



الجامعة الهاشمية  
The Hashemite University



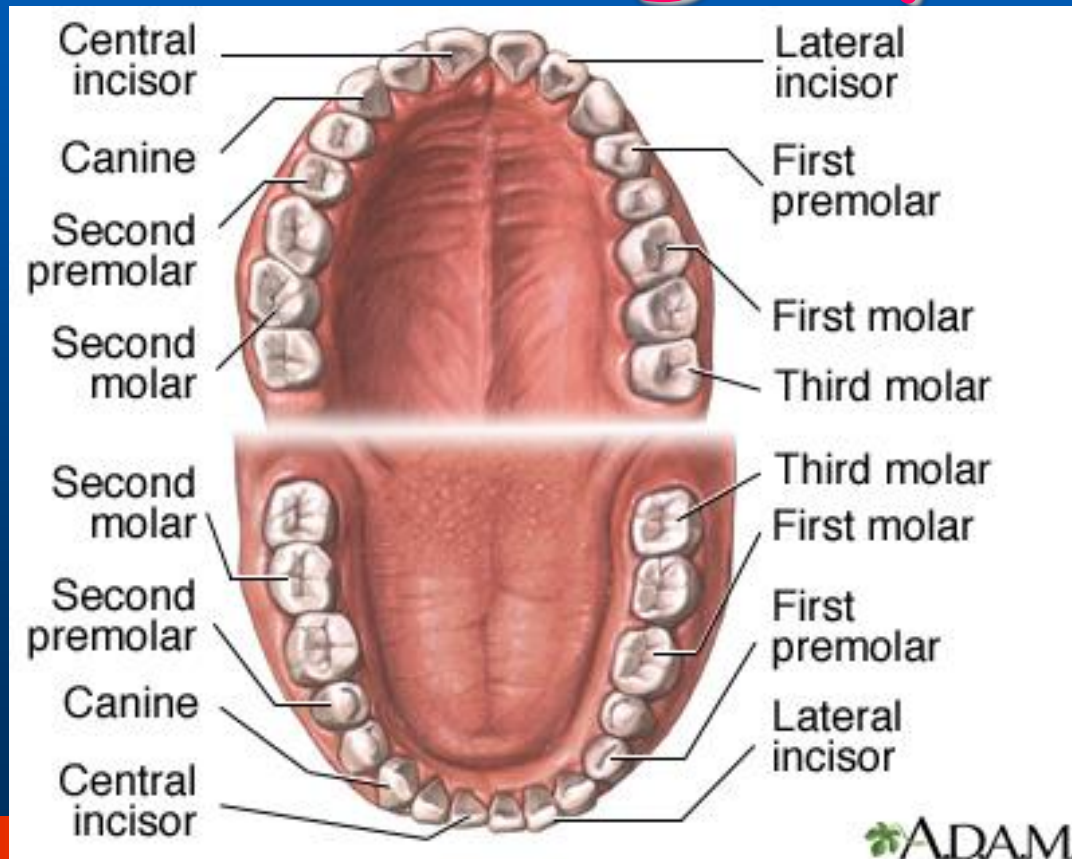
# Tooth classification & numbering systems

Done by: Rana Al-Tarawneh

**Dr. Reda Gaber**

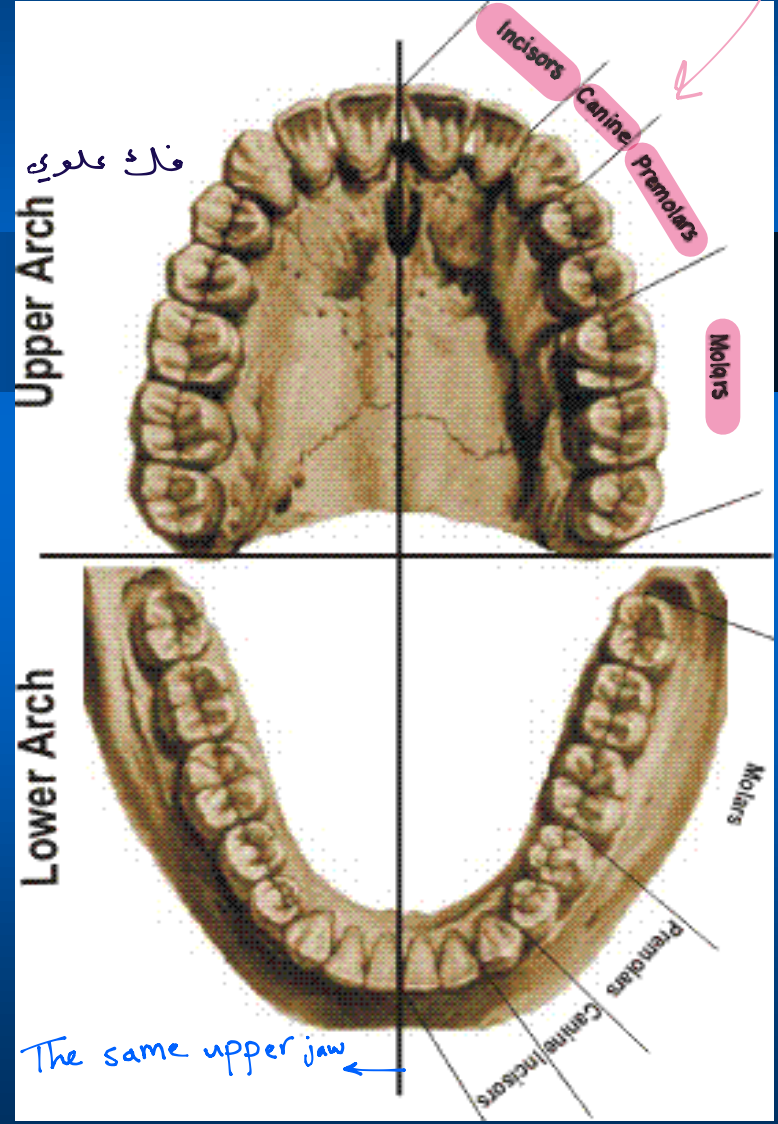
**Associate Professor of Oral Biology  
Faculty of Dentistry**

# Tooth classification & numbering systems



# The Jaws & Dental Arches

\* We have 4 types of teeth in every quarter  
 1 Incisors 2. Canine 3- Premolars 4 molars  
 قواطع ناب



فك علوي

# The Jaws and Dental Arches

فلك علوي ←

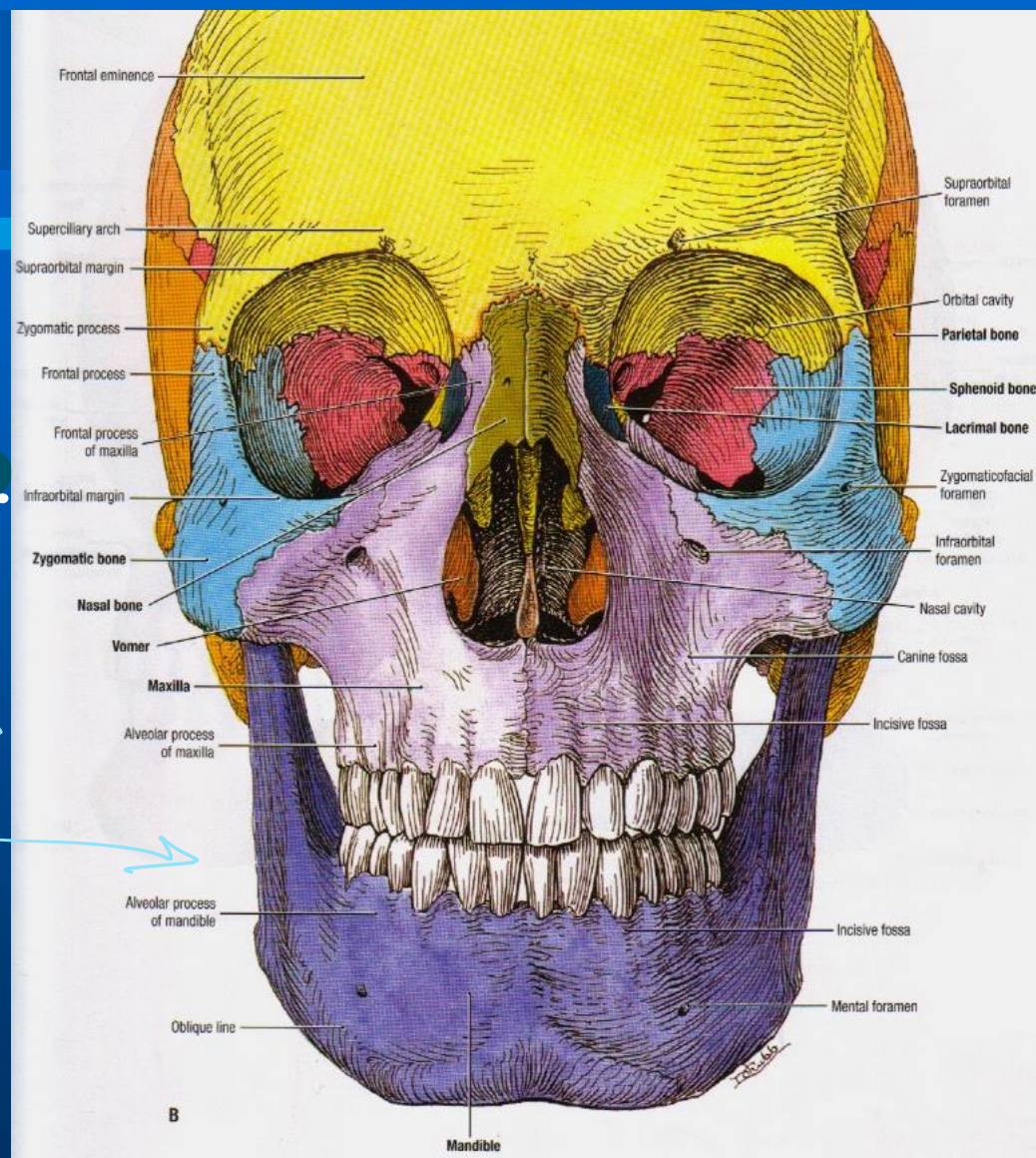
- **A. The maxilla** is two bones forming the upper jaw; they are rigidly attached to the skull.

فلك سفلي ←

- **B. The mandible** is a horse-shoe shaped bone which articulates with the skull by way of the temporo-mandibular joint the TMJ.

انه الفلك السفلي يشبه حذاء الحصان

وانه يفصل الفلك السفلي عن الكعك by: ↑



# Quadrants: right & left quadrants

الأربع

Maxillary right  
and left.

Mandibular right  
and left.

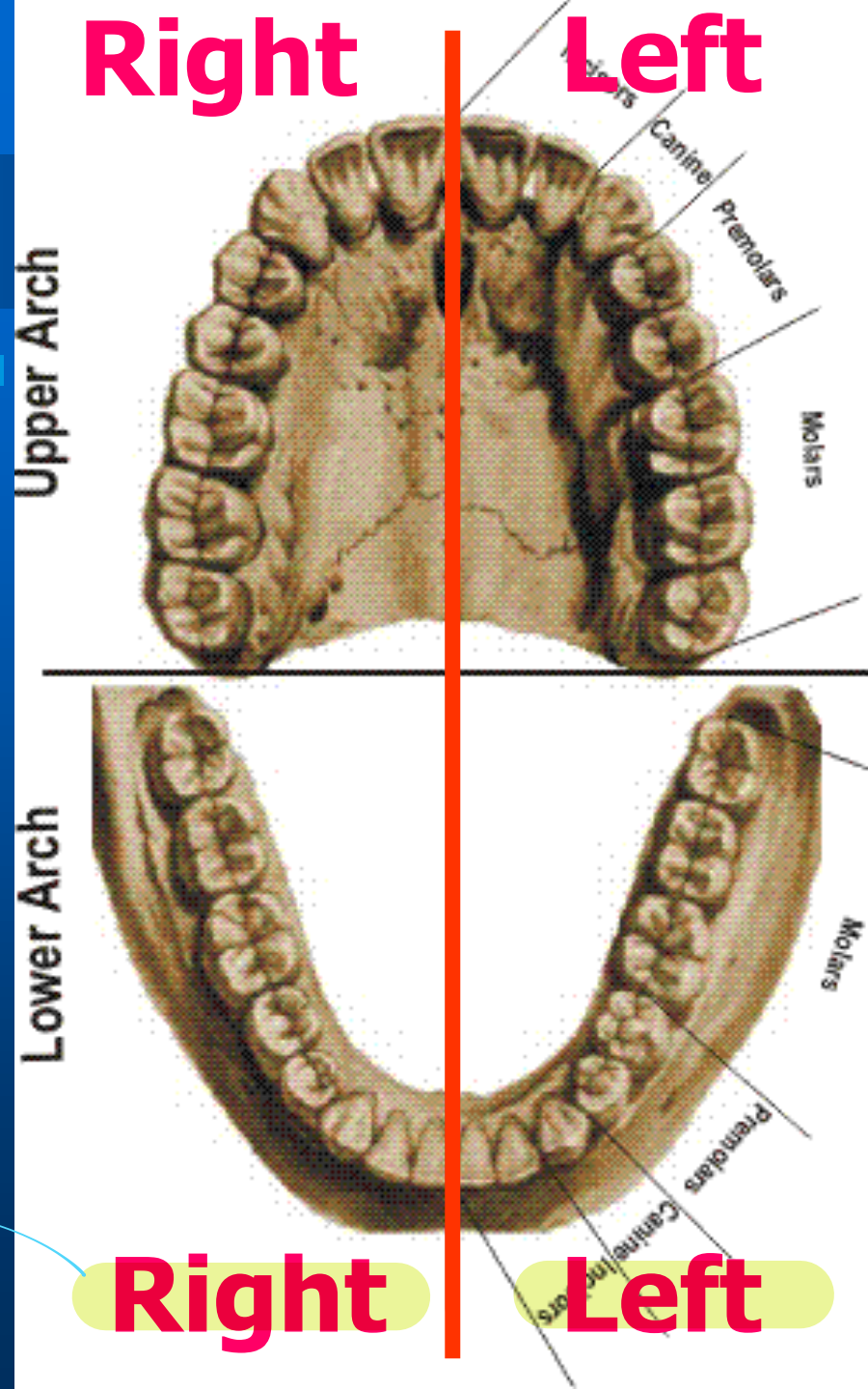
4 Quadrants

انتبهوا انه احنا بنكوي (right or left)

بالنسبة للمريض

Right

Left



# Types of Teeth



Anterior Teeth

← آمامي

for

function: cutting & tearing

قطع و تمزيق

food

6 Anterior

خلفي

Posterior Teeth

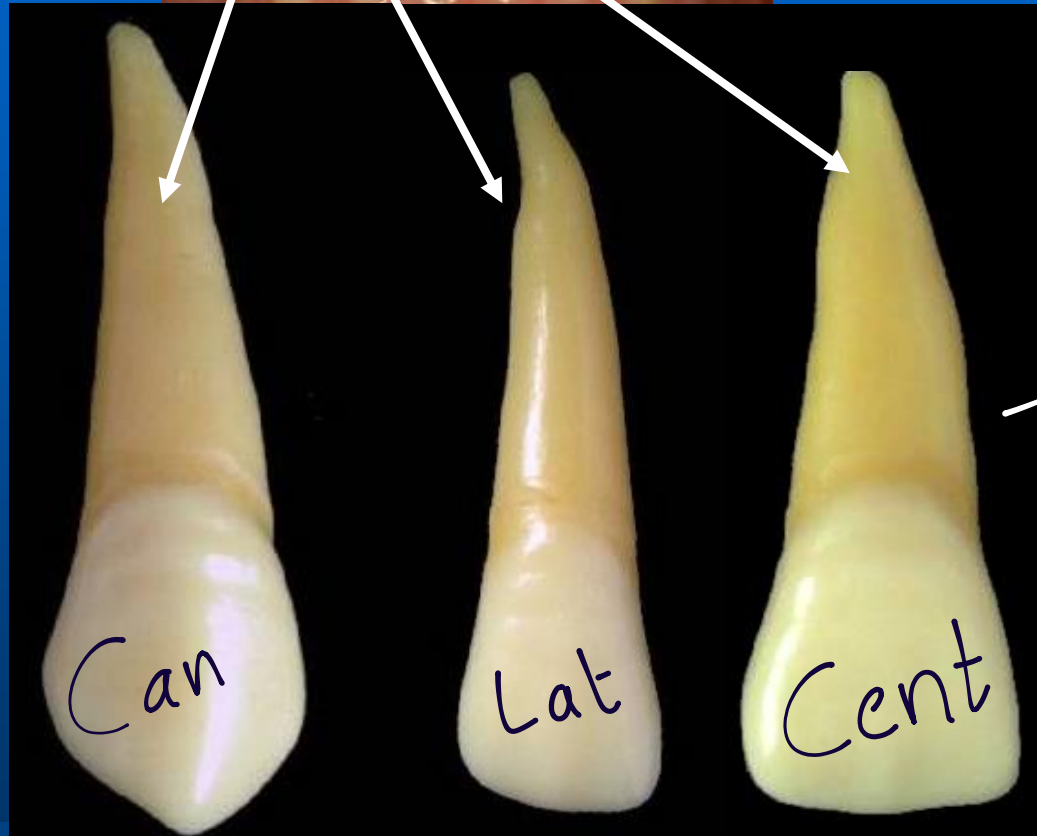
Tearing & grinding

food

func: تقطيع و طحن



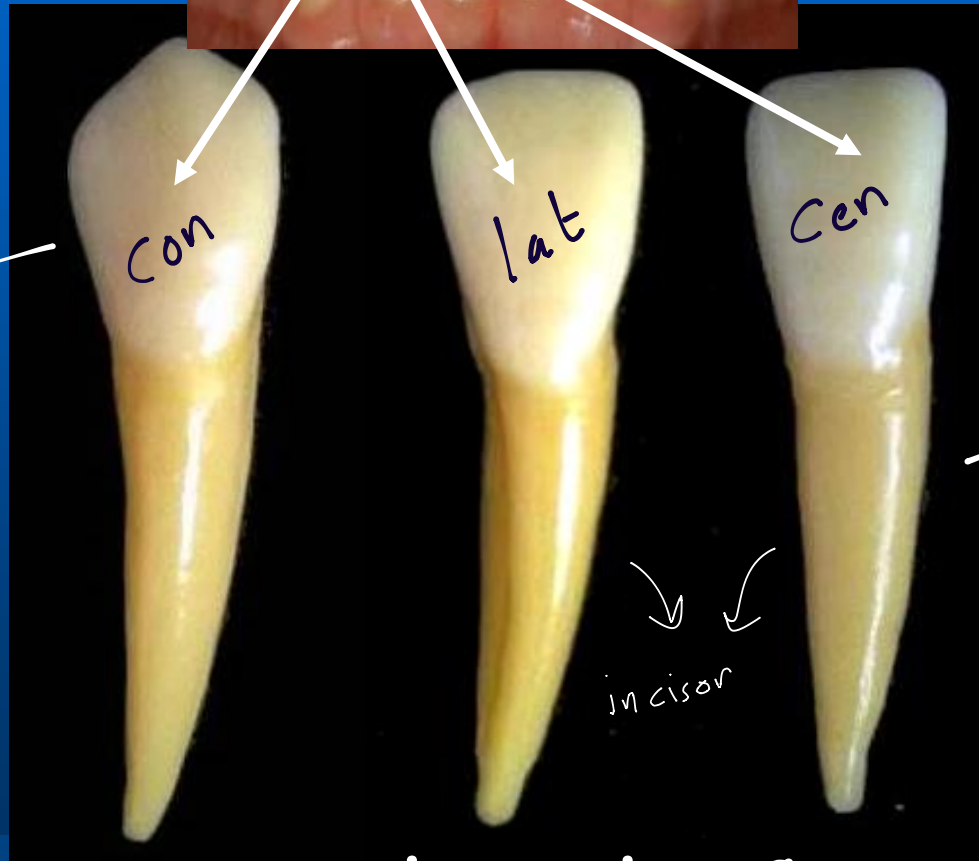
# Anterior Teeth - Upper



Canine lateral Central  
Incisors

عاجي

# Anterior Teeth - Lower

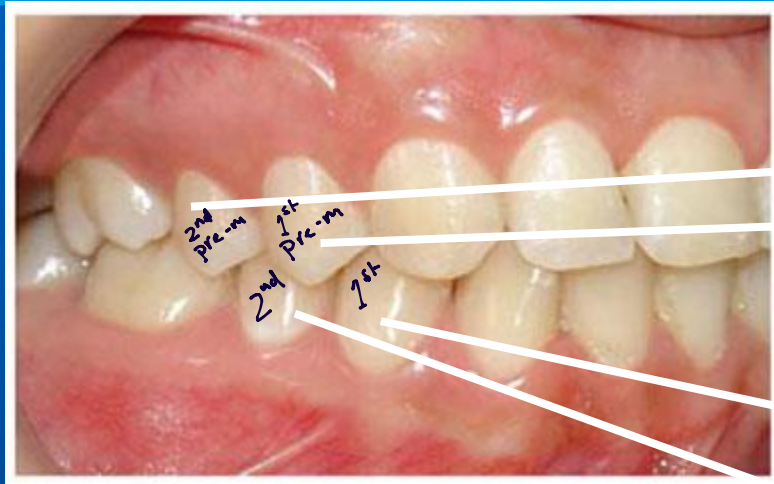


Canine

lateral - Central  
Incisors



# Premolars: (in permanent only)



Upper



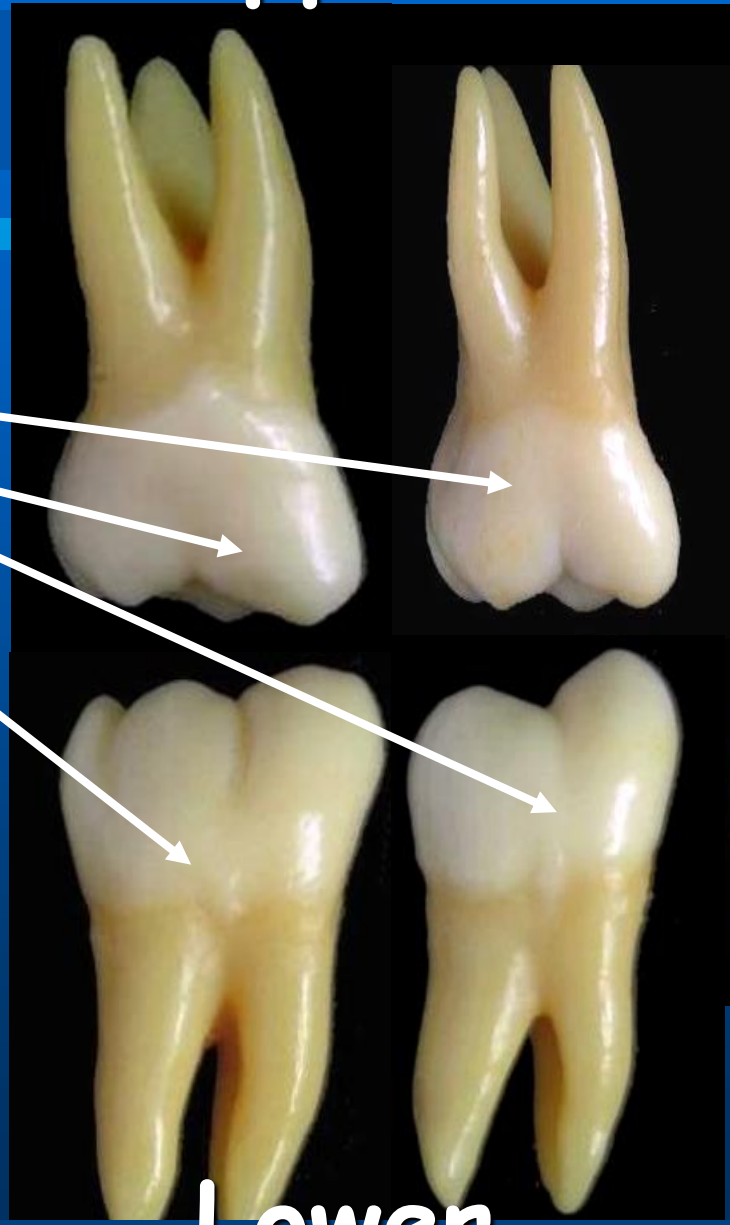
Lower

First premolar  
&  
Second premolar

شیردردی نقرق  
بینا pre-molar و molar  
کارینه در دندان 2  
بکونوا اثراتی تا 2  
و عدد هم 3  
و عدد هم 3 مع طاقونه اعصاب

# Molars:

Upper

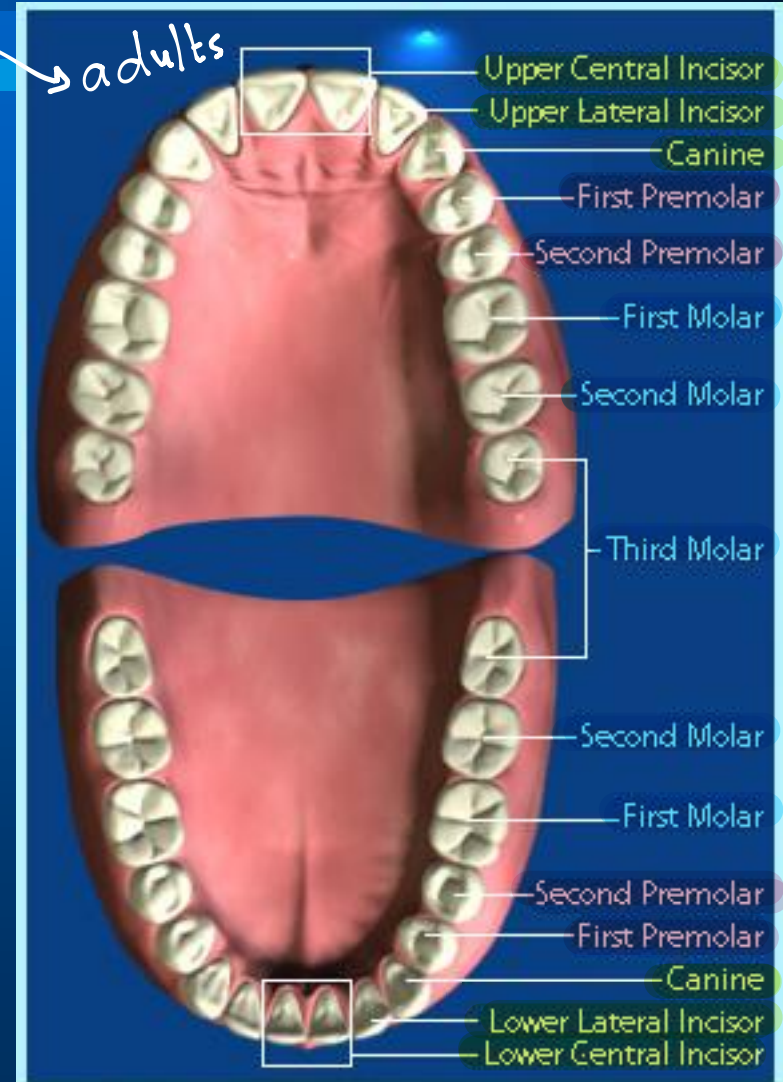
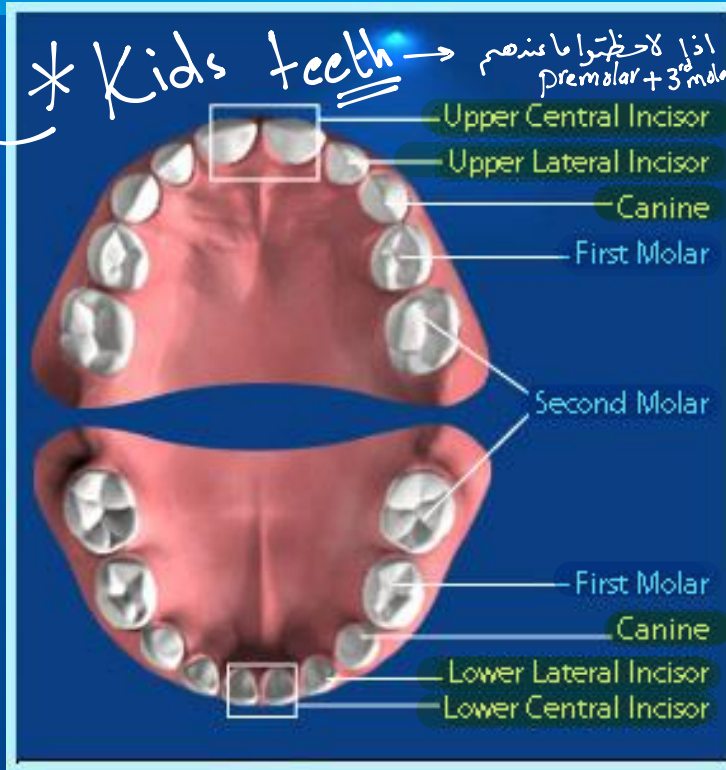


First & second

Wisdom tooth = طاحونة لعقل  
Third permanent molar

Lower

# Types of Dentitions: Primary & Permanent Dentition



علم حفظ  
بادي ترة

# Types of Dentitions:

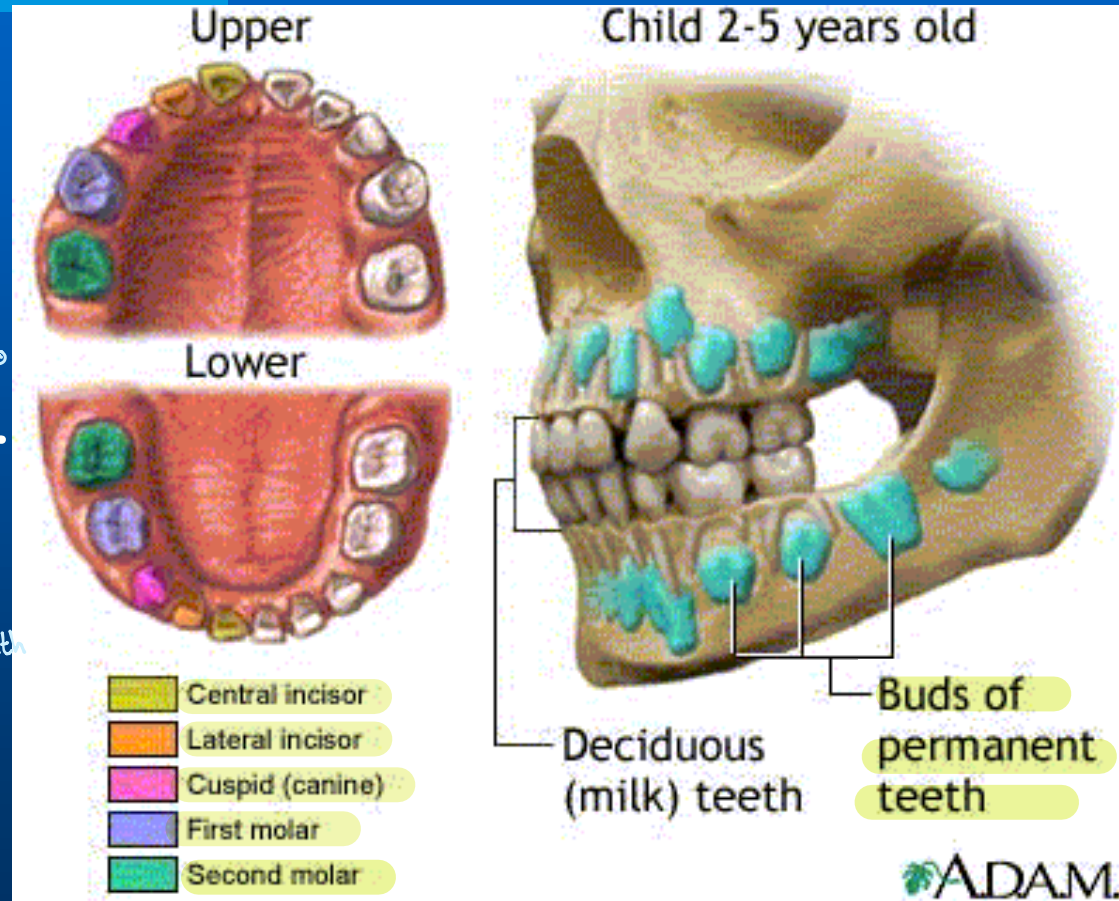
## I-Primary Dentition

العصر الأكثر من الاسم

Deciduous ,baby, milk teeth:

- a. **Twenty (20)** ✓✓ primary teeth. ٢٠
- b. **10** in each arch → ١٠ في قوس
- c. **5** in each quadrant ٥ في ربع

In function: Age range for these teeth  
**2 years** ⇔ **12 years**



# I-Primary Dentition





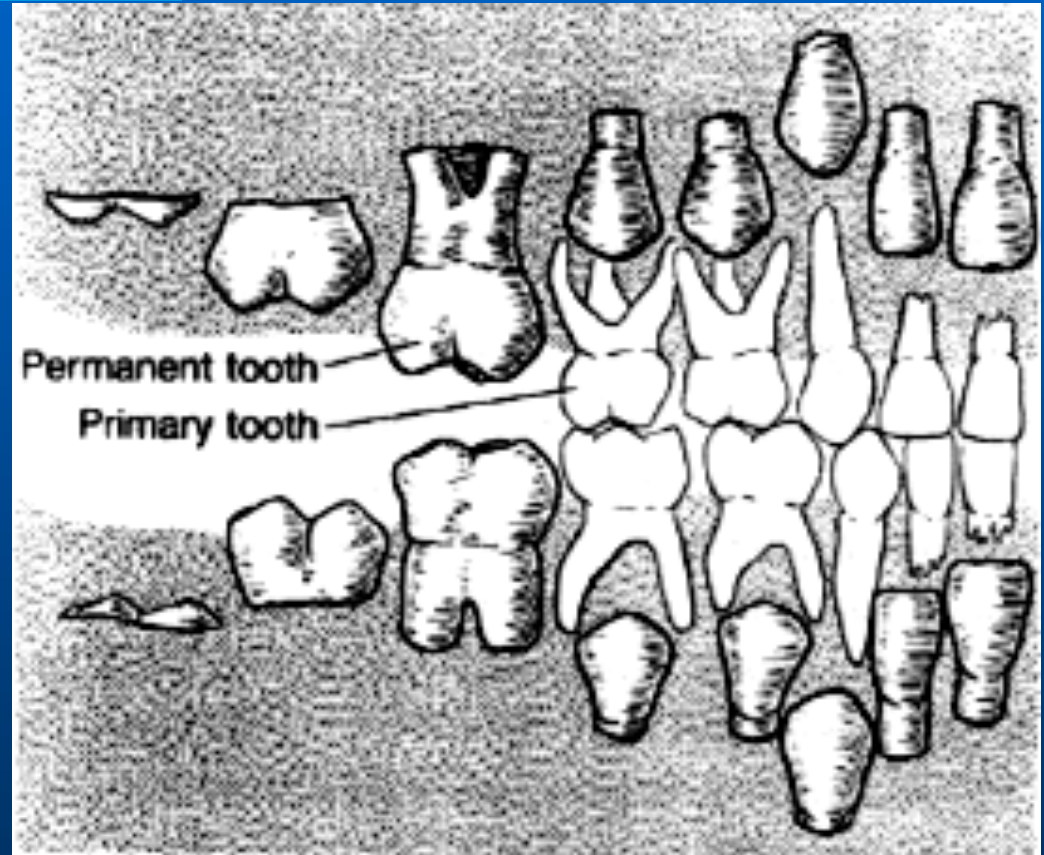
# Mixed Dentition Period

6 years → 12 years



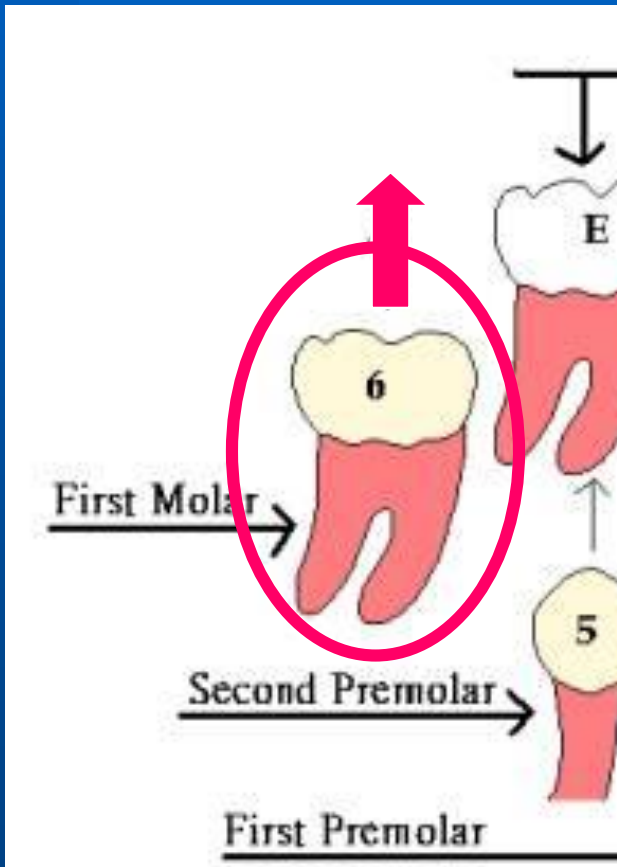
**Eruption**  
of  
first  
permanent  
molar

**Shedding**  
of  
last  
primary  
molar



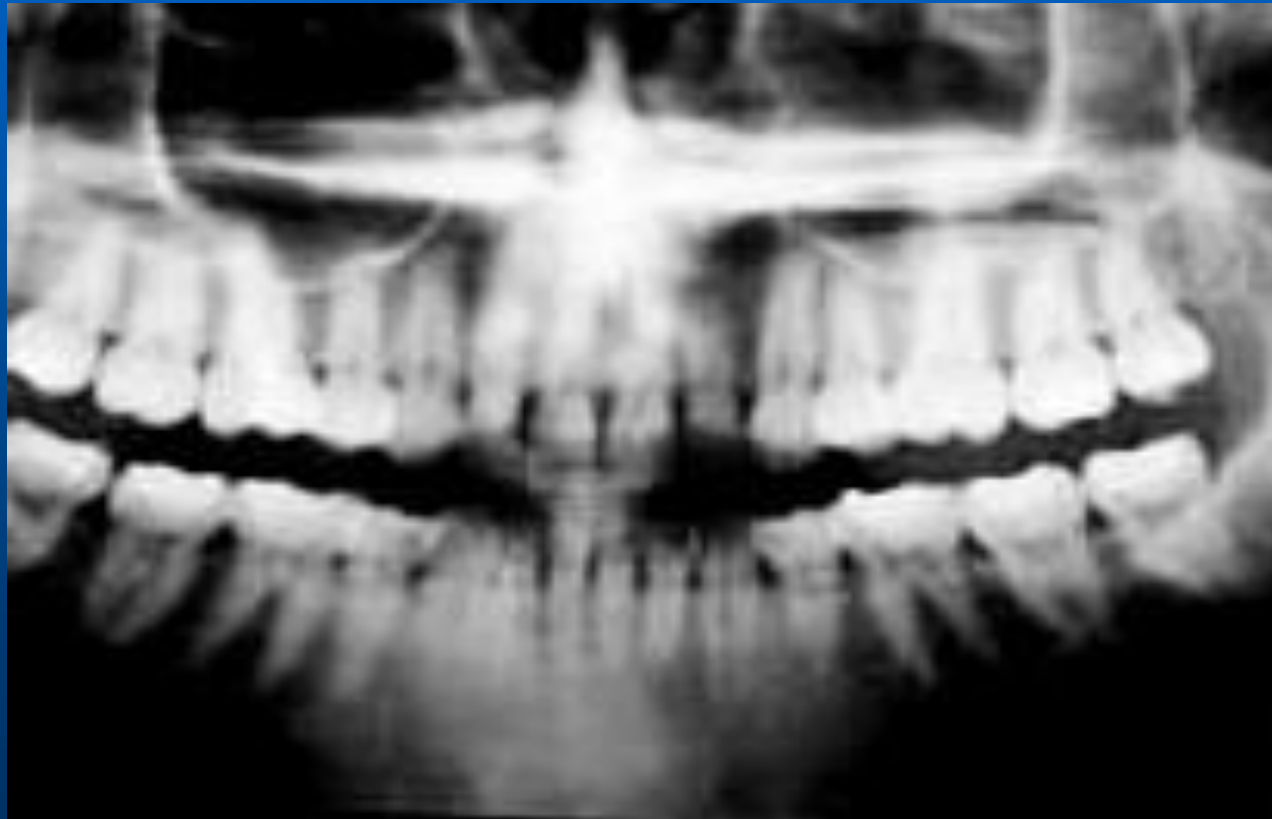
53

# 6 years → eruption of first permanent molar



انتهاء القلع  
↑

12 years ⇒ Shedding of **last** primary molar





# II-Permanent Dentition

أسنان دائمة

In  
function:  
12 years



through  
out  
life

Upper



Lower



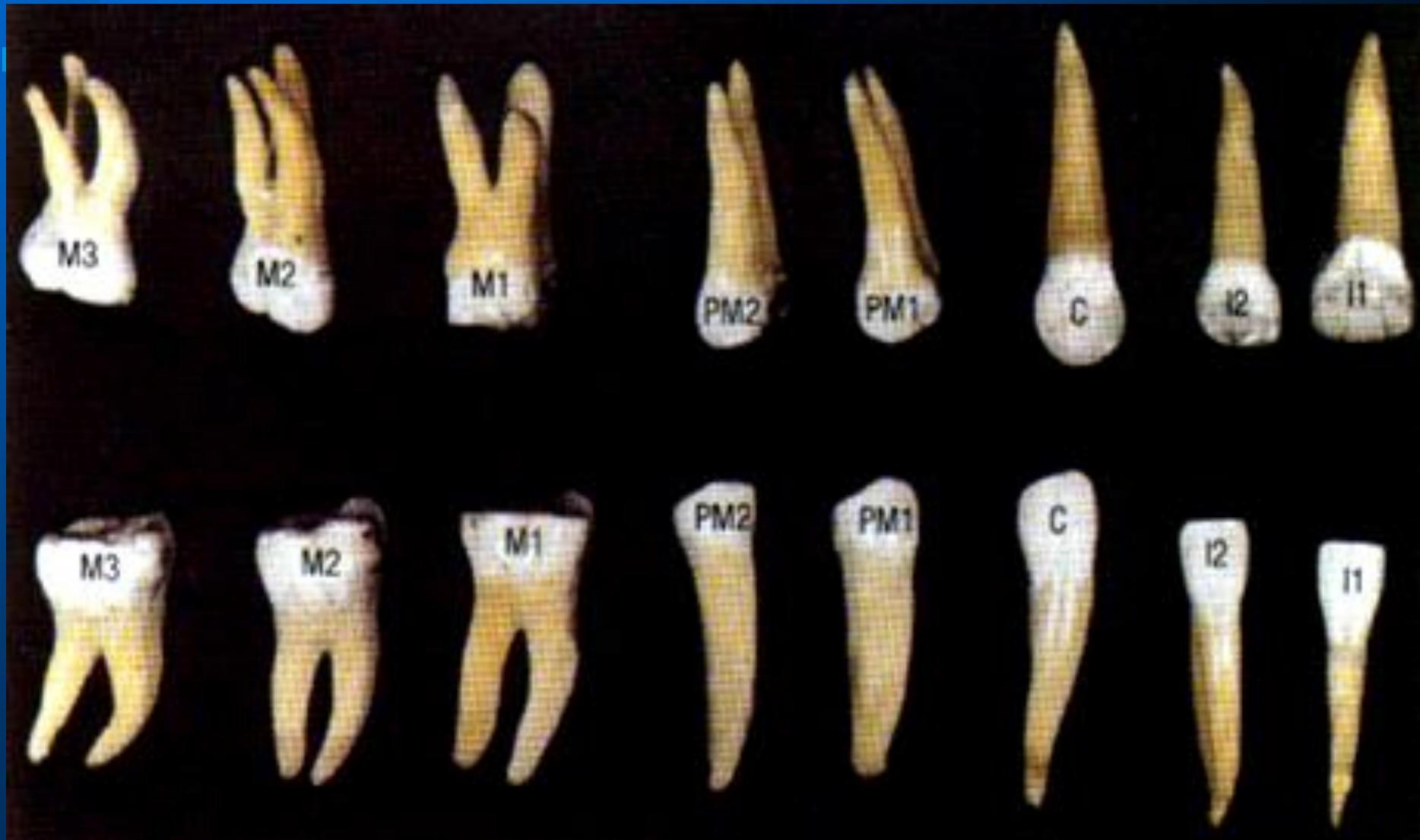
- |   |   |
|---|---|
|  Central incisor           |  Second premolar (bicuspid) |
|  Lateral incisor           |  First molar                |
|  Cuspid (canine)           |  Second molar               |
|  First premolar (bicuspid) |  Third molar                |

Adult 21-25 years old



Permanent  
(adult)  
teeth

# Permanent Teeth



# The Dentitions

Humans have two dentitions

1-The primary dentition: (deciduous)

سماضان لسيبة

كلوي

سفي

20 teeth. 10 maxillary and 10 mandibular.

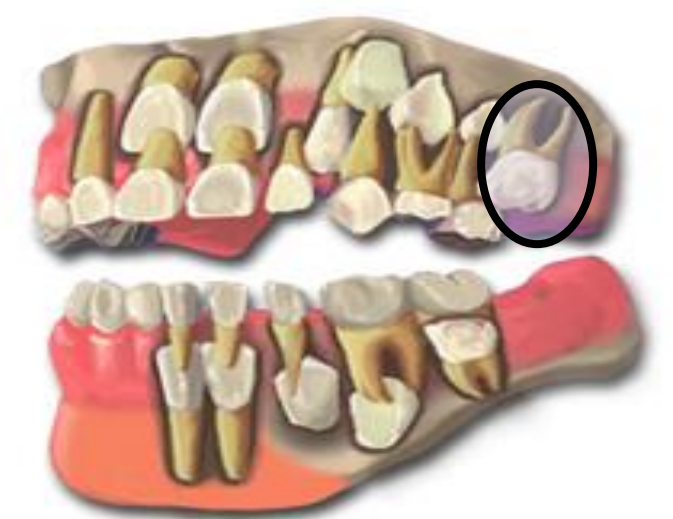
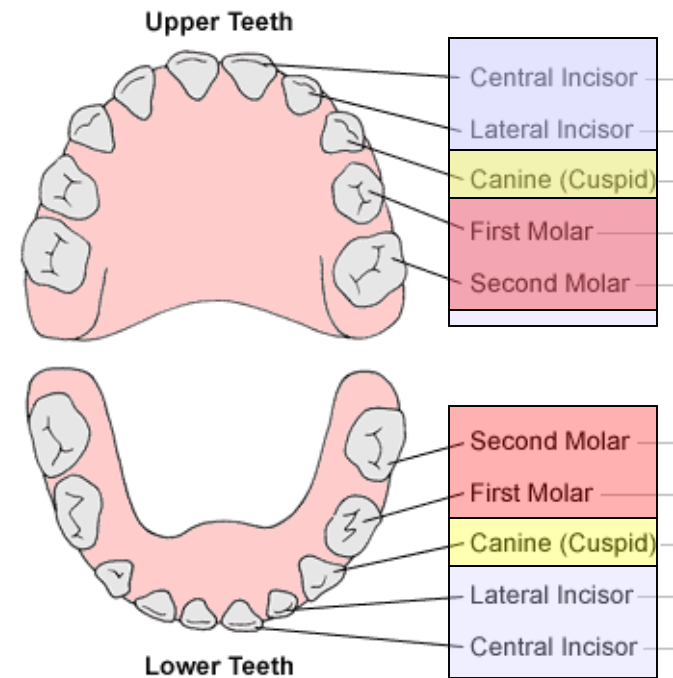
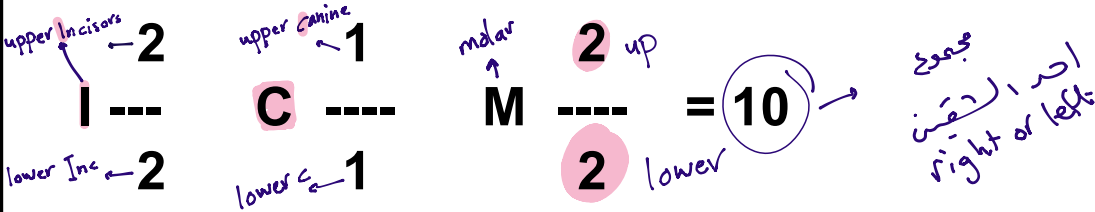
5 teeth are present in each quadrant.

2 incisors.

1 canine.

and 2 molars.

The dental formula is:



# The Dentitions

## 2-The permanent dentition:

(secondary, adult or succedaneous)

أسنان دائمة

32 teeth, 16 maxillary and 16 mandibular.

8 teeth in each quadrant are Present.

2 incisors.

1 canine.

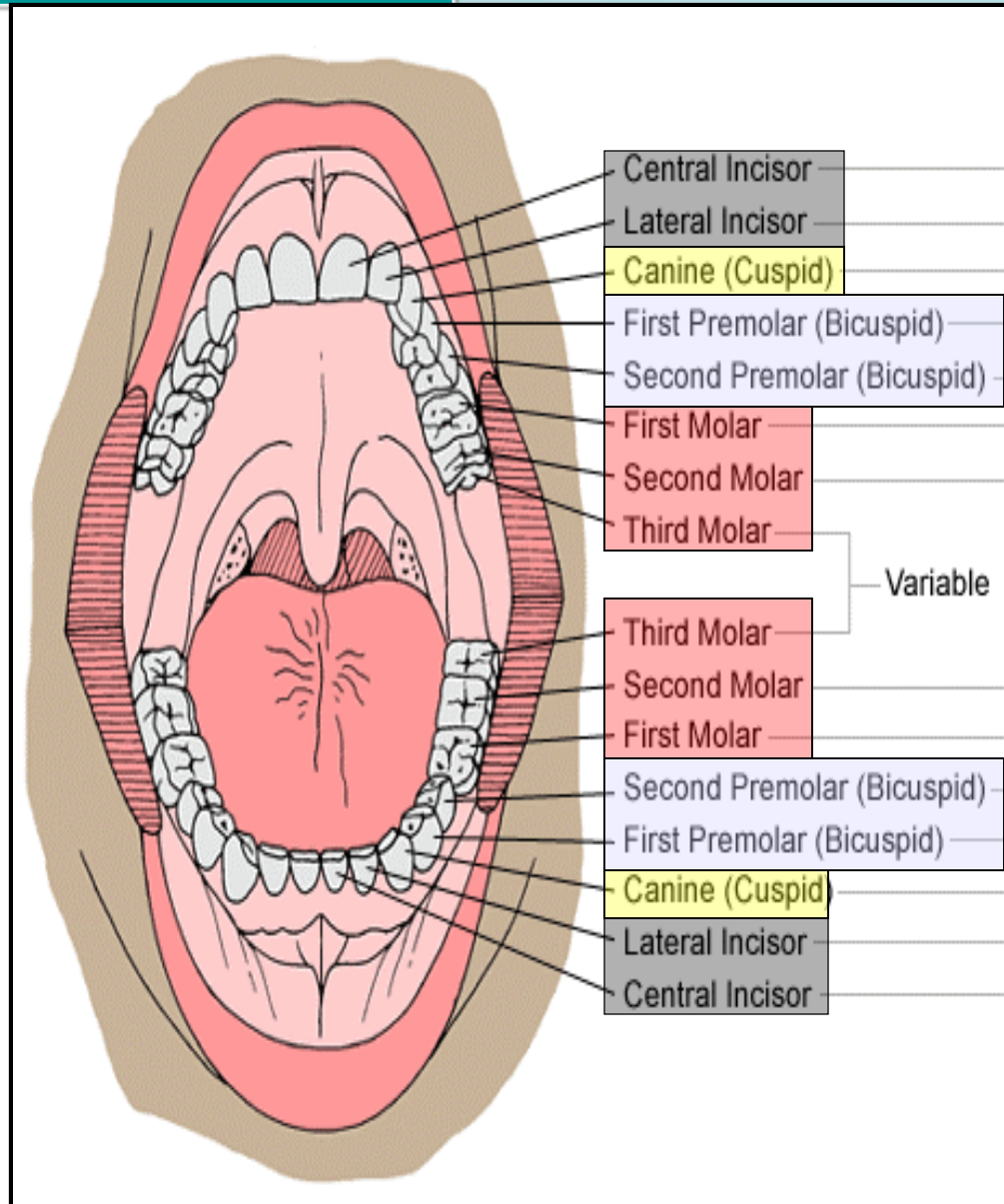
2 premolars.

and 3 molars.

**The dental formula is :**

$$\begin{array}{ccccccc}
 2 & 1 & 2 & 3 & & & \\
 I & - & C & - & PM & - & M & - & = & 16 \\
 2 & 1 & 2 & 3 & & & & & & 
 \end{array}$$

The *permanent molars* are not preceded with deciduous teeth so they may be termed as *non-succedaneous teeth*.



لغز معقد جدا  
صحح هذه المعادلة  
بتحرك عود  
ثقاب واحد فقط؟



11K



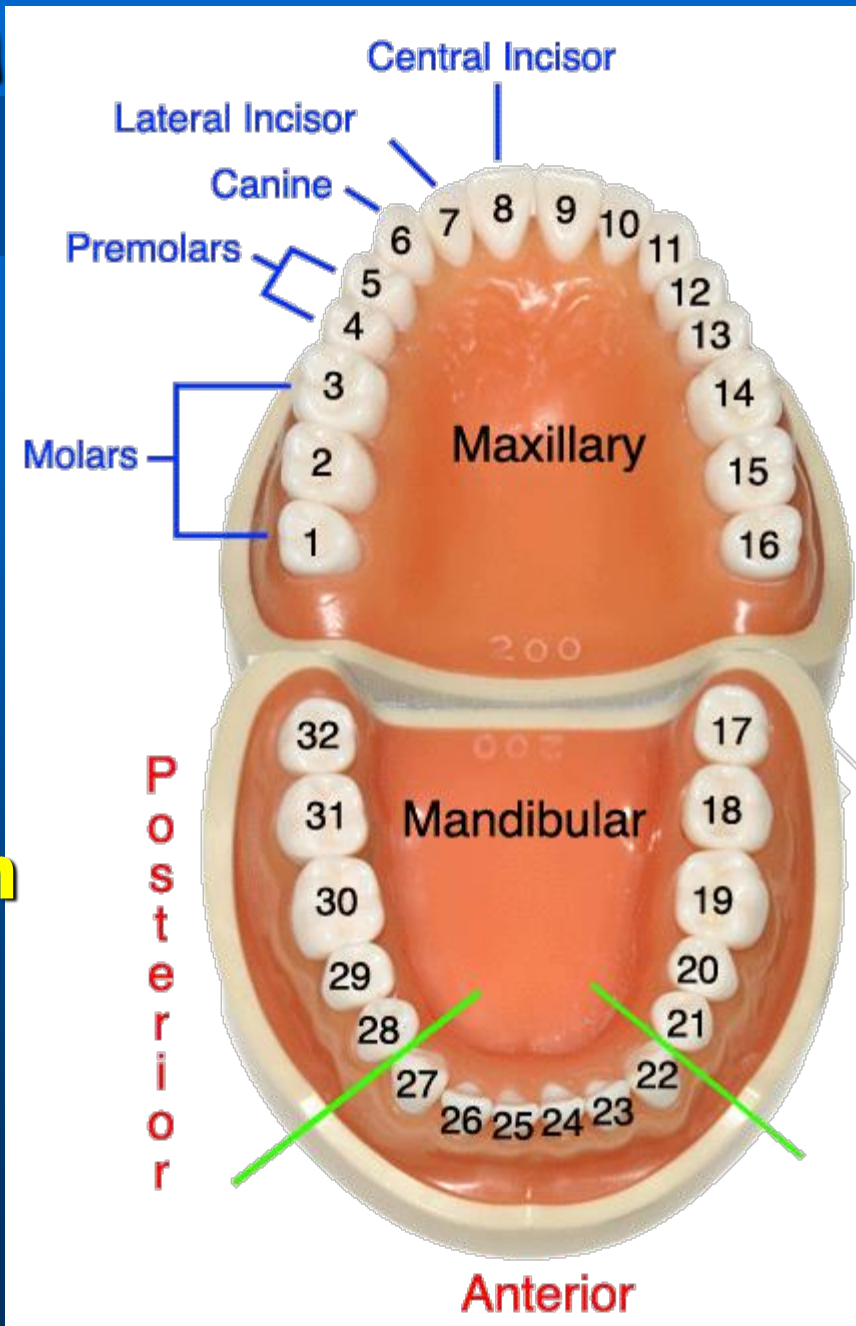
Dialko

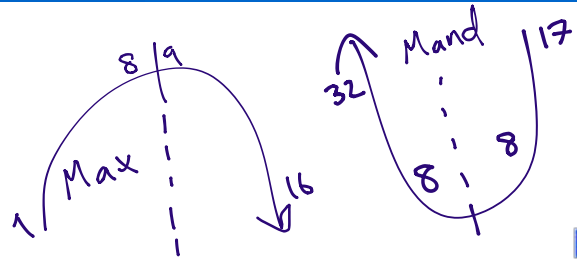
# Tooth Identification Systems

Numbering or Coding Systems

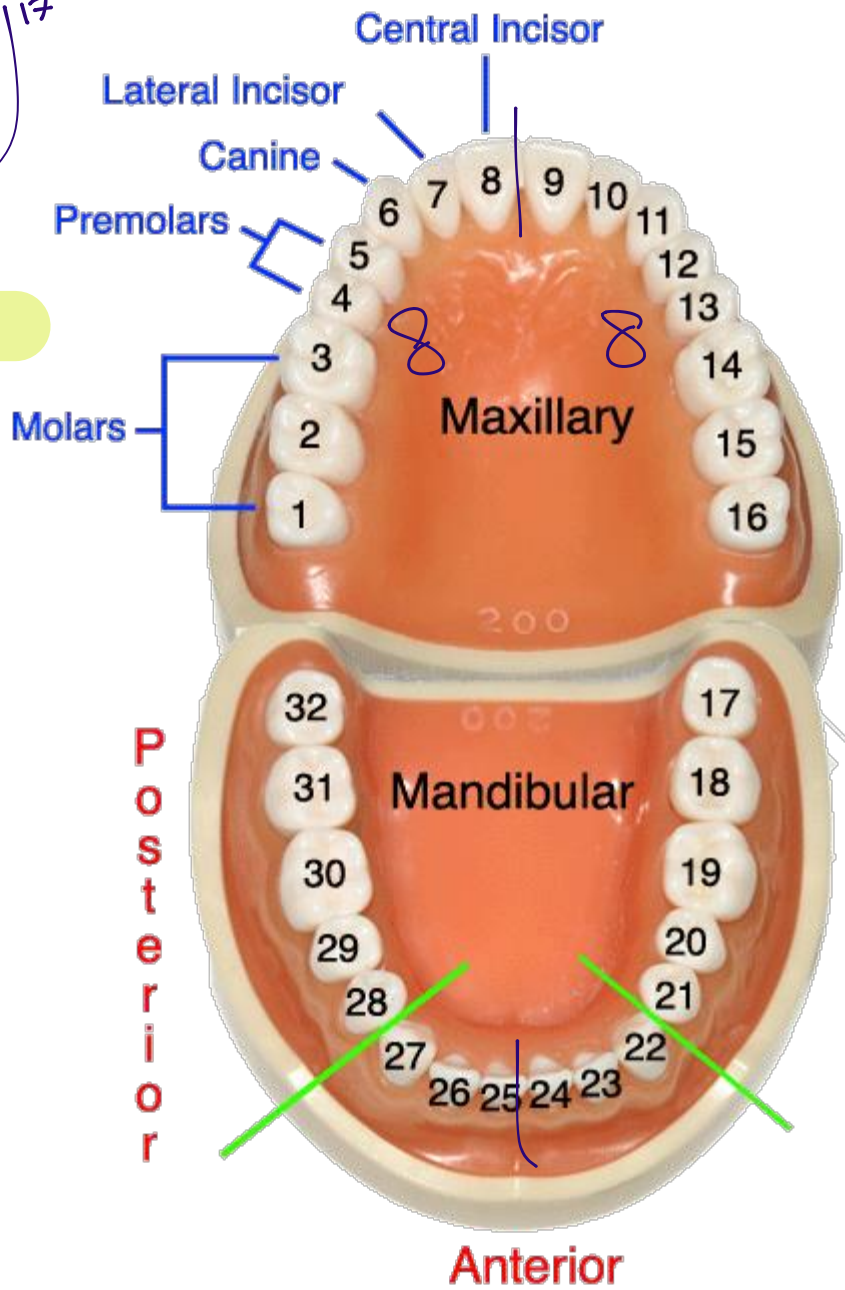
نظام تر الاضانه

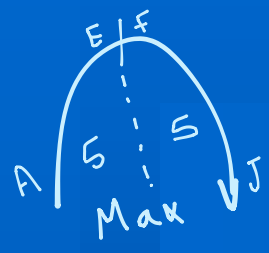
- 1. Universal System
- 2. Palmer Notation System
- 3. International FDI System (two digit system)





# 1- Universal system for Permanent Teeth

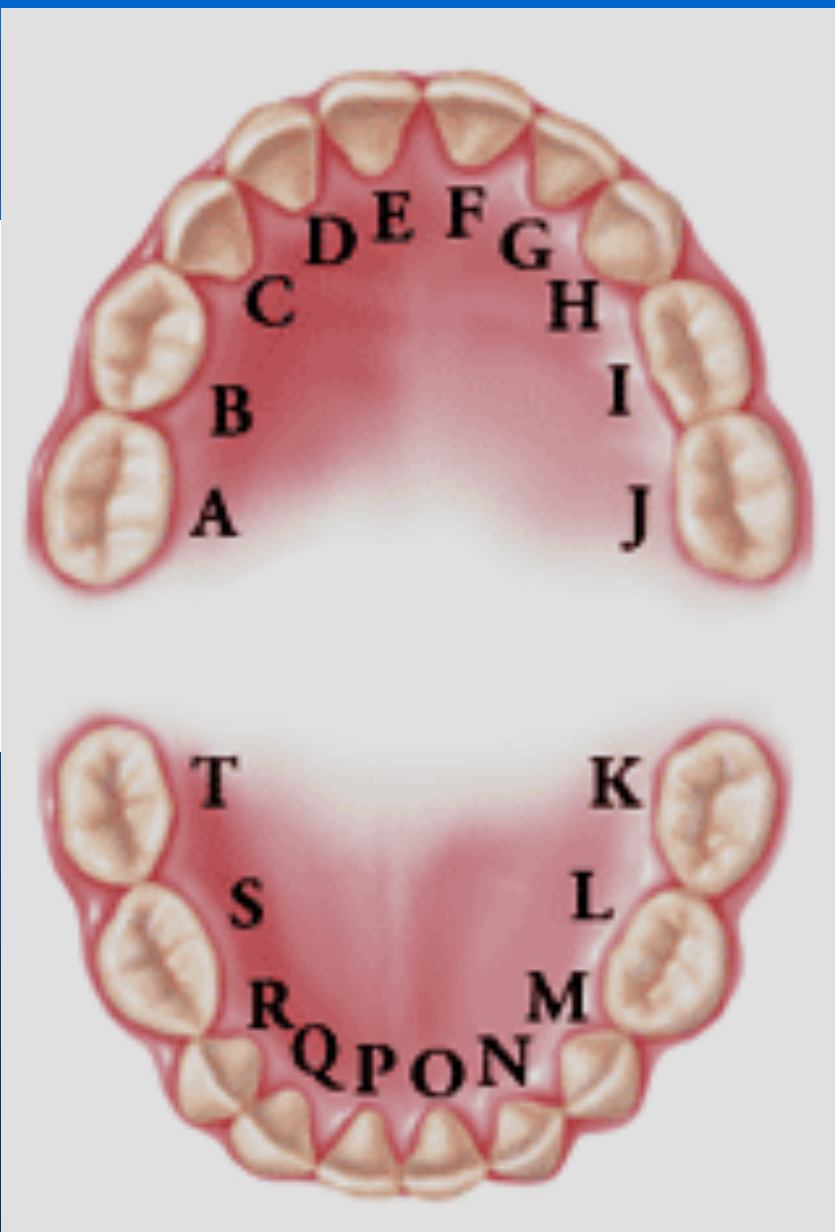




1-

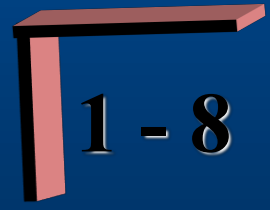
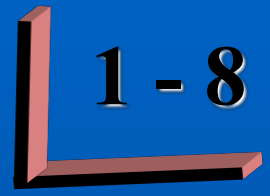
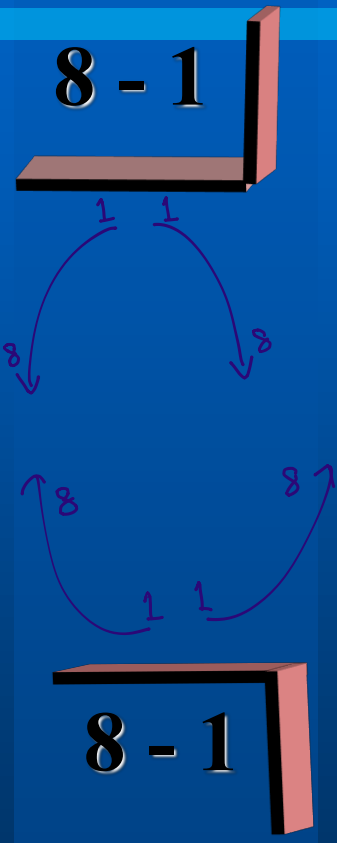
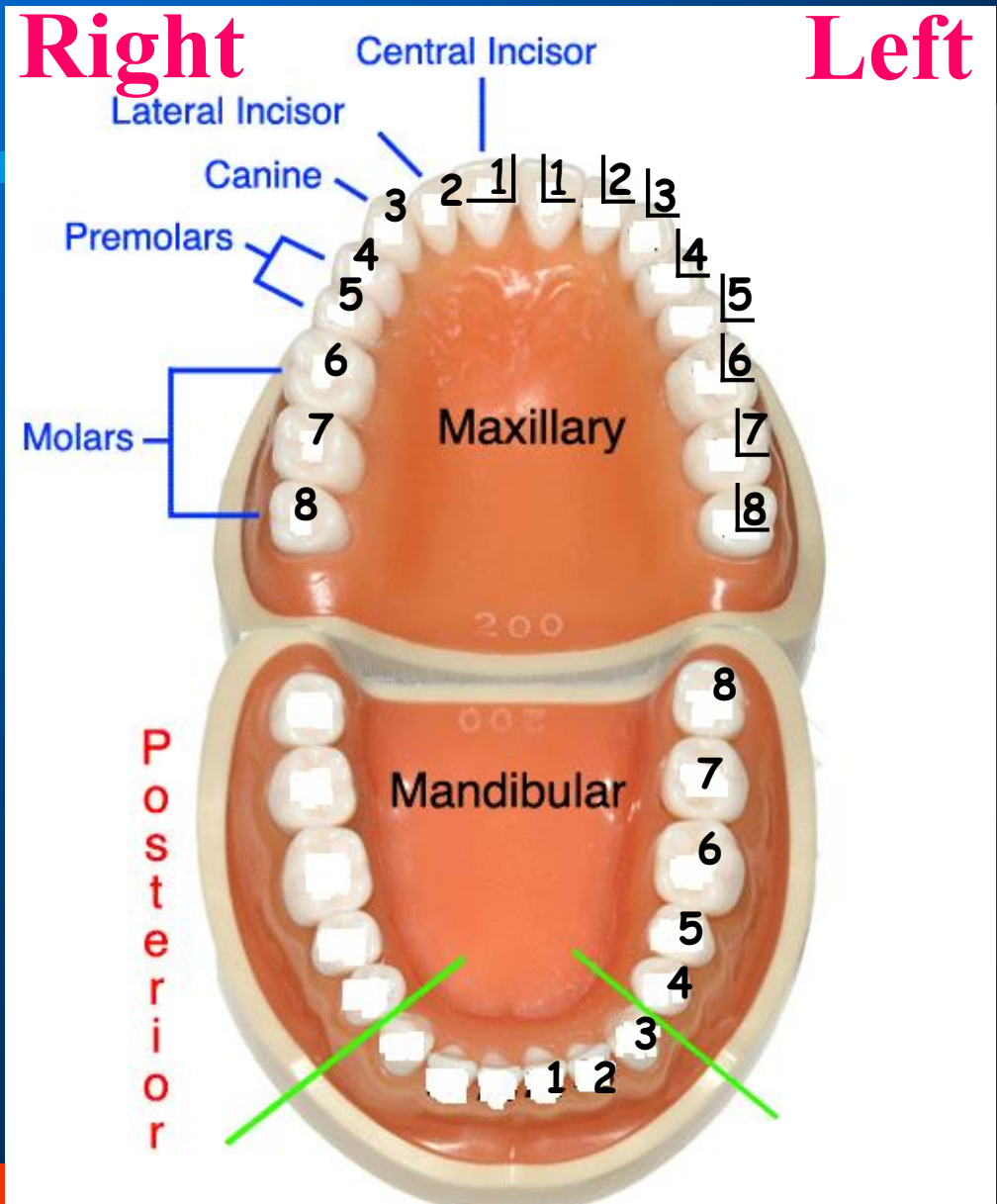
# Universal System for Primary Teeth

سینا





# 2-Palmer Notation System for Permanent Teeth



It represents the four quadrants of the dentition

as if you are facing the patient.

In upper right



In upper left



In lower right



In lower left



**Horizontal and vertical lines = symbol for the quadrant**

**The *permanent teeth* are numbered from 1-8 on each side from the midline.**

*\*count starts from the middle.*

Upper right

8 7 6 5 4 3 2 1

Upper left

1 2 3 4 5 6 7 8

8 7 6 5 4 3 2 1

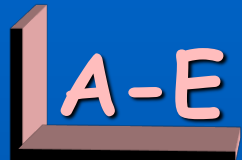
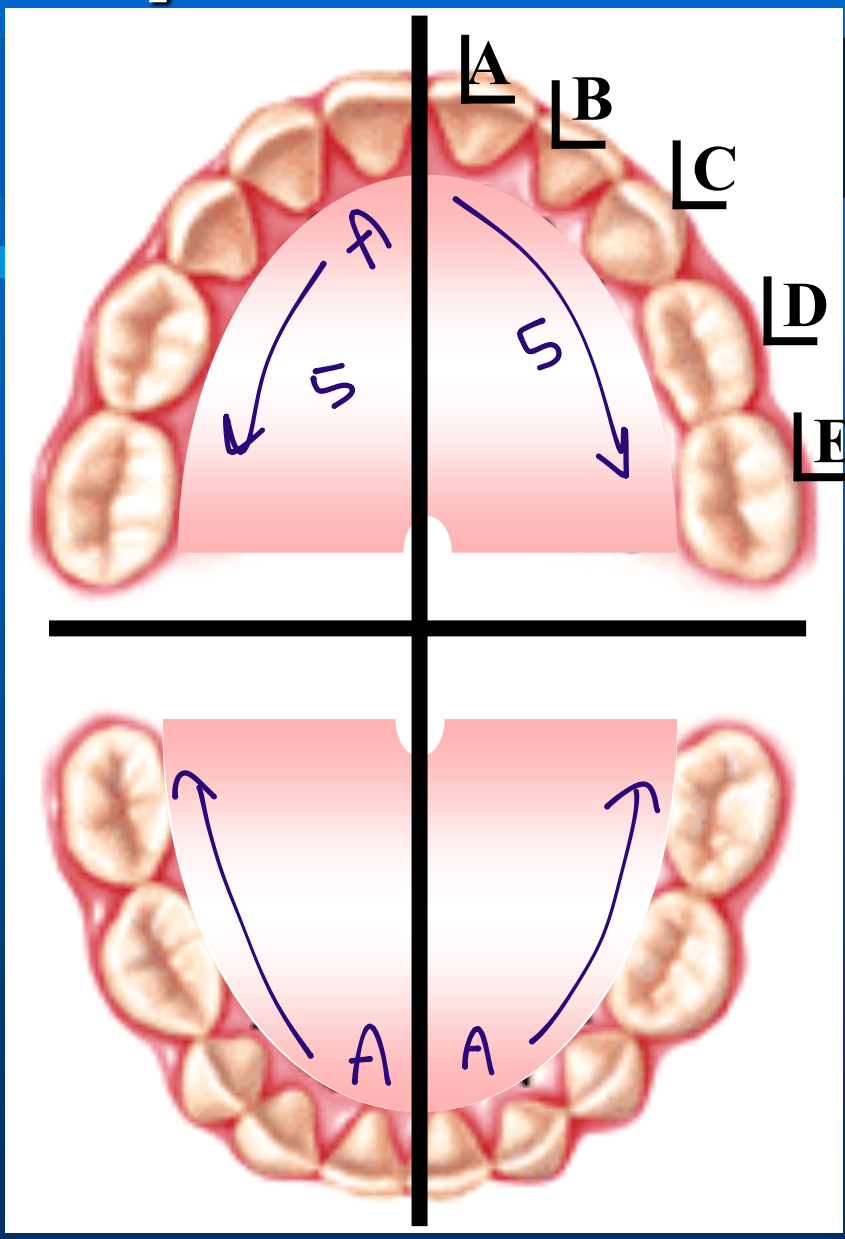
Lower right

1 2 3 4 5 6 7 8

Lower left

# Palmer Notation System

## for Primary Teeth



حفظ اسم كل نظام  
وكيف يتم التوزيع

The deciduous teeth are lettered from A-E on each side from the midline

Upper right

Upper left

E D C B A

A B C D E

E D C B A

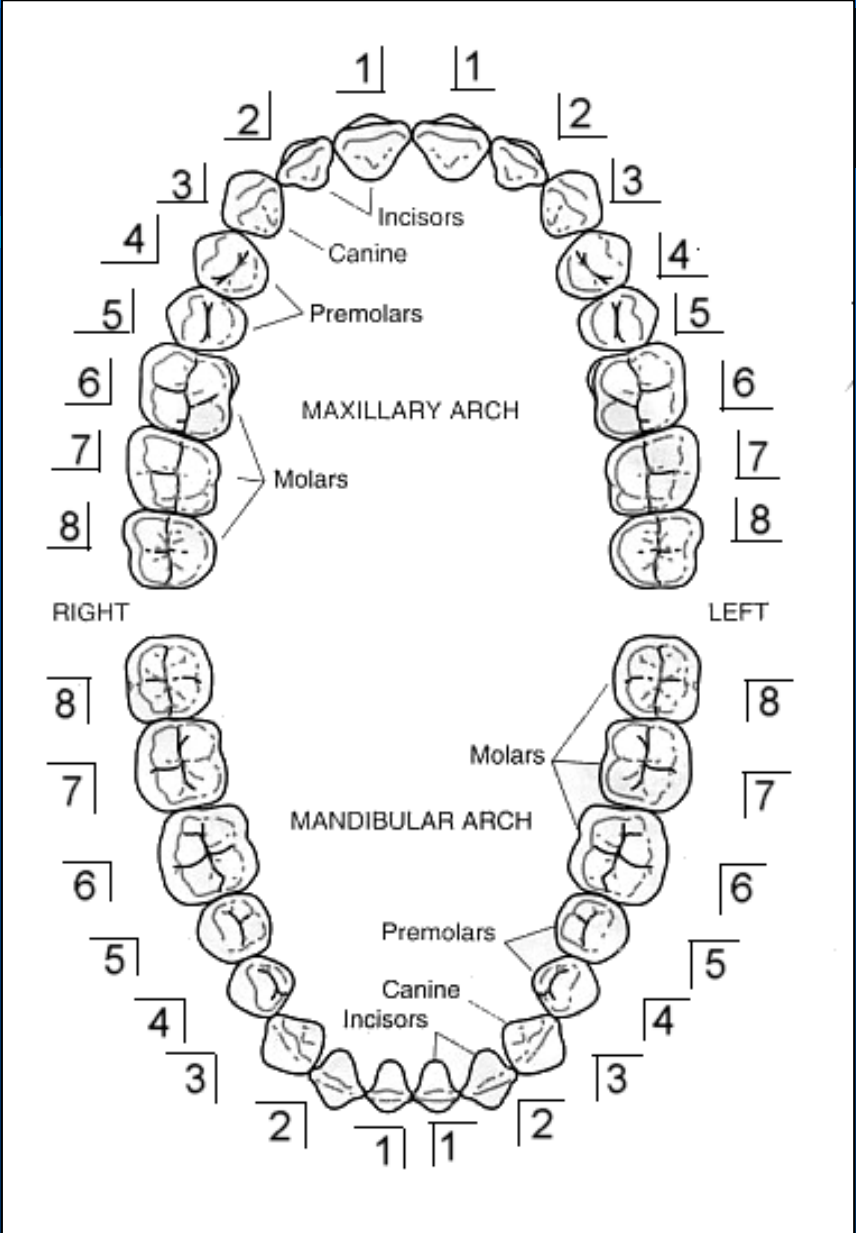
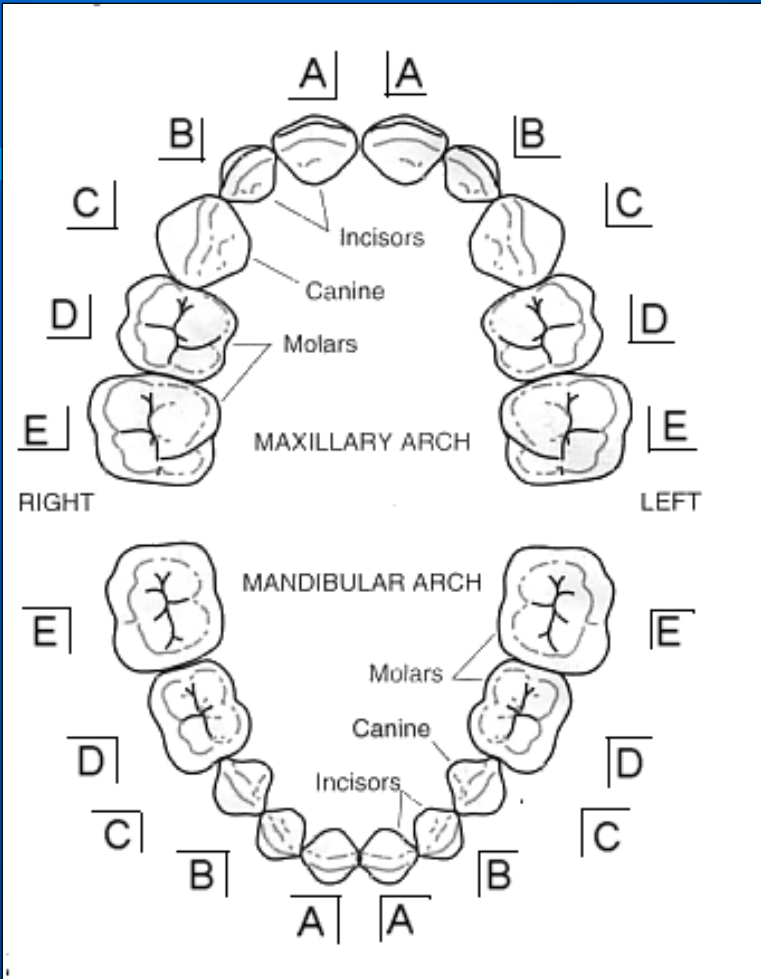
A B C D E

Lower right

Lower left

\* The count starts from the middle

# Palmer Notation System



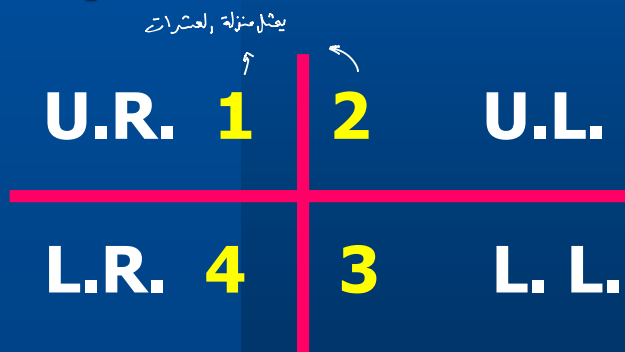
# 2-The International Numbering System

## “FDI” Federation Dentaire International (the two digit system)

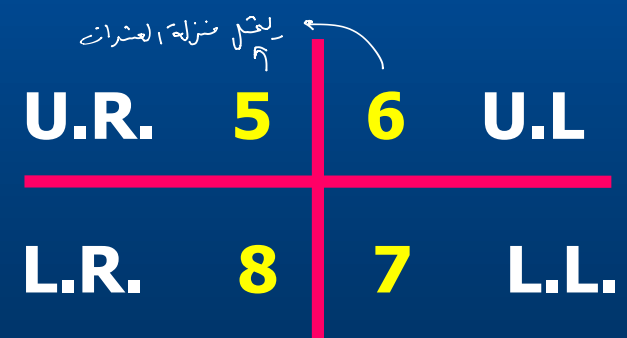
The teeth are designated by using two-digits:

- a. The **first digit** of the code is located at the left side of the number and indicates the **quadrant**:

### In permanent dentition



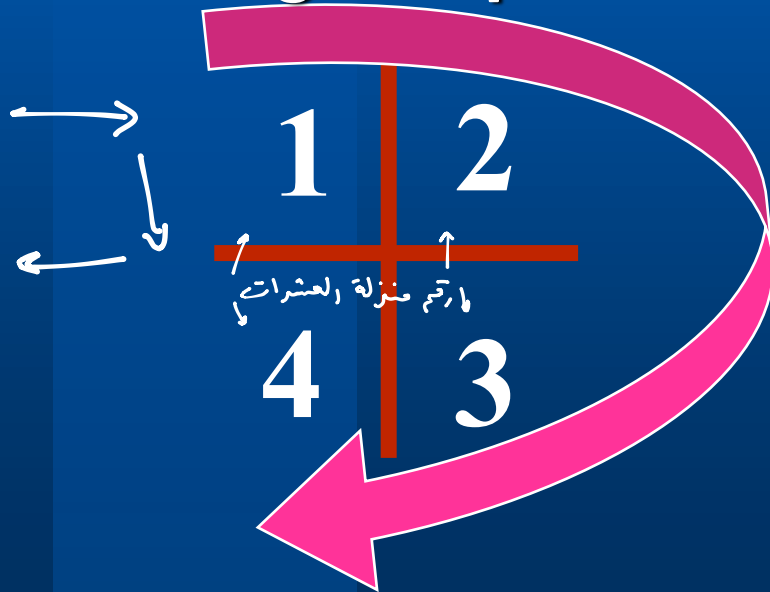
### In deciduous dentition



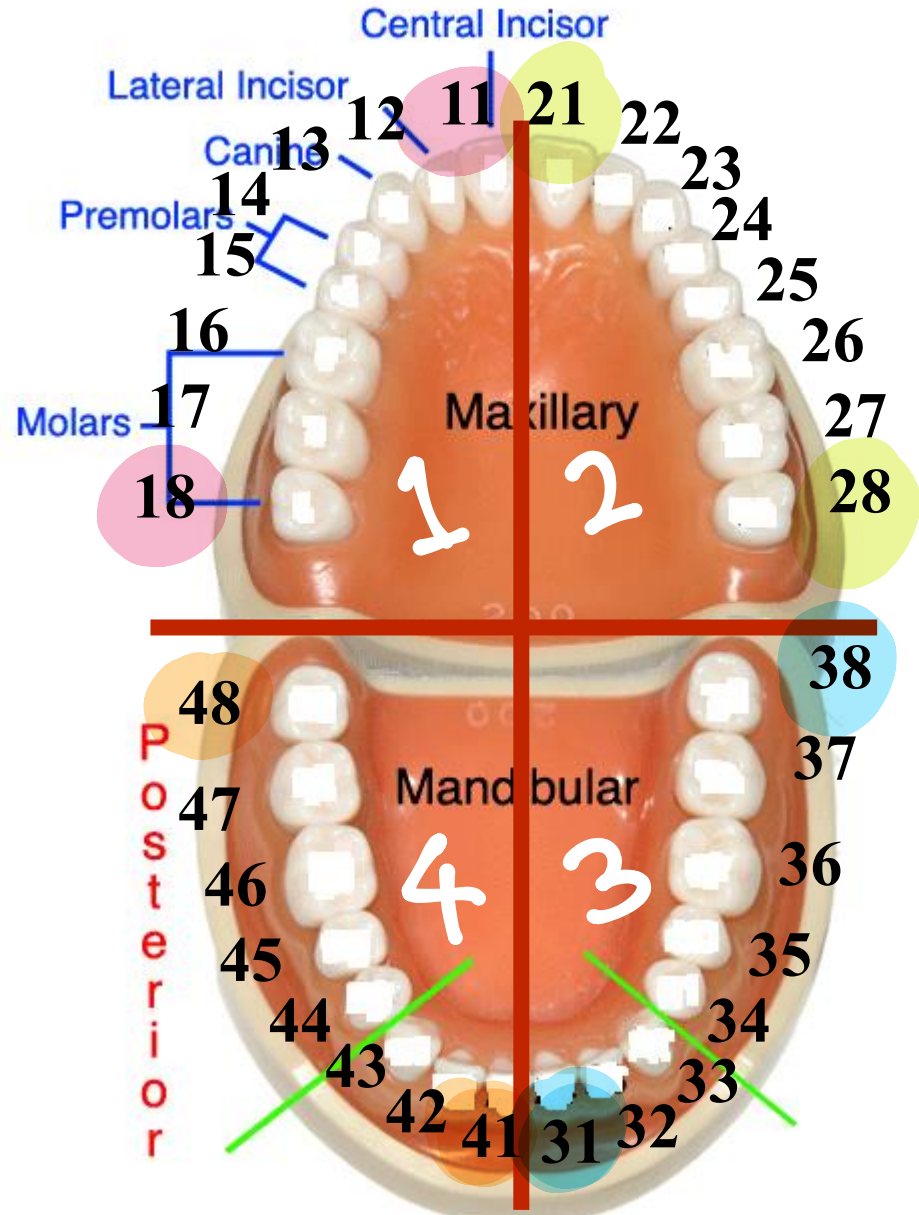
# 3-International System (Two Digit System) "FDI"

Federation Dentaire  
International

First Digit = quadrant



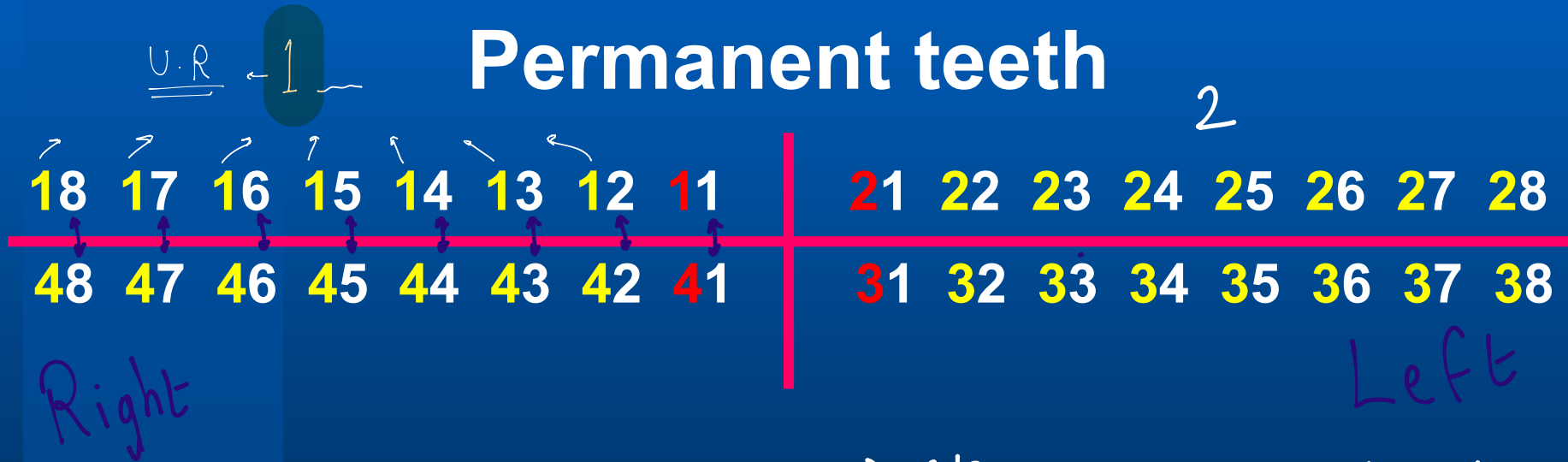
## For permanent Teeth



# Second Digit = Tooth number in the quadrant

b- The **second digit** is located at the right side of the number and indicates the **number of the tooth** in the quadrant.

☀ The two digits should be pronounced separately.



\* الفكرة انه كل اربع له رقم شرارة  $\frac{1}{4} | \frac{2}{3}$   
والاحاد من (1-8) ويبدأ العد من المنتصف  
done?



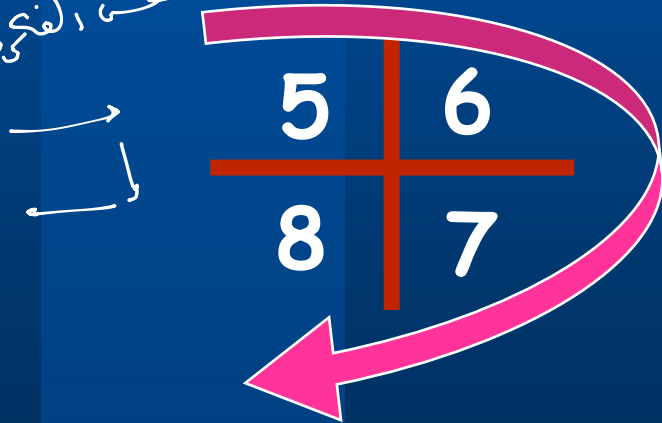
# 2-International System (Two Digit System)

“FDI”

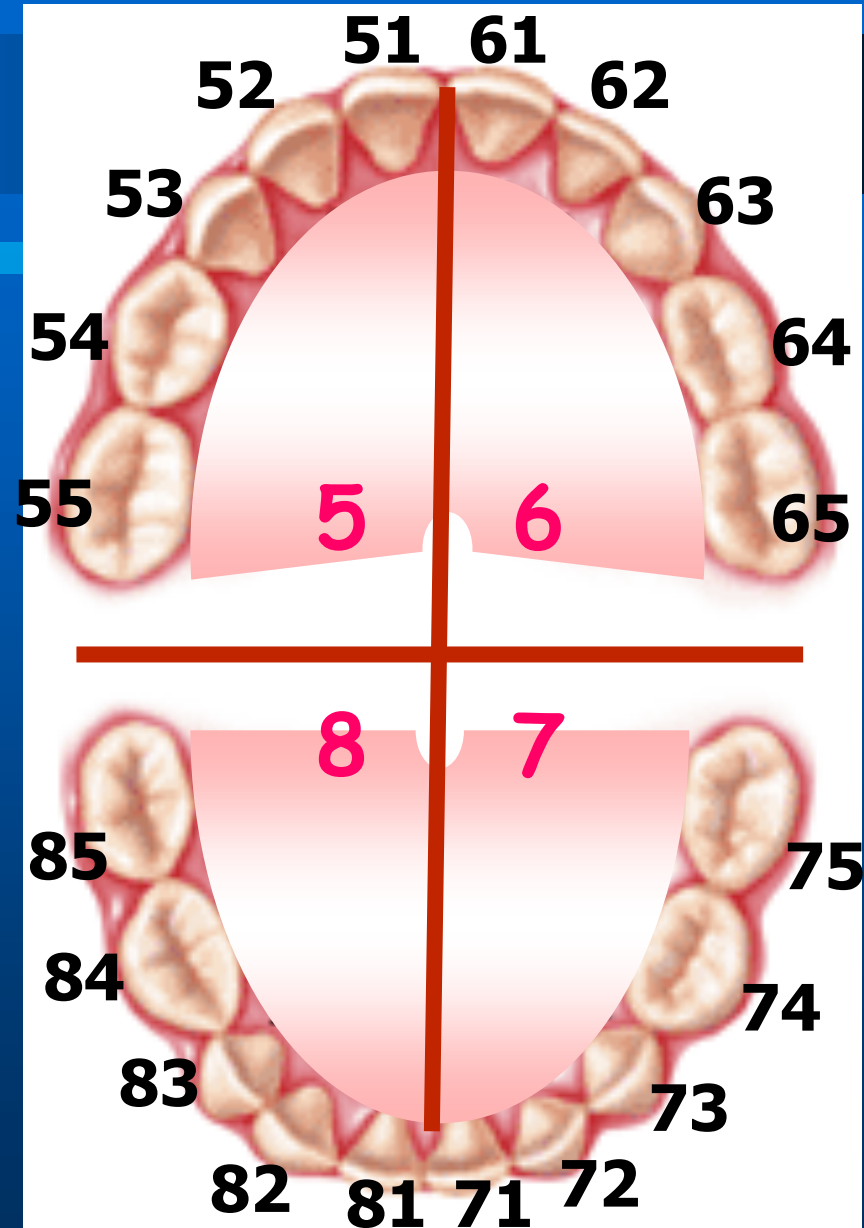
Federation Dentaire  
International

First Digit = quadrant

نفس الفكرة



## For Primary Teeth



For Primary Teeth

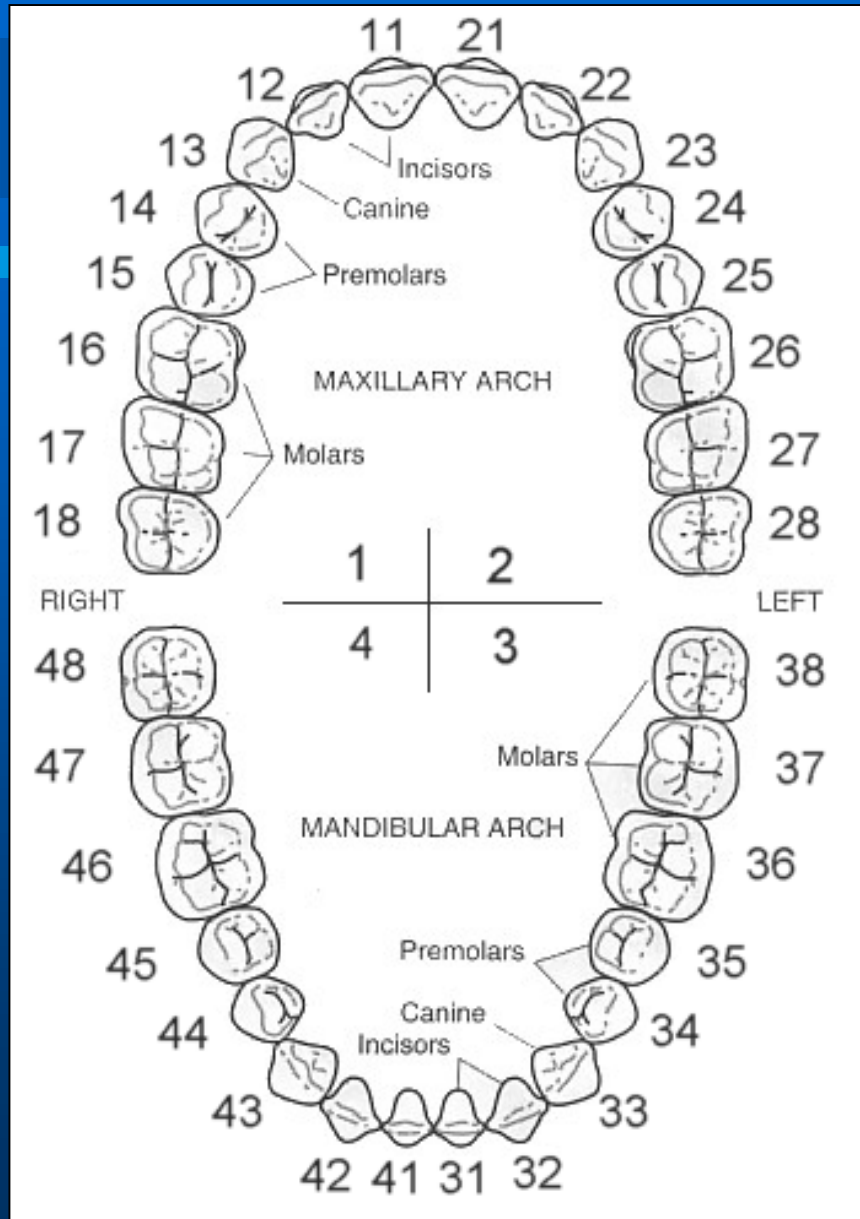
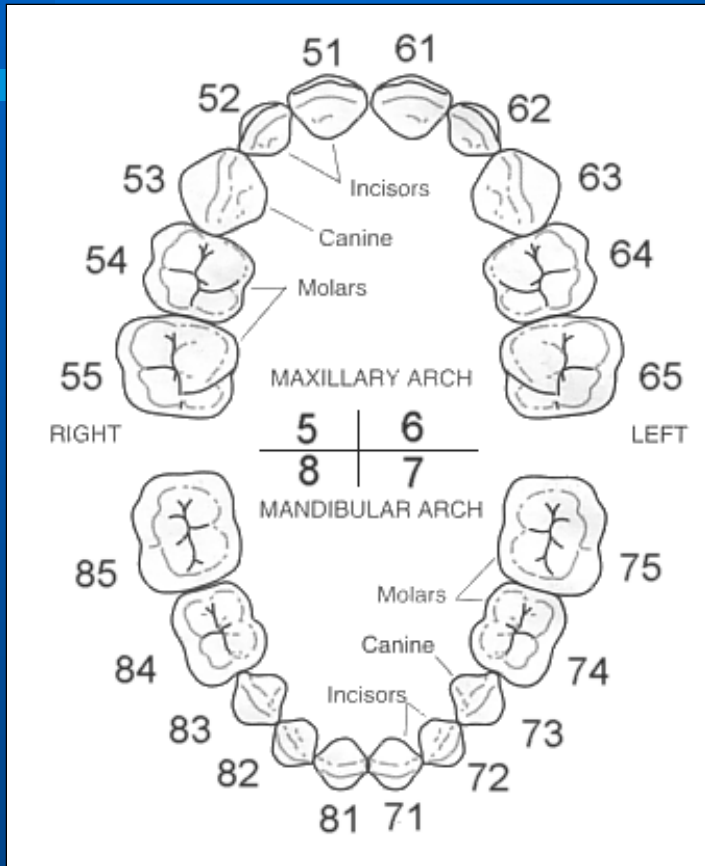
First Digit = quadrant

5	6
8	7

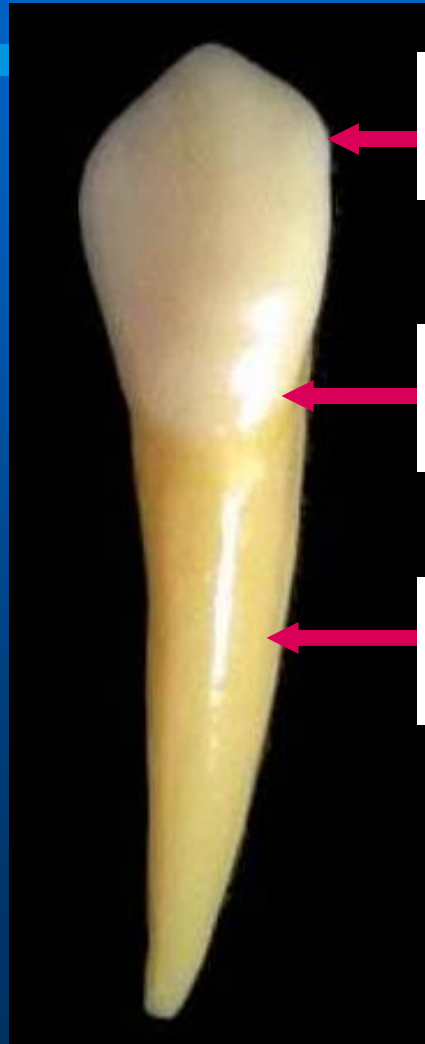
Second Digit = Tooth number in the quadrant

## Primary Teeth

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



# Macro anatomy of Teeth



**crown**

٢٢

**neck**

**root**

١٥

# Single-rooted

جذر

# Multi-rooted

متعدد جذور



THANK YOU

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[reda@staff.hu.edu.jo](mailto:reda@staff.hu.edu.jo)



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