



# INTRODUCTION TO DENTISTRY



LEC NO. : Lecture 2

DONE BY : Saba Al-rawadieh

وَقُلْ رَبِّ زِدْنِي عِلْمًا



# Introduction to Dentistry

## Lecture 2: Dental Terminology

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# Dental Terminology

**Dental terminology** involves the study of words and terms related specifically to the dental sciences.

مصطلحات في العيادة طب الأسنان بشكل خاص → ويمكن يكون المصطلحات مستعارة بالعلم بغير مام

**Dental terms** are usually formed by a combination of small words or syllables linked in a “building block” or word chain.

يكون عندما يضاف معنى بنوعها لكلمات → من خلقها بنوع من حالة السن أو العرفق ...

Many dental terms **originate** from:

مصطلحات المصطلحات



The names of bones or structures



The names of dental procedures or practical approaches. → the way of work

<p>المصطلحات التي تكون <b>Dental Terms</b></p>		
<p><b>Prefix</b> <small>بالهائية</small></p>	<p><b>Root</b> <small>المقطع الأساسي الذي بنوعه عليه</small></p>	<p><b>Suffix</b> <small>بالهائية</small></p>

**Acronyms: an abbreviation** → اختصارات

**Eponyms: a person after whom a discovery, invention, place, etc., is named**

**Homonyms: two or more words having the same spelling but different meanings.**

# Dental Terminology

A **prefix** is the first building block of a word division that begins a term.

A **prefix** alters the word's meaning by indicating **number, color, size, location, or condition.**

**Table 1-1** Examples of Prefixes Denoting **Quantity or Number**

المتا جمع حرفاً معناه يجي سواد عليها به تجر اسانيات

Prefix	Meaning	Example
bi- two,	double	bifurcation
hemi-	half	hemisection
prim-/i-	first	primary
quad-/quat-	four	quadrant
semi-	half	semiluminal
Tri-	three	trigeminal
Uni-	one	unilateral

**Table 1-2** Examples of Prefixes Denoting **Color**

<b>Prefix</b>	<b>Color</b>	<b>Example</b>
Albus-	white	albumen
cyan-/o-	blue	cyanosis
Erythr-/o-	red	erythrocyte
leuk-/o-	white	leukoplakia
melan-/o-	black	melanoma
xanth-/o-	yellow	xanthoma

**Table 1-3** Examples of Prefixes Denoting **Size or Degree**

<b>Prefix</b>	<b>Meaning</b>	<b>Example</b>
hyper-	over/excess	<i>hypertrophy</i>
hypo-	under/below	<i>hypoplasia</i>
macro-	large	<i>macrodonia</i>
micro-	small/minute	<i>microbe</i>
pan-	all around	<i>panoramic</i>
ultra-	extreme/beyond	<i>ultrasonic</i>

**Table 1-4** Examples of Prefixes Denoting **Location or Direction**

<b>Prefix</b>	<b>Meaning</b>	<b>Example</b>
ab-	away from	<i>Abduction</i>
ad-	toward/near	<i>Adduction</i>
ambi-	both sides	<i>ambidextrous</i>
de-	down from	<i>dehydration</i>
dexi-	right side	<i>dexter</i>
ecto-	outside	<i>ectopic</i>
endo-	within	<i>endodontic</i>
epi-	upon/over	<i>epidermis</i>
ex/o-	out from	<i>excretion</i>

**Table 1-4** Examples of Prefixes Denoting **Location or Direction**

<b>Prefix</b>	<b>Meaning</b>	<b>Example</b>
infra-	below	<i>infraorbital</i>
inter-	in midst of	<i>interdental</i>
im-	into/position	<i>implant</i>
mes-/o-	mid, among	<i>mesioclusion</i>
para-	near/beside	<i>parasagittal</i>
peri-/o-	around	<i>periodontal</i>
pre-/ante-	before	<i>premolar</i>
retro-	behind/back	<i>retromolar</i>
sub-	under, lesser	<i>subdermal</i>
supra-	above/over	<i>supraorbital</i>



## Examples of Prefixes Denoting **Condition**

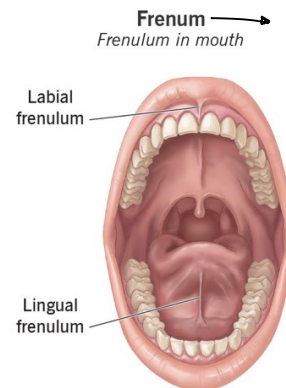
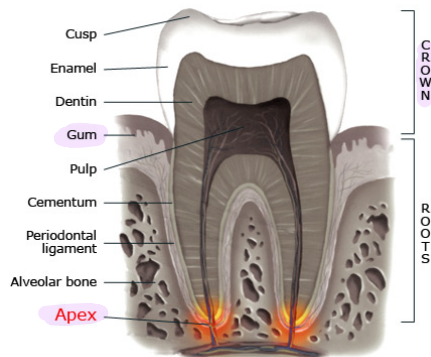
<b>Prefix</b>	<b>Meaning</b>	<b>Example</b>
a-, an-	without	<i>anodontia</i>
Brady-	slow	<i>bradycardia</i>
Tachy-	fast	<i>tachycardia</i>
contra-	against	<i>contrangle</i>
dis-	take away	<i>disinfectant</i>
in-	not	<i>insoluble</i>
mal-	bad	<i>malocclusion</i>
un-	non/not	<i>unerupted</i>

**A Root Word:** The main section or division of a term that provides the **foundation or basic meaning** → المصطلح الذي يُمَيِّنُ عليه term

**Table Common Dental Root / Combining Forms**

Root	Combo Form	Pertains To
Alveolar	alveo	alveolus
Apical <sup>قمة</sup>	apic-/o-	apex of a root
Buccal <sup>سواء الخد</sup>	bucc-/o-	cheek
Coronal	coron-/o-	crown
Dens	dent-/o-	tooth
Distal	dist-/o-	farthest from center → Midline <sup>الابعد عن</sup>
Enamel	ename-/o- or amel-/o-	tooth, enamel tissue
Frenum	frene-	frenum
Gingiva	gingiv-/o-	gingiva, gum tissue → اللثة و أنسجة اللثة
Glossa	gloss-/o- or gloss/a	tongue → اللسان
Gnath	gnath-/o-	jaw, cheek → فم / خد
Incisor	incis-/o-	incisor tooth → قواطع

صور توضيحية



قيداً غشائية أو غشائية  
المعاطين به عماد بغير  
حرمة عضو معين .

**A Root Word:** The main section or division of a term that provides the foundation or basic meaning

### Common Dental Root/Combining Forms

Root	Combo Form	Pertains To
Labia	labi-/o-	lip area
Lingua	lingu-/o-	tongue
Mesial	mesi-/o-	middle, midplane
Mucosa	muc-/o-	tissue lining an orifice → <span>النسيجة الباطنية</span>
<span>اغلاق</span> Occlude	occlus-/o-	occluding, jaw close
Odont	odont-/o-	tooth
<span>تصحيح</span> orthos	orth-/o-	straight, proper order → Orthodontics ← <span>معدن تقويم الاسنان</span>
stoma	stoma-	mouth

**A suffix:** An element added to the end of a root word or combining form to describe or qualify the word meaning is

**Table Examples of Suffixes Indicating Condition**

**Suffix**

**Condition of Root Foundation**

**Sounds Like**

-ia	anesthesia (without feeling)	(an-es-THEE-zee-ah)
-id	cuspid (cusp shape)	(CUSS-pid)
-ion	occlusion (bite)	(oh-CLUE-shun)
-ism	bruxism (tooth grinding)	(BRUCKS-ism)
-itis	arthritis (joint inflammation)	(ar-THRI-tis)
-pathy	myopathy (muscle disease)	(MY-oh-path-ee)
-tion	mastication (chewing)	(mass-tah-KAY-shun)

**A suffix:** An element added to the end of a root word or combining form to describe or qualify the word meaning is

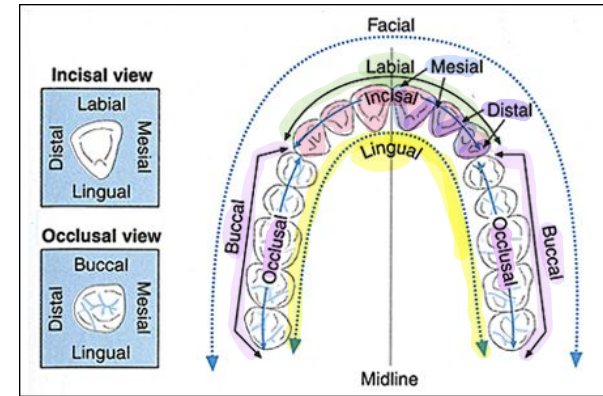
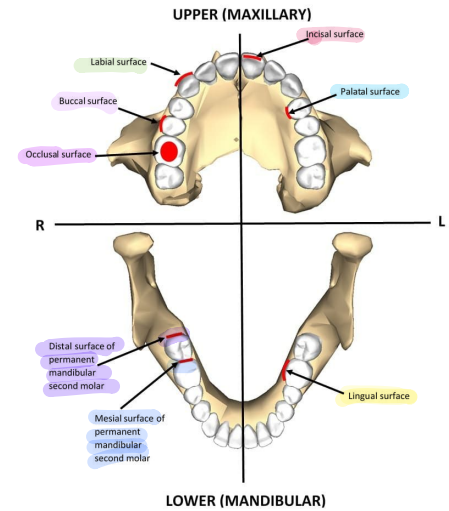
### Table Suffixes Expressing Medical Terms, Processes, Uses

Suffix	Meaning	Sample Words
-algia	pain	odontalgia, neuroalgia, myalgia
-cide	kill	germicide, homicide
-cyte	cell	leukocyte, osteocyte
-ectomy	surgical → استعمال	removal apicoectomy, appendectomy
-plasty	surgical repair استعمال	gingivoplasty
-tomy	incision	myotomy (muscle)

# Tooth surfaces

↪ Side of face forming lateral wall of the mouth

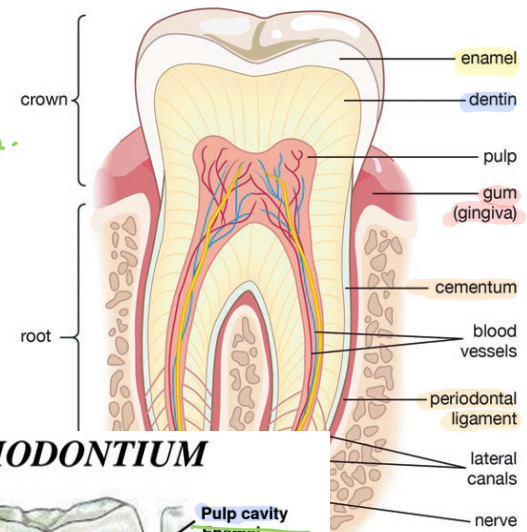
- **Buccal** : towards the cheek
- **Lingual** : toward the tongue → بتجاه اللسان
- **Labial** : towards the lips → بتجاه الشفاة
- **Palatal** : towards the palate → نحو الحنك
- **Mesial** = towards the midline
- **Distal** = away from the midline
- **Occlusal** the direction towards the biting surface of posterior teeth → for incisors
- **Incisal** = the direction towards the biting edge of anterior teeth



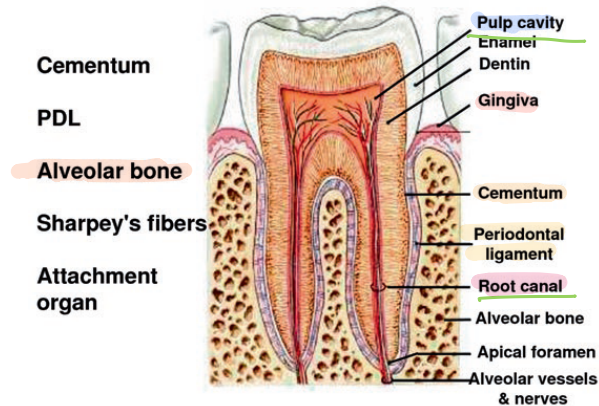
# Tooth layers

- **Enamel** → *مينا* → bone structure covers the crown.
- **Dentin** = tissue of tooth surrounding the pulp
- **Pulp** = (soft, vascular tooth tissue) is found in the center of the tooth. *it contains*  $\text{Ca}^{2+}$
- **Pulp chamber** = found in the crown = pulp cavity
- **Pulp canal** = found in the root = Root canal
- **Gums / Gingiva** → *اللثة*
- **Alveolar bone** → *الشكل الصلب للمسيج العظام*
- **Cementum** = tissue covering of tooth root)
- **Periodontal ligament** → *الجزء الذي يثبت السن*

band of fibrous tissue connecting bones or cartilages, serving to support and strengthen joints



## PERIODONTIUM



# Tooth Numbering Systems →

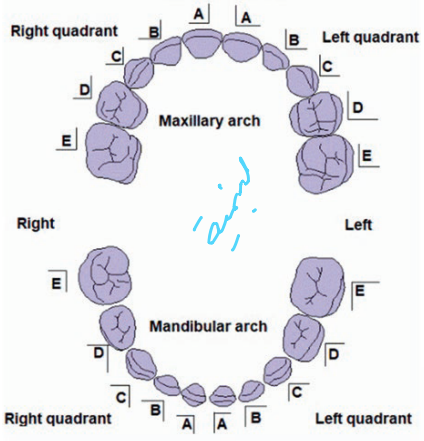
النظمة ترقيم الأسنان

1. **Symbolic (Palmer) system notation (L 1-8)** → يقسم إلى أربعة أرباع على ربيع ترقيم من (1-8) ← للأسنان الدائمة
2. **Universal numbering system. (# 1-32)** → يبتدئ من أول فوس في الجهة العلوية على الجانب الأيمن للنهاية الجهة العلوية وبعد ين لكل من الجهة اليسرى من الفك السفلي إلى نهايته
3. **FDI system (two-digits)**

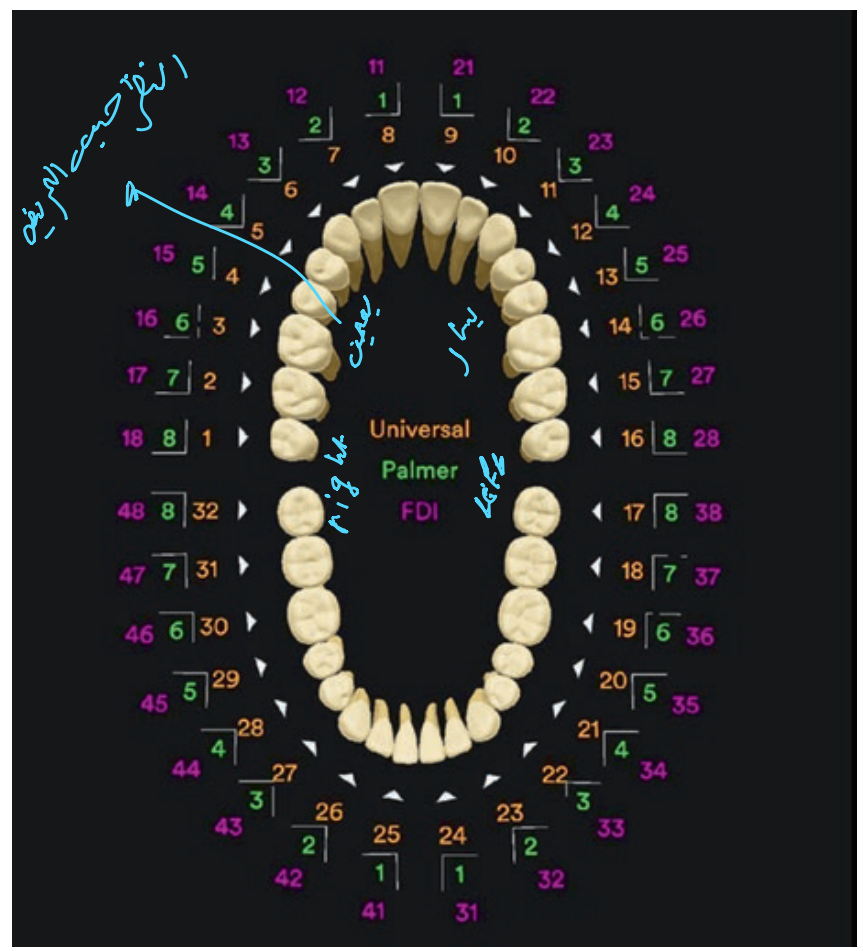
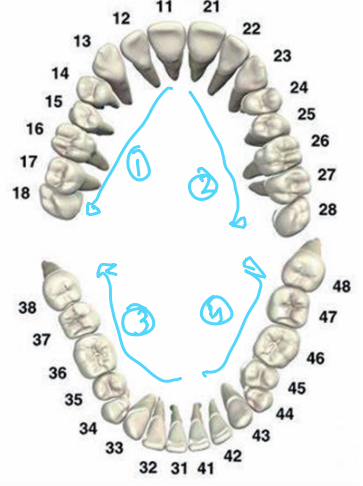




Palmer Notation System  
(Primary Teeth)



FDI World Dental Federation  
(ISO-3950 notation)



دائمية ← ارقام

لسنة ← رموز احرف (A-T)

# Primary or Deciduous dentition

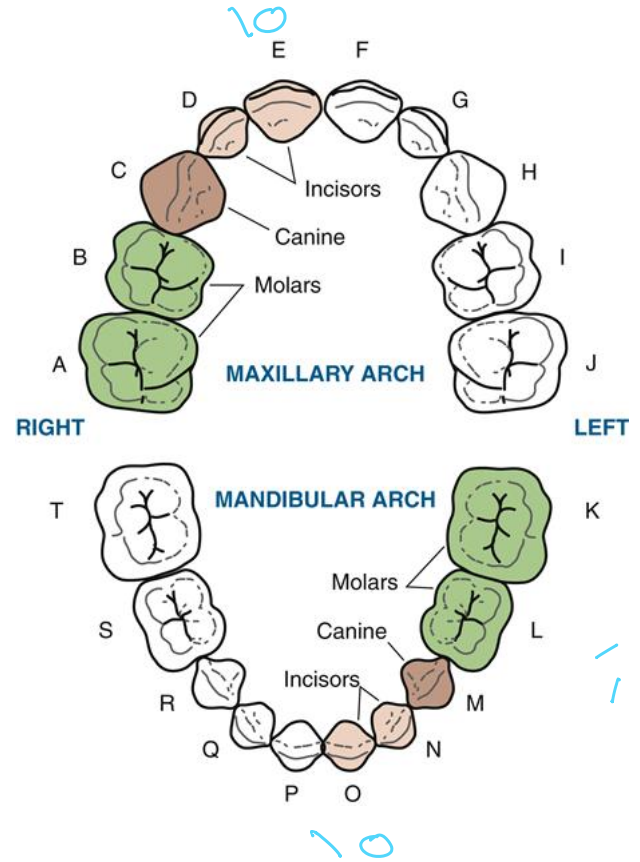
The 20 deciduous teeth erupting first are commonly called “baby teeth” or primary teeth.

(6 month — 2.5 years) تبدأ من

central  
Lower ↑ incisors

اول شيء

upper ↓ incisors  
central

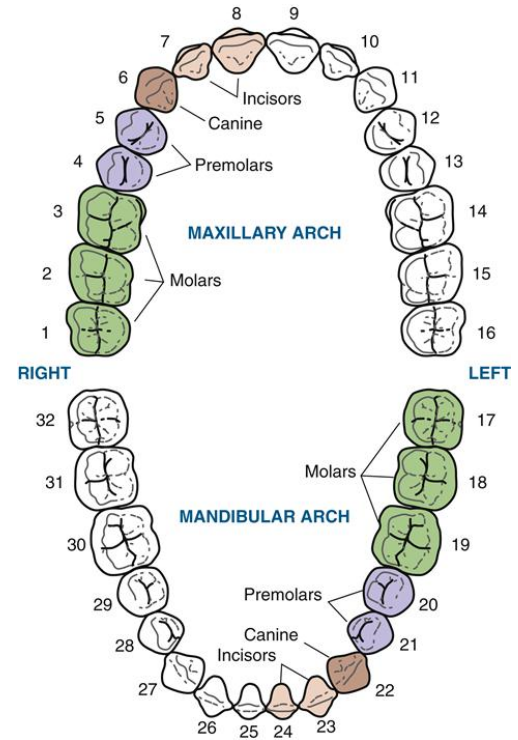


# Succedaneous or Permanent teeth

الثانويه

The 32 permanent teeth that erupt and replace the deciduous teeth are commonly called secondary teeth.

الاسنان التي تحل محل الاسنان اللبنية



# Transition or Mixed dentition period

Mixed dentition occurs from age 6 to 12, →  
when the dentition contains both  
deciduous and secondary teeth.

*first molar in 6 years → very important*  
*upper and lower first molars*



الحالات الشائعة التي تؤثر على تجويف الفم

## Common conditions that affecting the oral cavity

**Stomatitis:** inflammation of the mouth → التهاب الفم

**Gingivitis:** inflammation of the gingiva ( gum) → التهاب اللثة

**Dental caries:** <sup>تسوس، كدم سنات</sup> tooth decay = cavities in the teeth caused by bacteria → بسبب البكتيريا

**Odontalgia:** toothache = pain in the tooth → ألم في الاسنان

**Bruxism:** = involuntary grinding of the teeth that usually occurs during sleep → صرير اسنان سلوكي غير واعي يحدث عادة أثناء النوم



# Dental Terminology

وهو جنين

**Natal teeth** are present at birth which develop and erupt during the intrauterine life

ولادة الطفل  
با سنان تكونت  
وهو جنين

بعد الولادة

**Neonatal teeth** erupt during the first month of life, creating a disturbance in physiological chronology →

ظهور اسنان اثناء اول شهر بعد انوكة

**Microdontia** is an anomaly in which teeth appear smaller than the normal →

ظهور اسنان اصغر  
من المعتاد

**Macrodontia** refers to a tooth or a group of teeth that are larger than normal.

من المجموعة اسنان اكبر  
من المعتاد

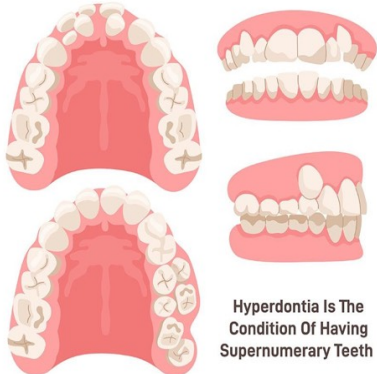
**Anodontia** is described as complete agenesis of the dentition.

← عدم ظهور اسنان اصلي

**Supernumerary teeth**, also known as **hyperdontia**, refer to the presence of an additional tooth or teeth to the existing series of teeth. →

وجود سن او اكثر زيادة عن الطبيعي

Hyperdontia



Hyperdontia Is The Condition Of Having Supernumerary Teeth

Macrodontia



Microdontia

