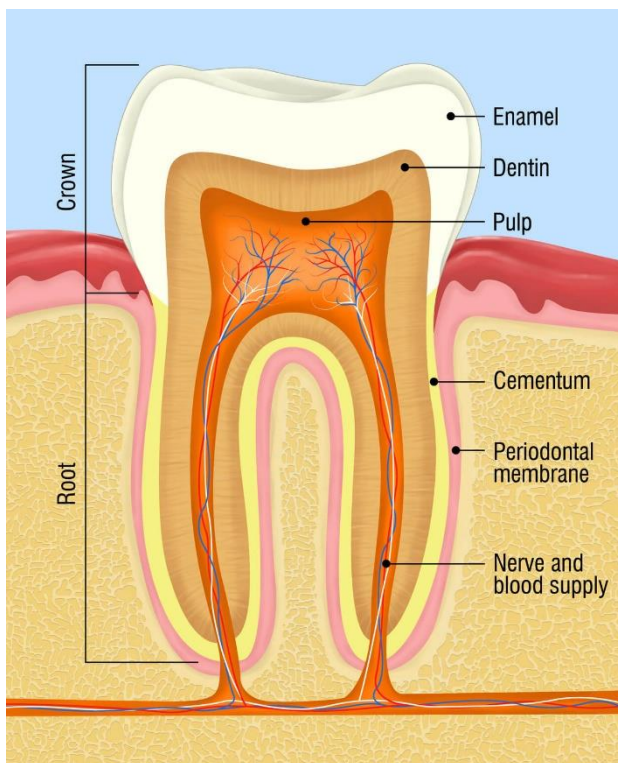
Dental pulp: is the soft tissue of the tooth and present in the pulp chamber and pulp canal.

Pulp chamber: is the part of dental pulp in the crown.

Pulp canal: is the part of dental pulp in the root.

Anatomical crown: is the portion of the tooth which is covered by enamel.

Clinical crown: is the portion of the tooth which is visible in the mouth. In healthy person, the anatomical crown is larger than the clinical crown.

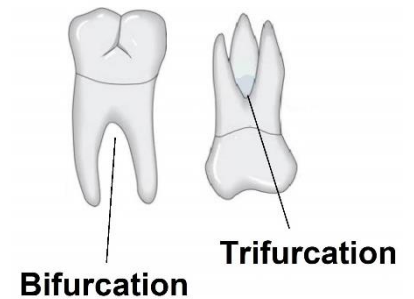
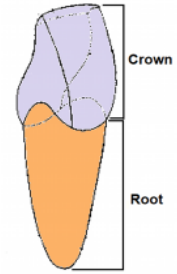


The number of roots

1. **Single root:** in all anterior teeth, mandibular premolars and maxillary second premolar.

2. **Two roots with bifurcation:** in mandibular molars and maxillary first premolar. Division of the tooth root is known as furcation.

3. **Three roots with trifurcation:** in maxillary molars.



Tooth surfaces and ridges:

The crowns of incisors and canines have four surfaces and ridge, while the crowns of premolars and molars have five surfaces.

Tooth surfaces are:

1. **Labial surface:** is the surface which is toward the lip in incisors and canines (in anterior teeth).

2. **Buccal surface:** is the surface which is toward the cheek in premolars and molars (posterior teeth). Labial and buccal surfaces could be termed as the "facial surfaces".

3. **Lingual surface:** is the surface which is facing the tongue (all teeth).

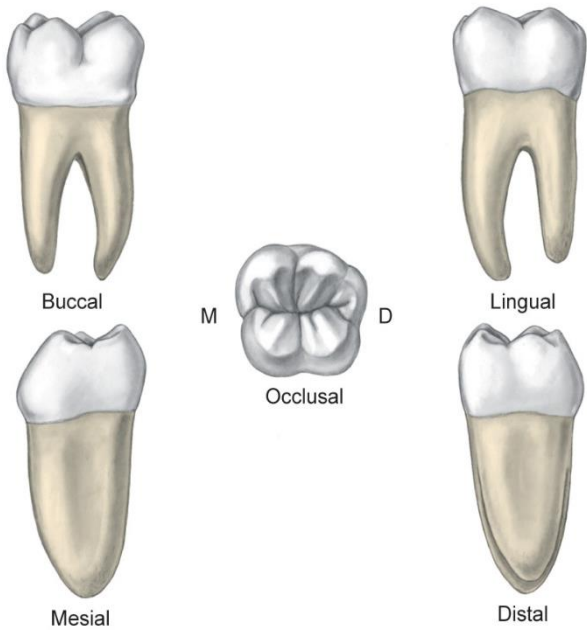
4. **Occlusal surface:** is the surface of the posterior teeth coming in contact with the teeth in the opposite jaw (opposing teeth) during closing the mouth. In anterior teeth, this surface is called "incisal ridge".

5. **Proximal surface:** is the surface of the tooth facing toward adjacent teeth in the same dental arch.

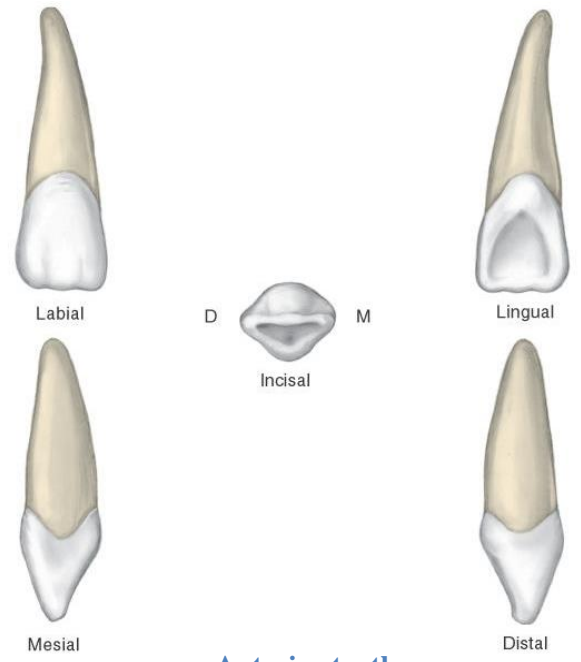
a. **Mesial surface:** is the surface which is facing toward the median line.

b. **Distal surface:** is the surface which is facing away from the median line.

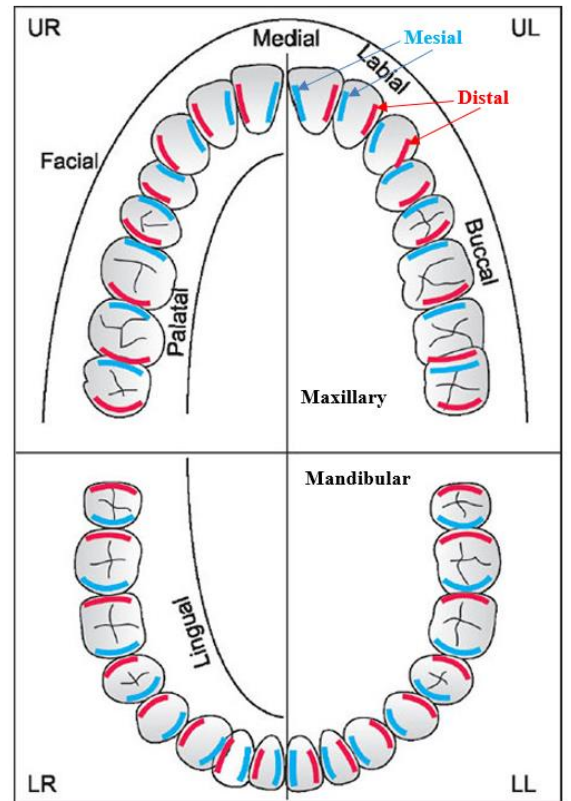
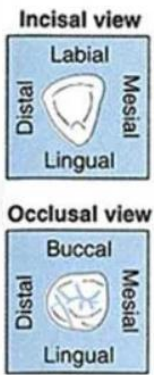
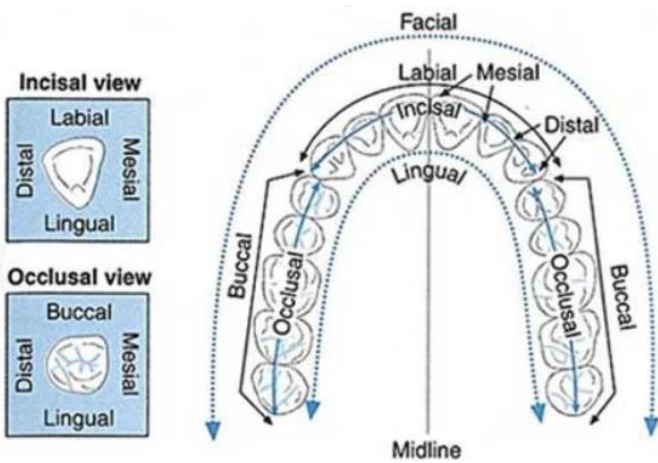
All teeth have their mesial surfaces touching the distal surfaces of the adjacent tooth except the maxillary and mandibular central incisor (both permanent and deciduous). The area of the mesial and distal surface that touch its neighbor in the arch is called the "contact area".



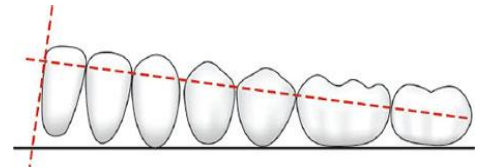
Posterior tooth



Anterior tooth

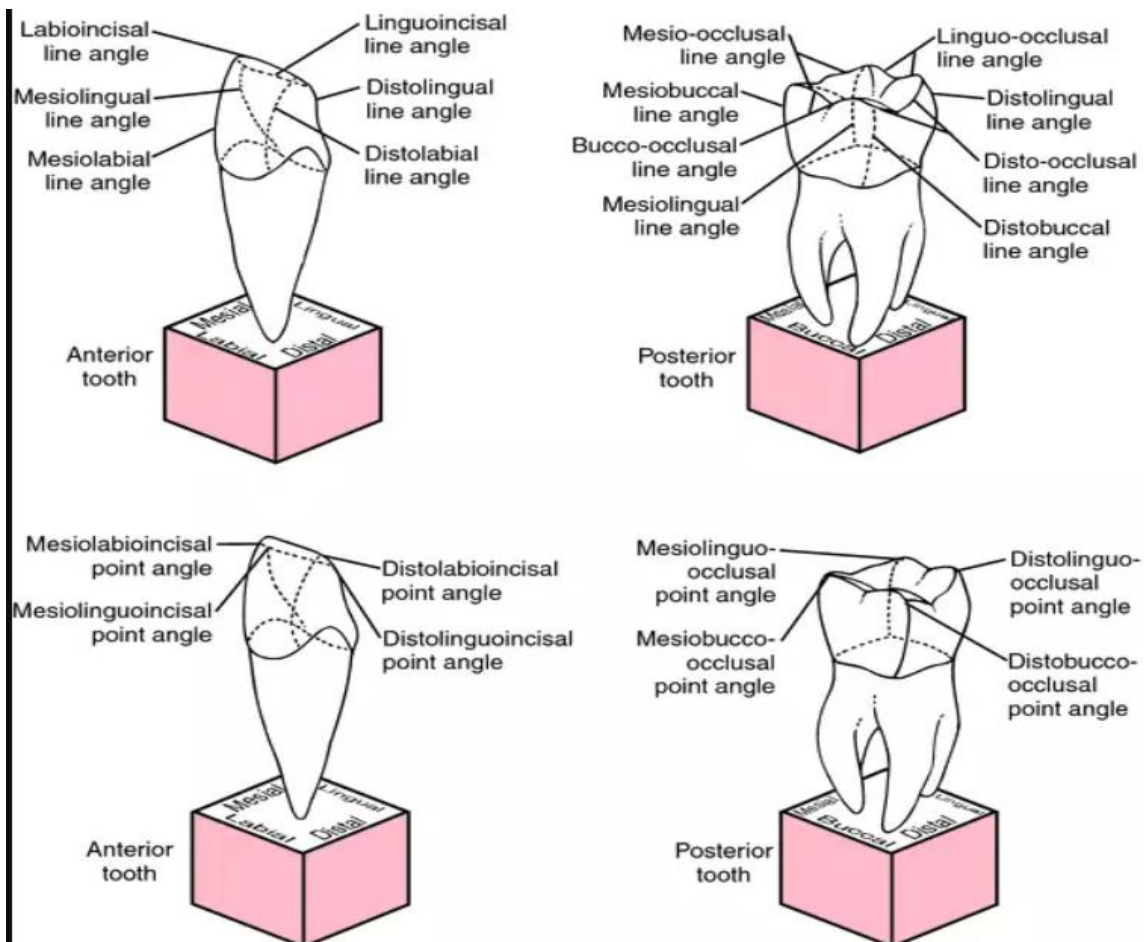
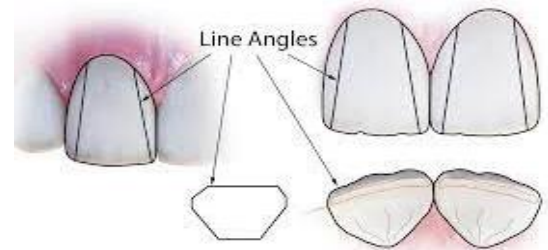
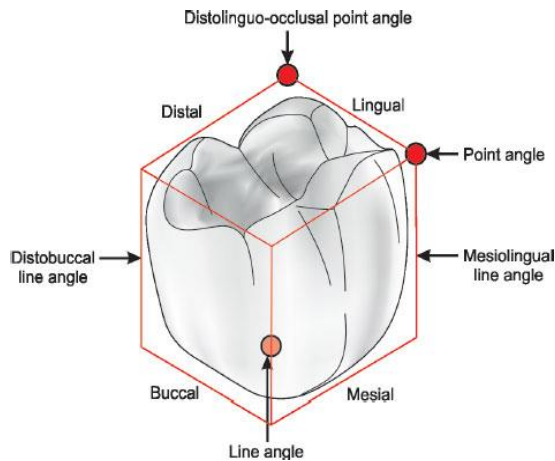


Contact area: the area of the mesial or distal surface of the tooth which touches its neighbor in the arch.



Line angle: it is formed by the junction of two surfaces and gets its name from these surfaces. Example: mesio-labial line angle.

Point angle: it is formed by the junction of 3 surfaces and gets its name from these surfaces. Example: mesio-linguo-incisal point angle.



Division of the crown into thirds:

For description, the crown and the root are divided into thirds according to the position of the surface.

