



# INTRODUCTION TO DENTISTRY

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KEEP  
CALM  
AND I'M A  
DENTIST  
SOON  
TO BE

# Basic Oral Structures and Tooth

## Terminology...2

مصطلحات فموية و سنية 2  
اساسية

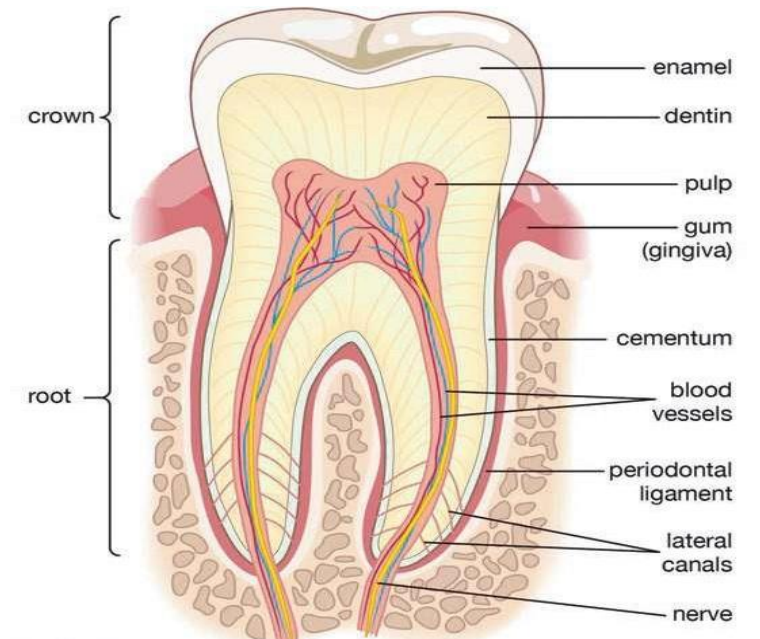
# Tooth layers: revision

C  
R  
O  
W  
N

- ❖ Enamel
- ❖ Dentin
- ❖ Pulp:
- ✓ Pulp chamber (or pulp cavity = found in the crown)

r  
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t

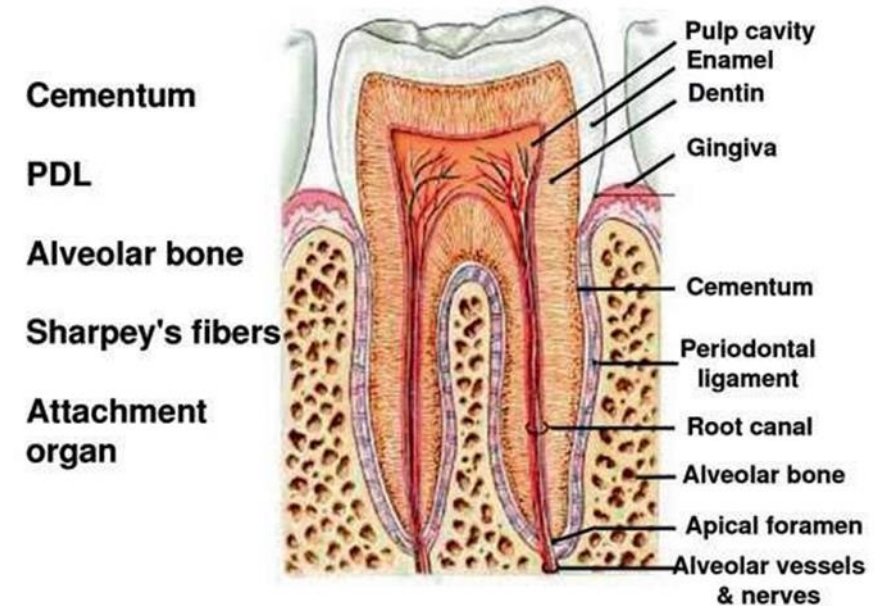
- ✓ Pulp canal = found in the root
- ❖ Cementum = tissue covering of tooth root)



# PERIODONTIUM

- ❖ Gums / Gingiva
- ❖ Alveolar bone
- ❖ Periodontal ligament

## *PERIODONTIUM*



# TYPE OF HUMAN TEETH DENTITION

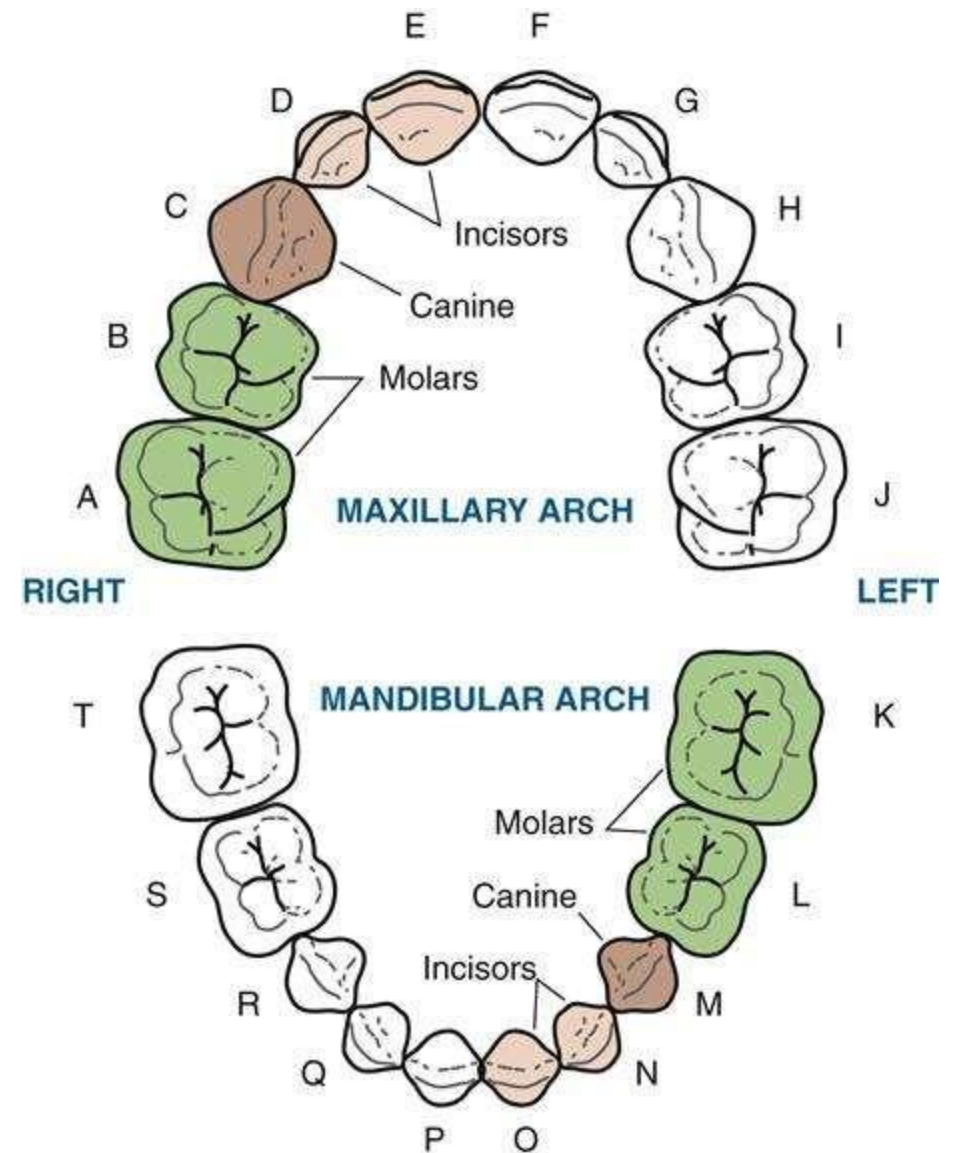
أنواع الأسنان في الإنسان

# Primary or Deciduous dentition

NUMBER: 20 deciduous teeth

WHEN APPEAR? erupting first usually at 6 months

Other names? are commonly called “baby/milk teeth” or primary teeth.



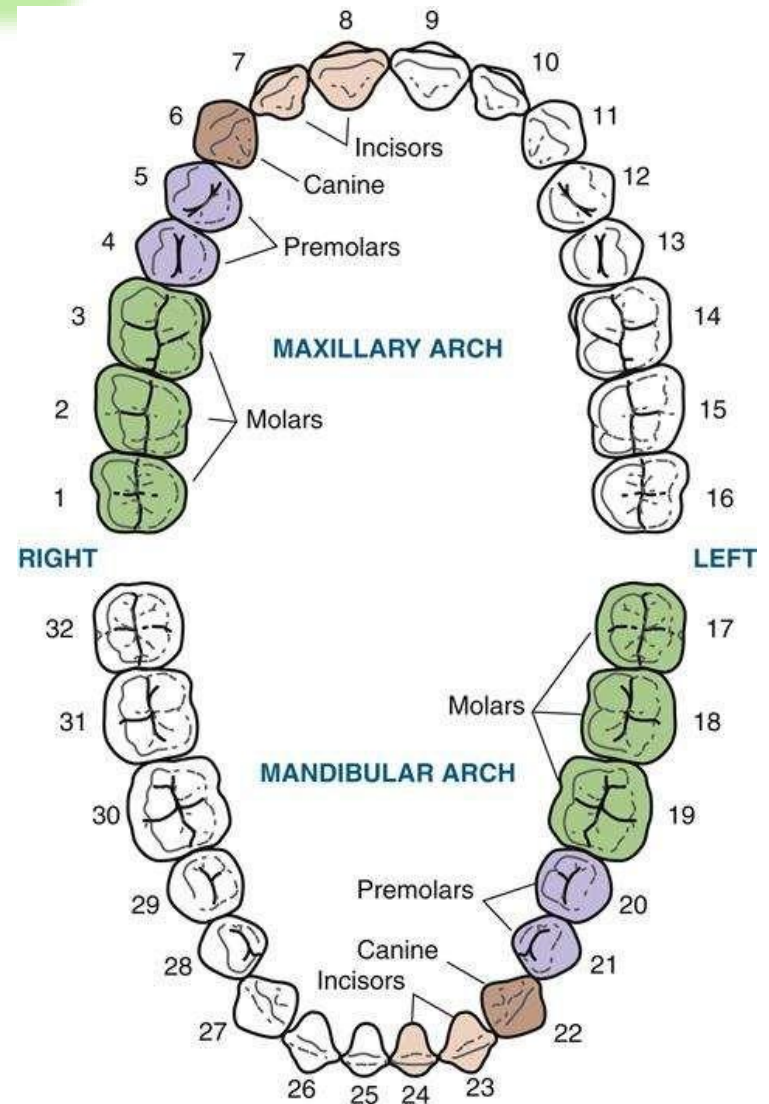
# Succedaneous or Permanent teeth

Number: The 32 permanent teeth  
when do they erupt?

- Erupt at 6 years and most of them replace the deciduous teeth

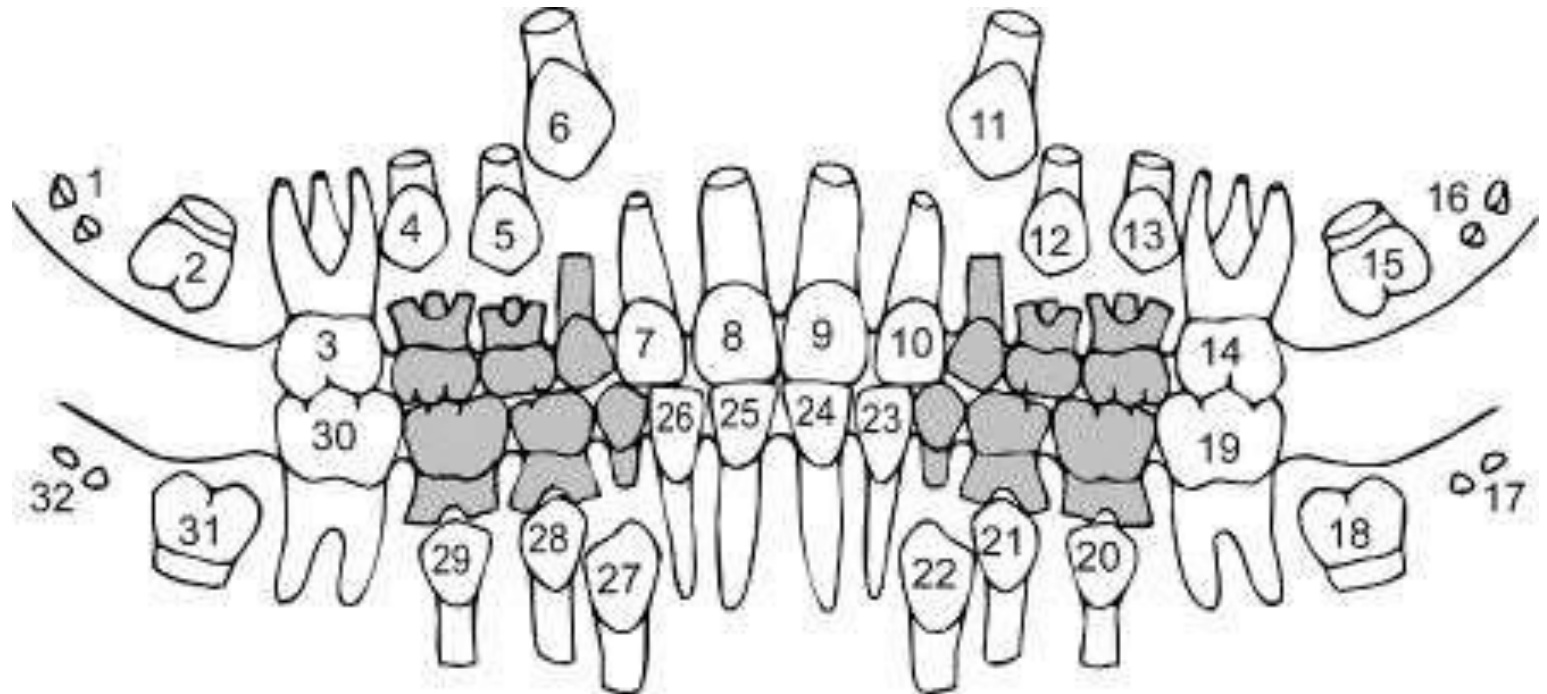
Other names??

- are commonly called secondary teeth.



# Transition or Mixed dentition period

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



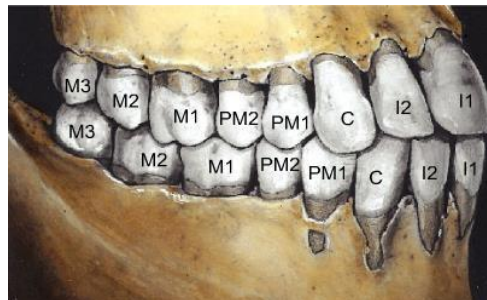




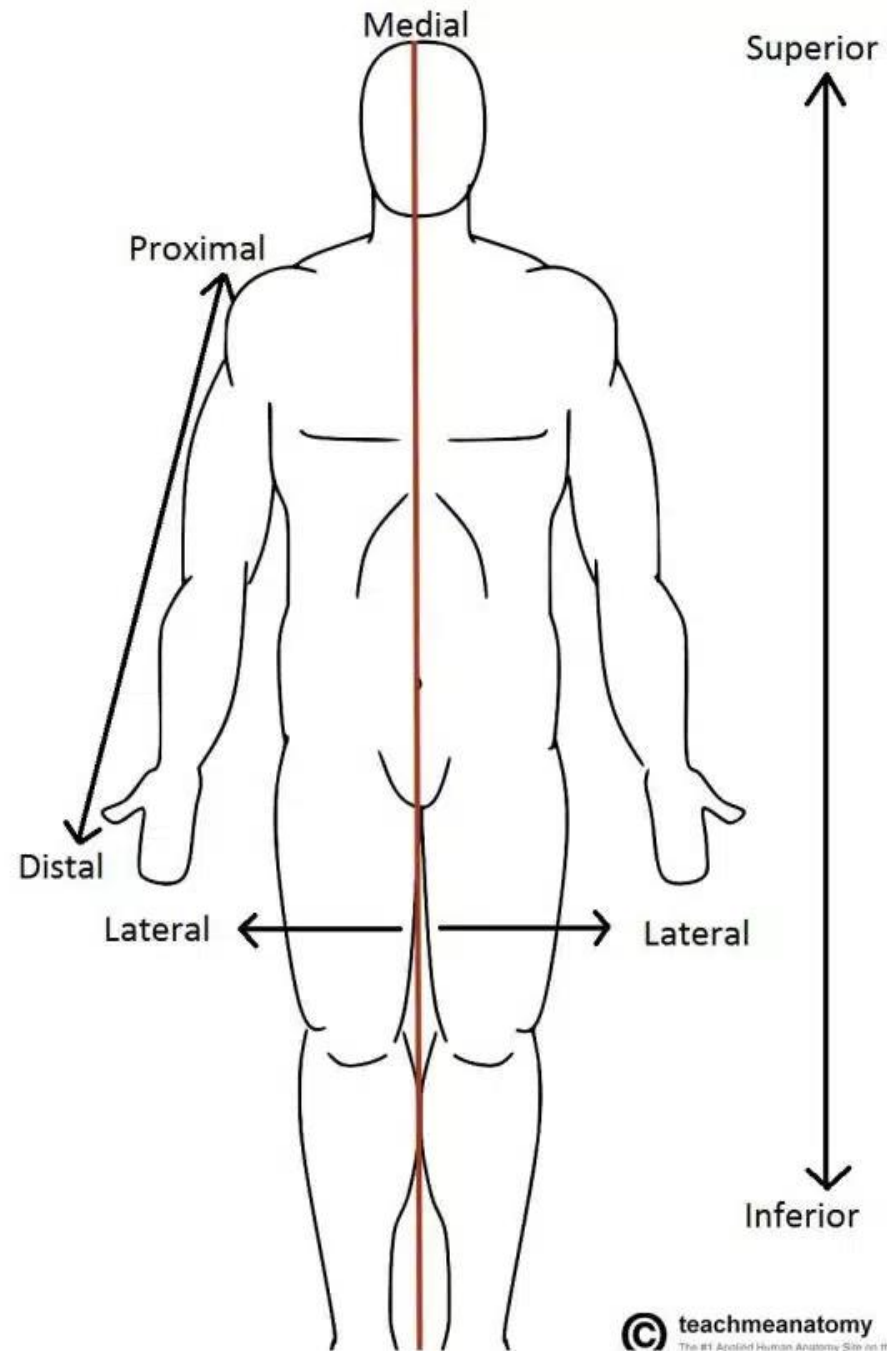
upper (maxillary) arch



lower (mandibular) arch

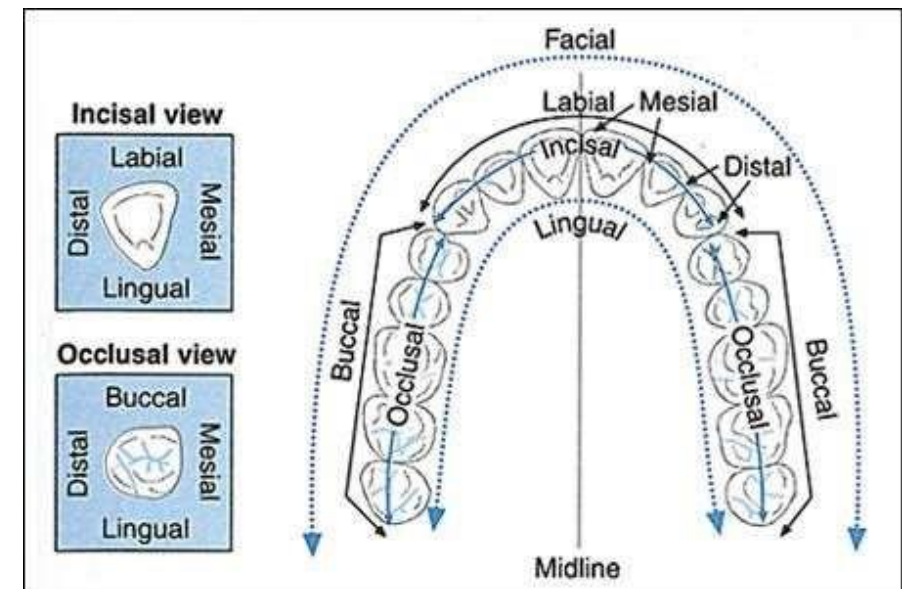
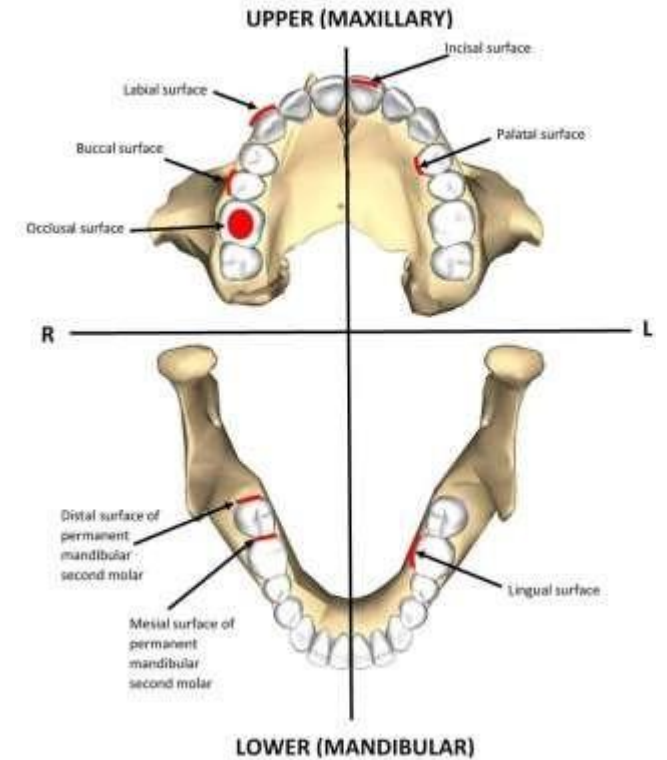


the occlusion (bite)



# Tooth surfaces

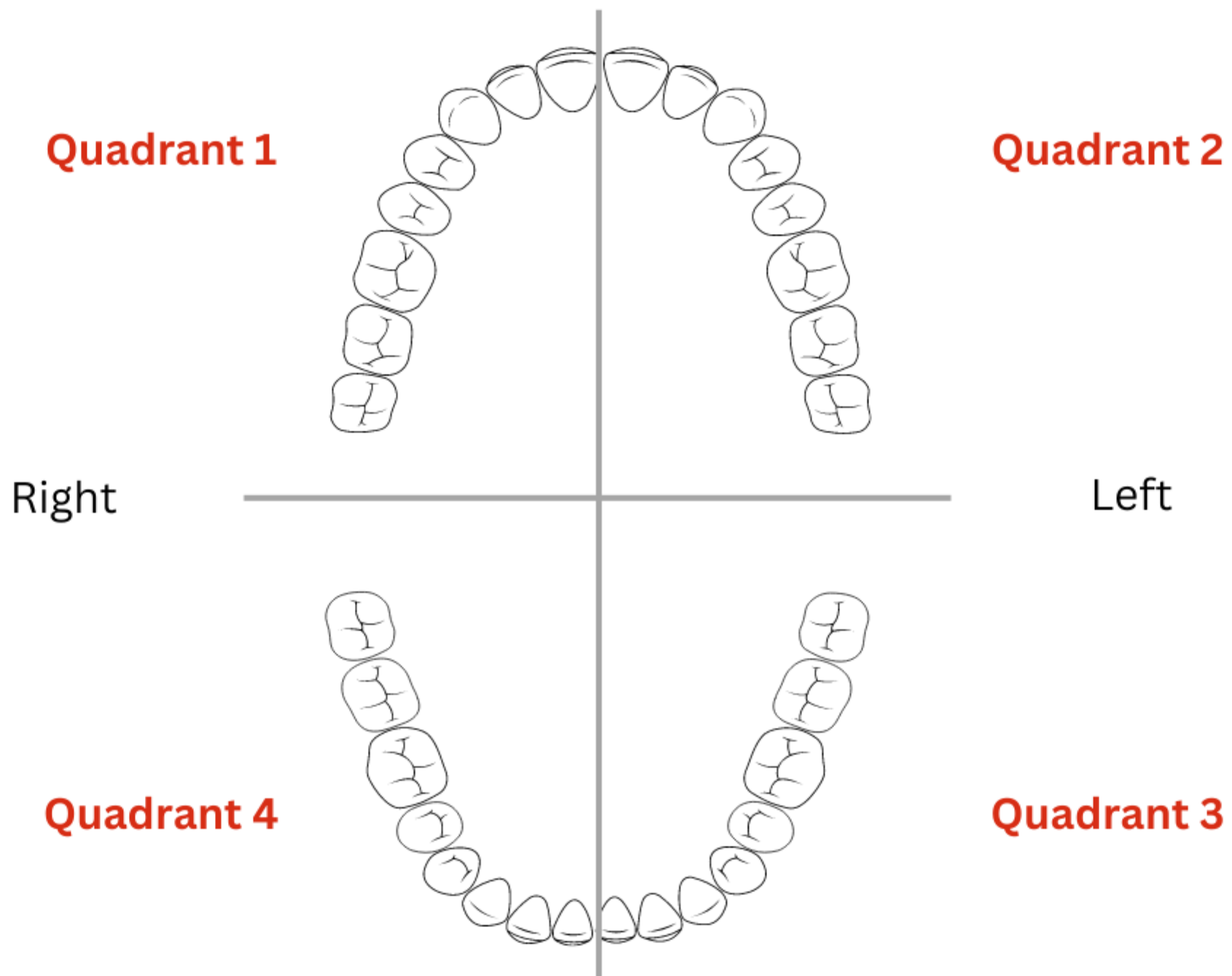
- Buccal : towards the cheek
- Lingual : toward the tongue
- Labial : towards the lips
- Palatal : towards the palate
- Mesial= towards the midline
- Distal = away from the midline
- Occlusal the direction towards the biting surface of posterior teeth
- Incisal= the direction towards the biting edge of anterior teeth



# Describing and Numbering Teeth

smile





**Quadrant 1**

**Quadrant 2**

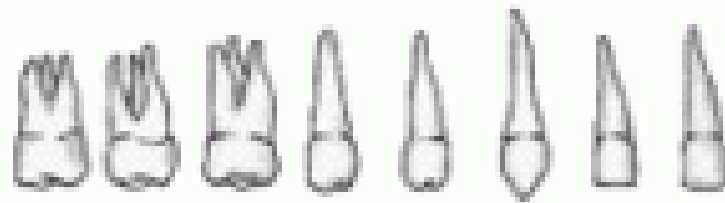
Right

Left

**Quadrant 4**

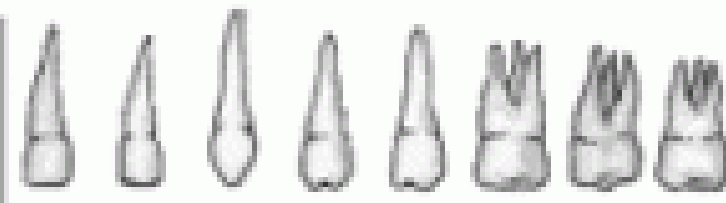
**Quadrant 3**

**UPPER RIGHT**



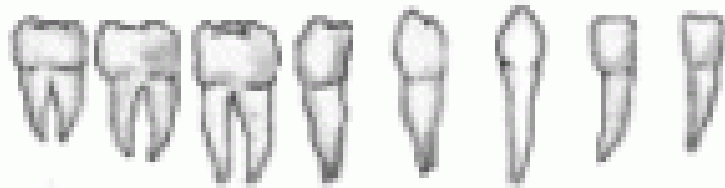
18 17 16 15 14 13 12 11

**UPPER LEFT**



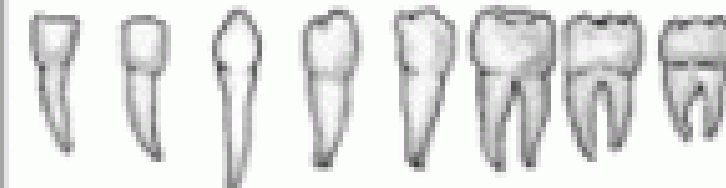
21 22 23 24 25 26 27 28

48 47 46 45 44 43 42 41



**LOWER RIGHT**

31 32 33 34 35 36 37 38



**LOWER LEFT**

# D-A-Q-T System

❖ The "D-A-Q-T System" :

1. begins with **THE BROADEST** concept of teeth -- primary or permanent dentition. the **DENTITION** is named first
2. followed by the **ARCH**.
3. Then the **QUADRANT**.
4. and lastly the **TOOTH** name.

This breaks down as follows:

**D** stands for **Dentition**: primary or permanent.

**A** stands for **Arch**: maxillary or mandibular.

**Q** stands for **Quadrant**: right or left.

**T** stands for the **Tooth** type:

REMEMBER 1

Incisor: central or lateral.

Canine.

Premolar: 1st or 2nd.

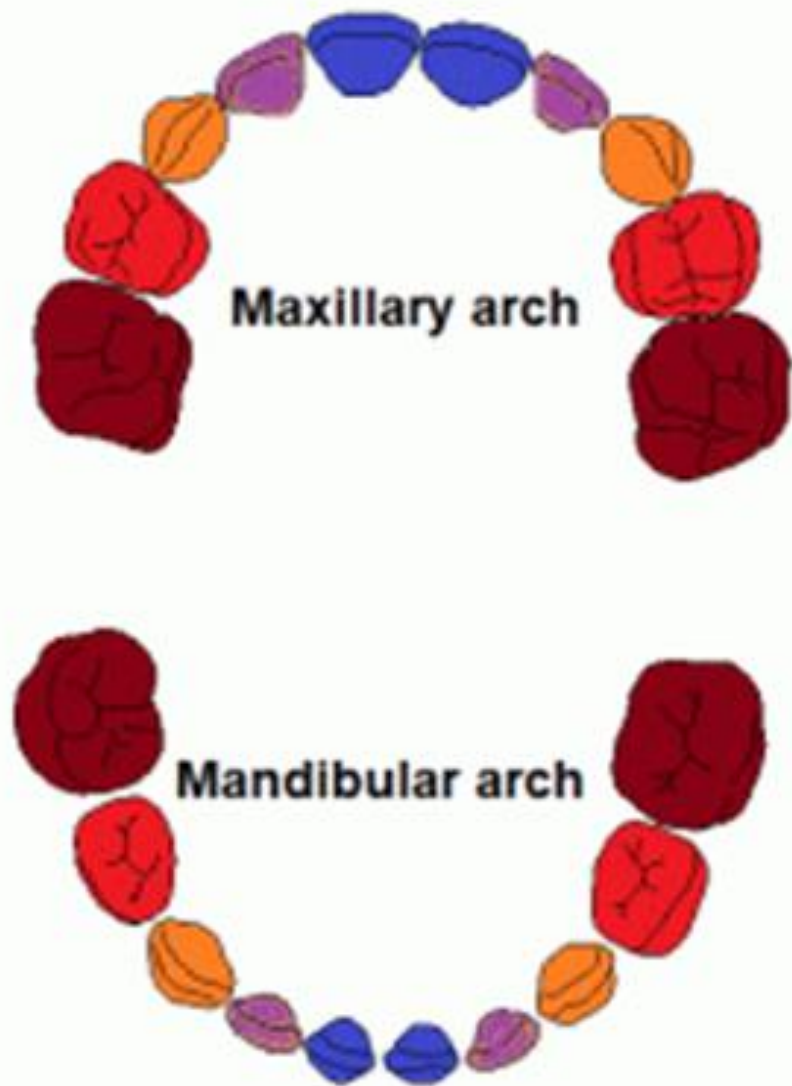
Molar: 1st, 2nd, or 3rd.

REMEMBER 2

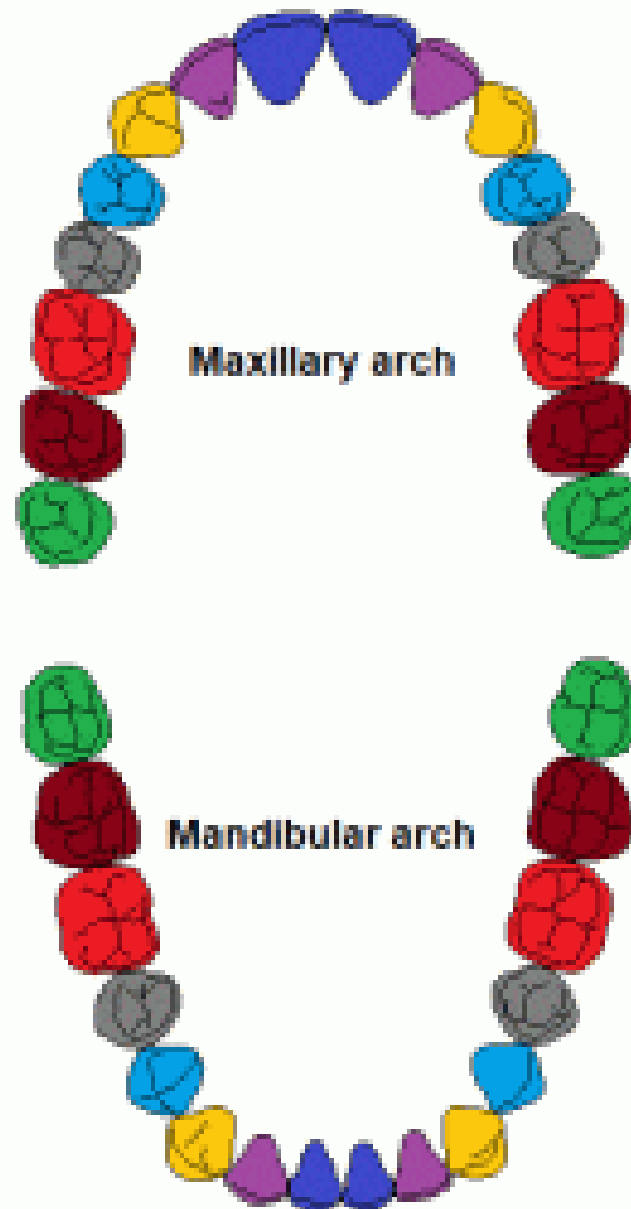
we always consider the patient's right, NOT the clinician's right



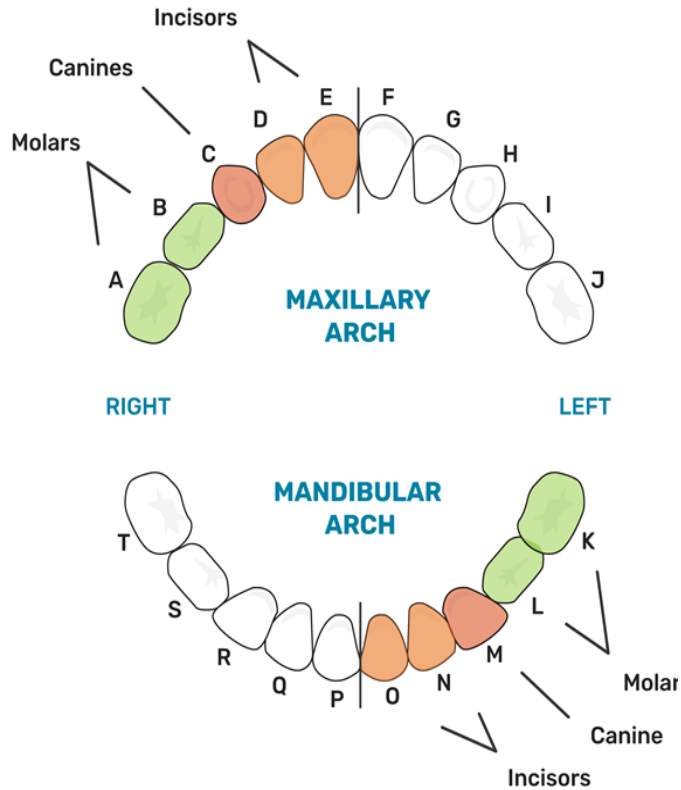
### Primary Dentition



### Permanent Dentition



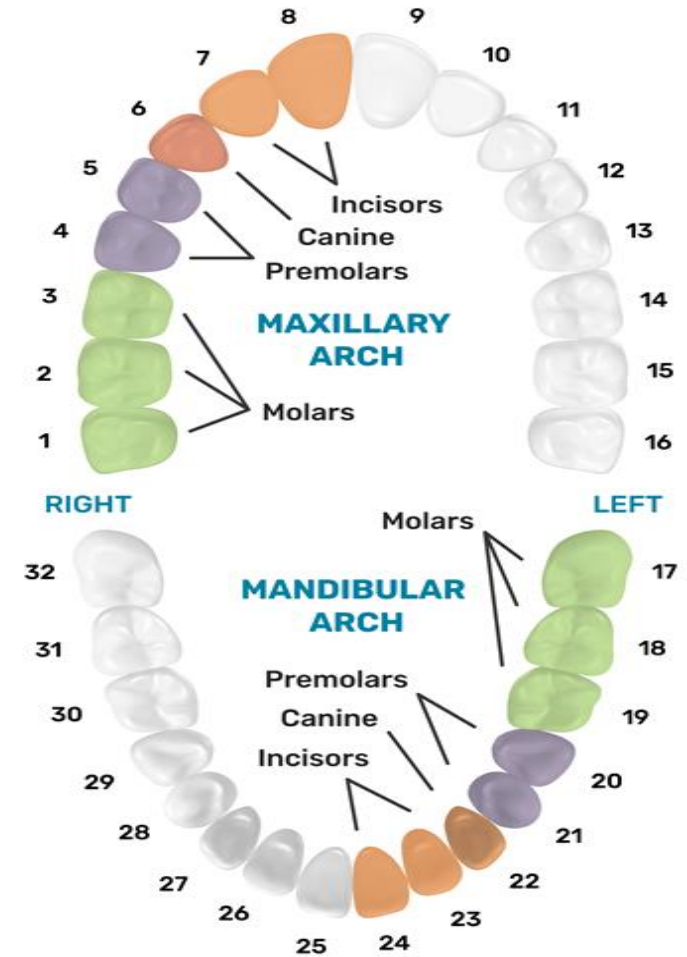
## Primary Dentition



Take a moment to study the D-A-Q-T System on in the following diagrams of primary and permanent dentition. Practice by moving through the sequence of dentition, arch, quadrant, and tooth type.

e.g., primary maxillary left first molar.

## Permanent Dentition



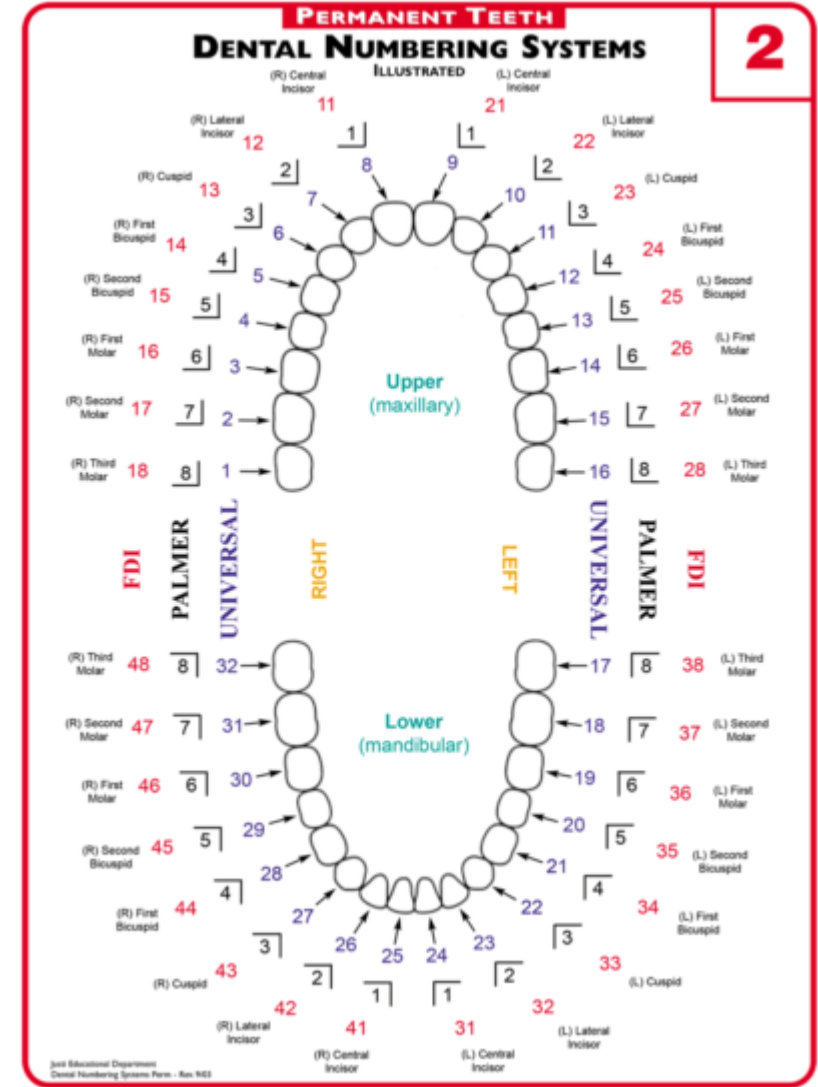
e.g., permanent mandibular right lateral incisor

# OTHER Tooth Numbering Systems

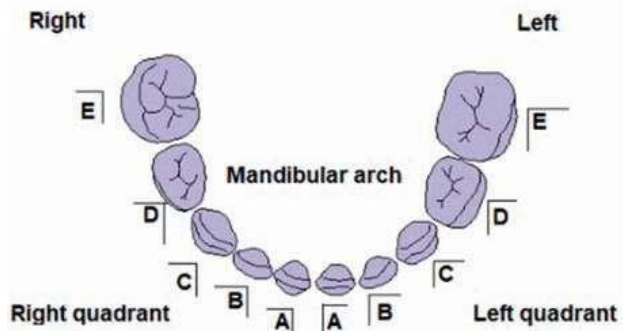
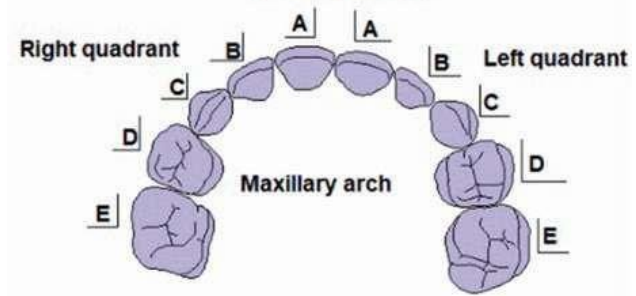
1. Symbolic (Palmer) system notation (L 1-8)

2. Universal numbering system. (# 1-32)

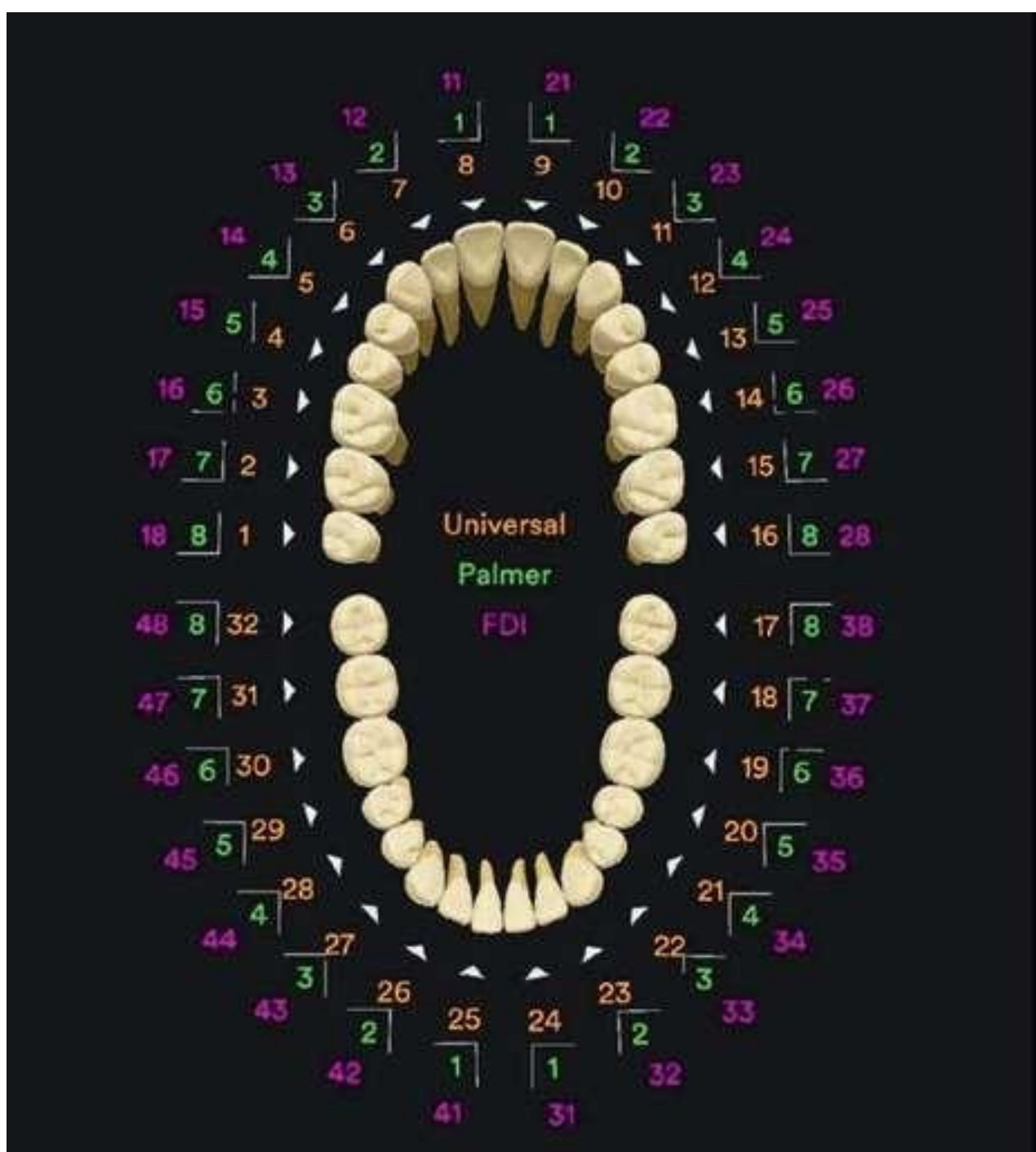
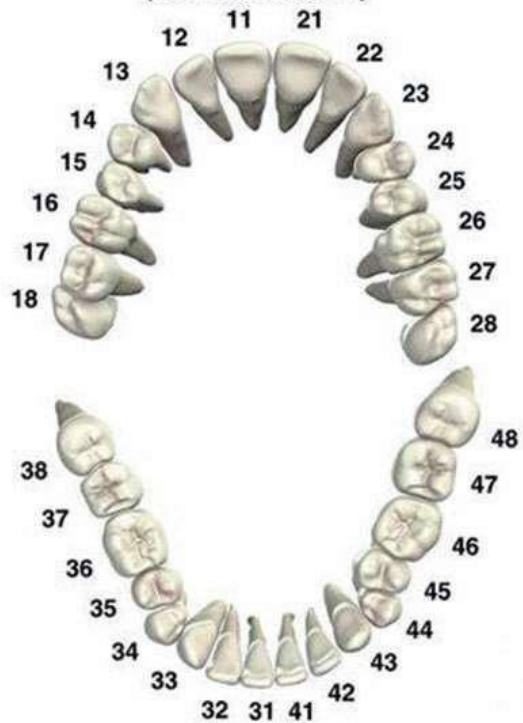
3. FDI system (two-digits)



**Palmer Notation System  
(Primary Teeth)**

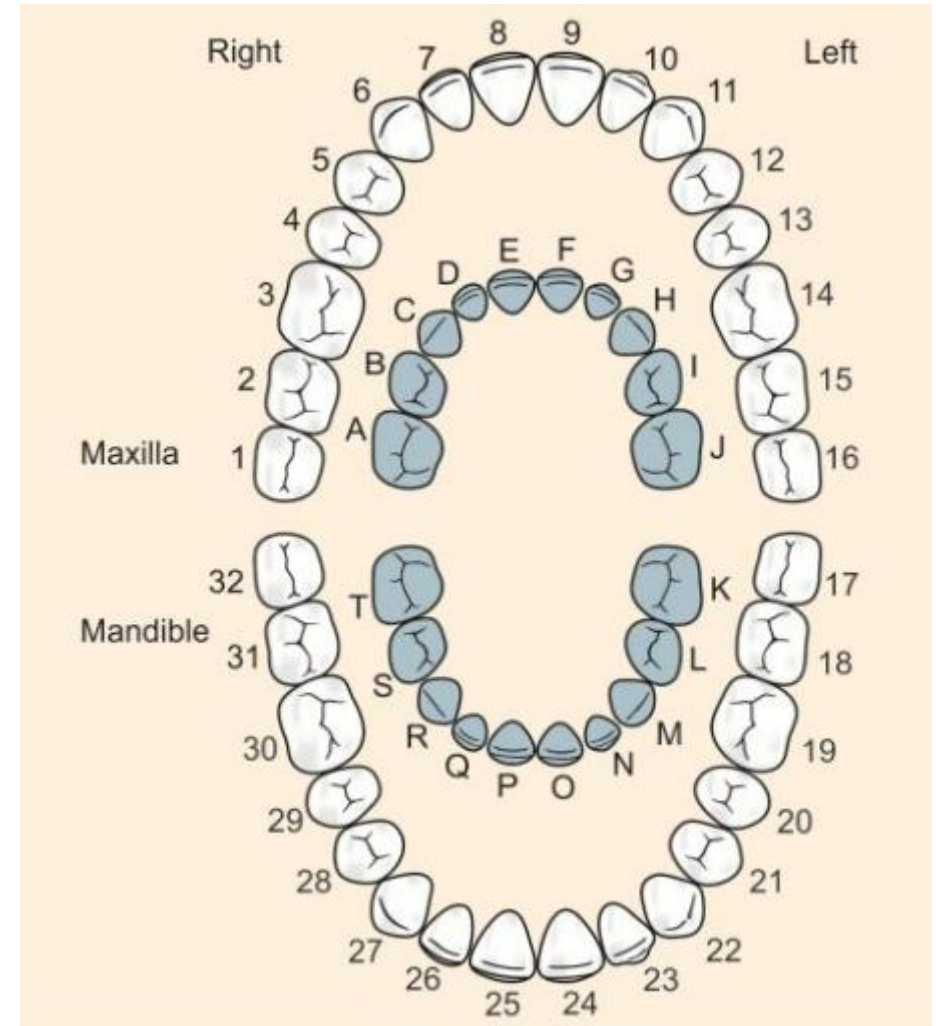


**FDI World Dental Federation Notation  
(ISO-3950 notation)**



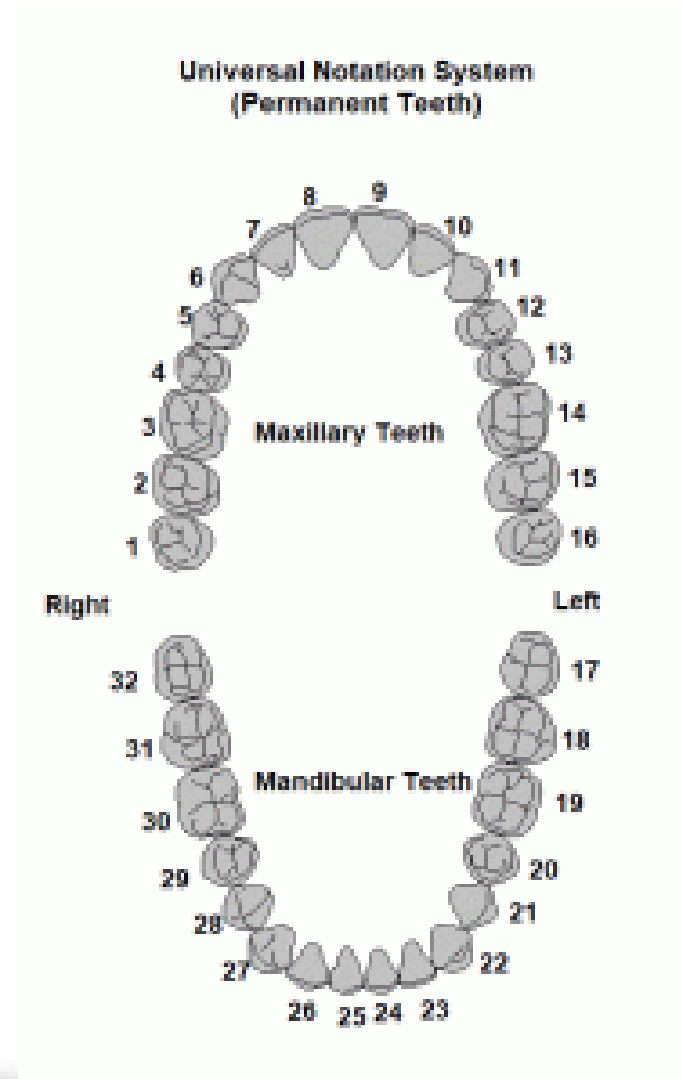
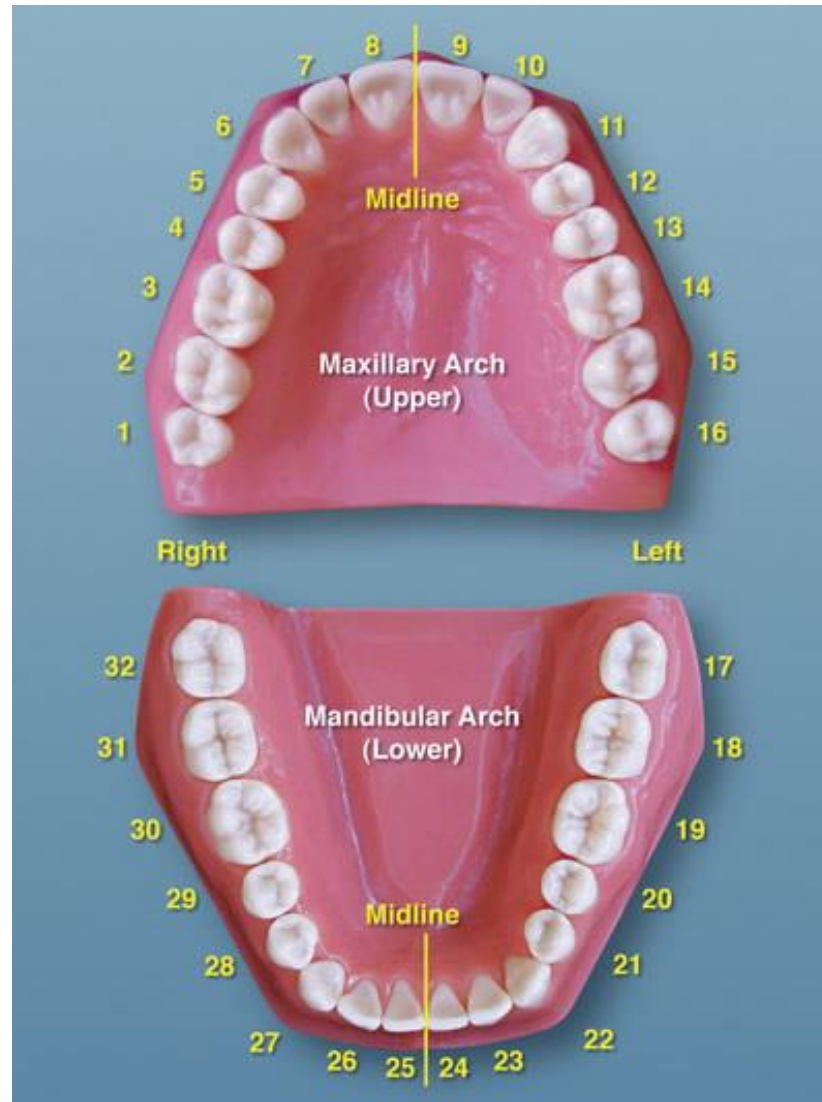
## The Universal Tooth Numbering System

- ❖ A more convenient method of identifying or classifying teeth.
- ❖ The American dental association (ADA) recommends the universal numbering system. This tooth notation system is also known as the American tooth numbering system.
- ❖ The Universal Numbering System assigns a number from 1 to 32 to adult teeth, beginning with the upper-right third molar.



To move through the Universal Tooth Numbering System,

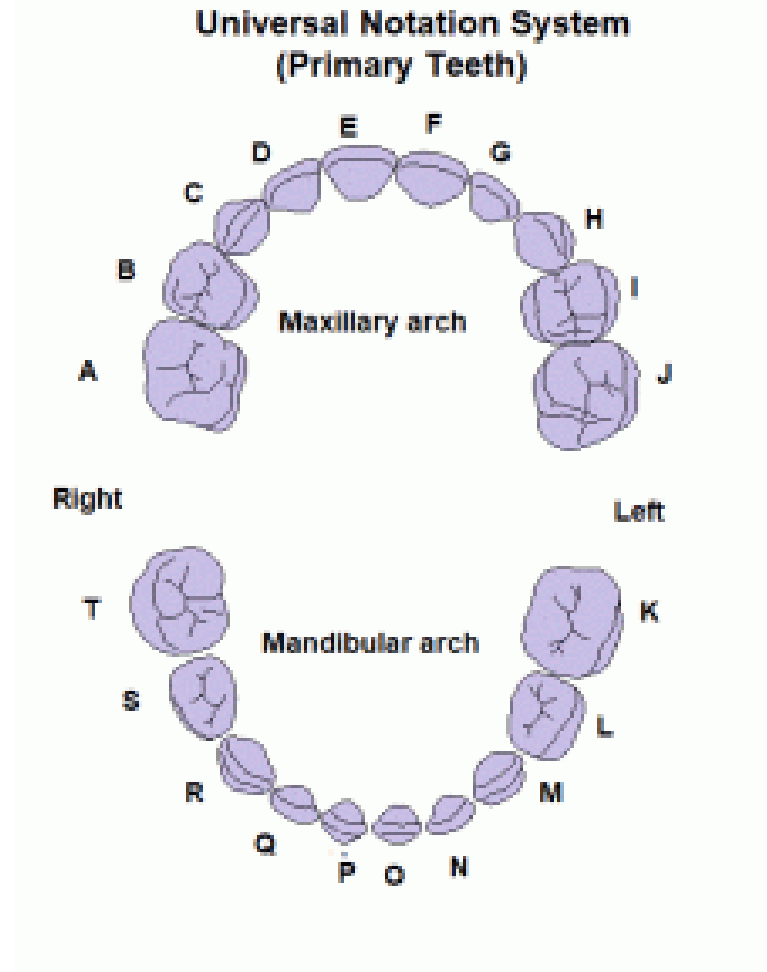
1. count from the upper-right third molar toward the midline and two front teeth, then to the left side.
2. Once you reach #16 (upper-left third molar), drop down and begin with #17 (lower-left third molar).
3. Then, counting across the lower teeth, you end at #32 (lower-right third molar).



Dentists still assign numbers to any missing teeth. By doing this, they can create an accurate tooth chart to keep in a patient's records.

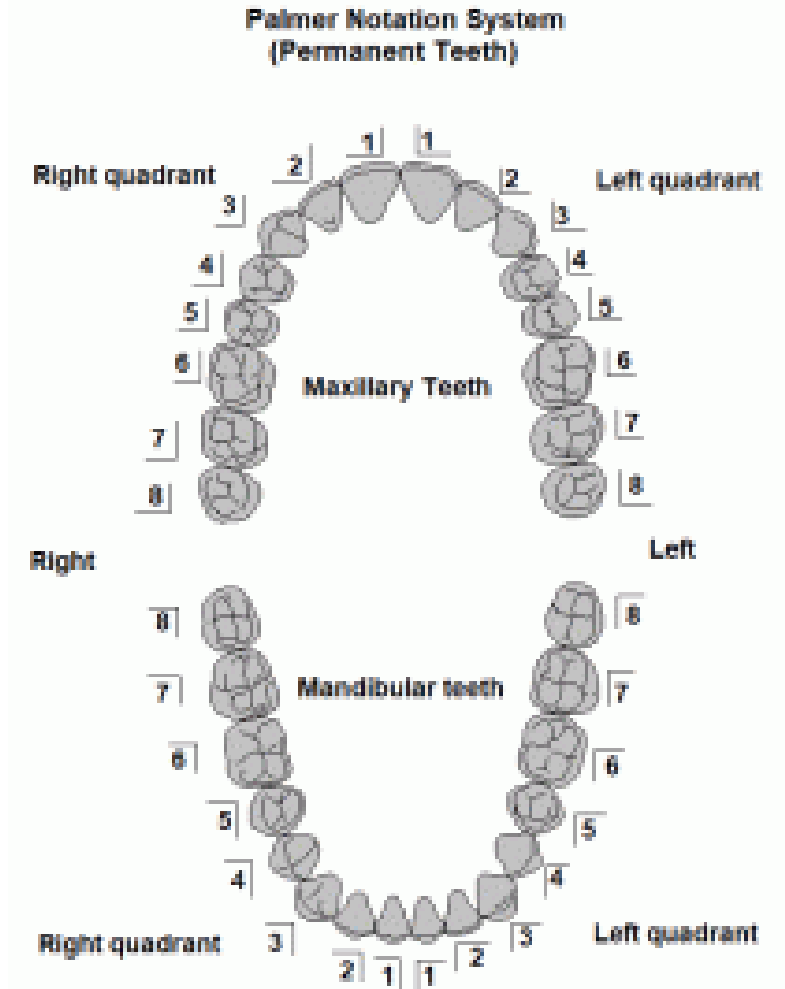
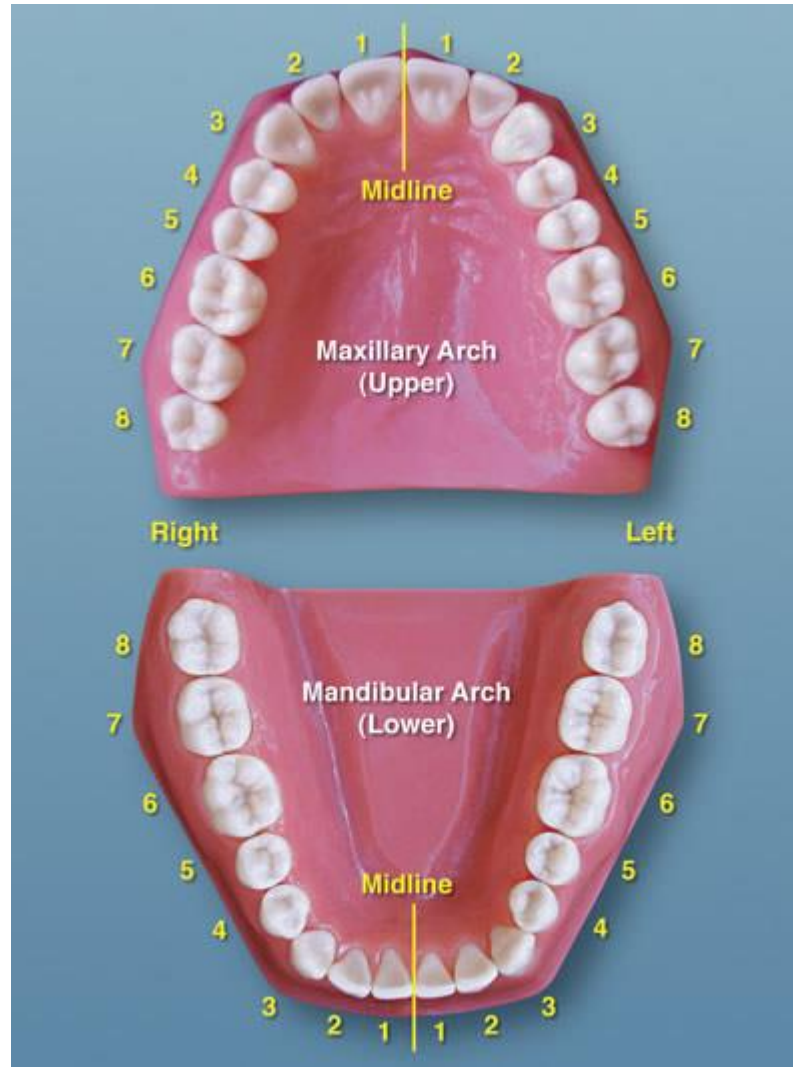
## The Universal system/ Deciduous dentition

- for tooth notation UPPERCASE ALPHABETS is used for DECIDUOUS TEETH.
- **START:** The tooth notation in the universal system in deciduous teeth begins from the right maxillary second molar with alphabet A. In the mandibular deciduous teeth, the universal notation begins with alphabet K for the mandibular left second molar
- **END:** the **last** alphabet in the **maxillary arch** is **J** for the left maxillary second molar. In the **mandibular** deciduous teeth, **ends** with letter **T** for the right mandibular second deciduous molar.



## Palmer numbering system

1. A tooth numbering system where the centrals of each quadrant are number 1
2. and the teeth are consecutively numbered to the third molars, number 8.
3. Teeth are charted using the quadrant name and tooth number, such as "upper right 1"

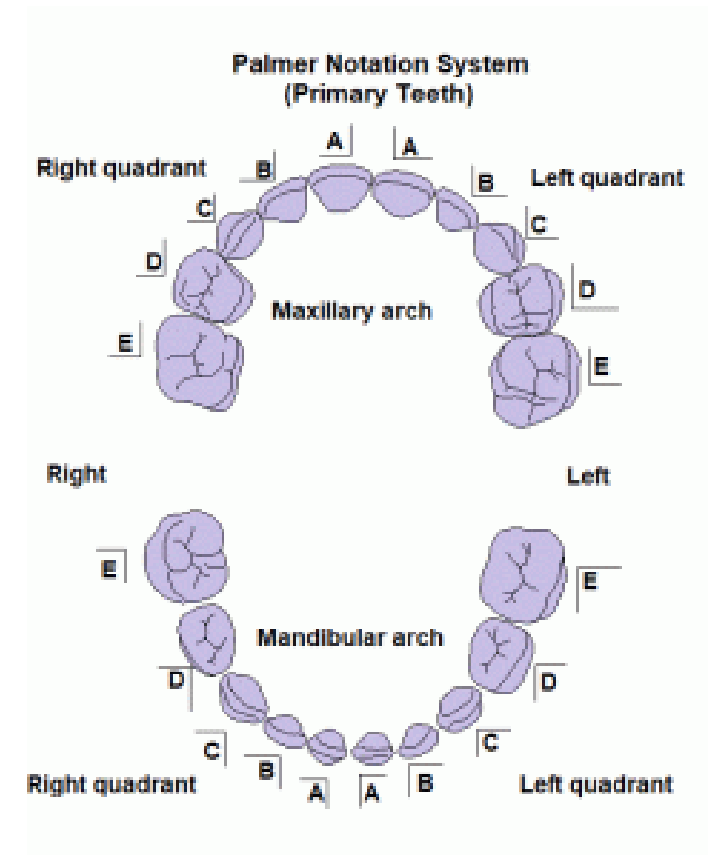


Variations: The system is widely known as the Palmer notation system and less commonly as the Palmer Zsigmondy notation system. Military numbering system, numeric notation



# Palmer tooth numbering system Deciduous dentition

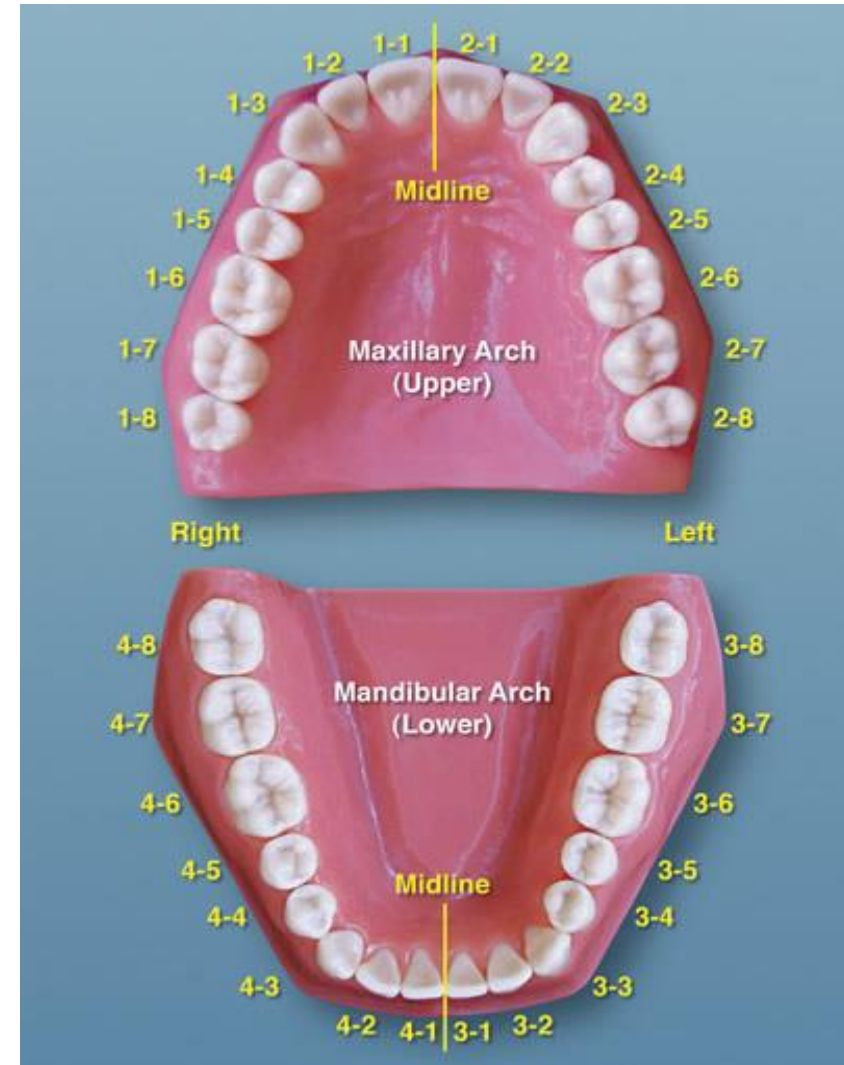
- In this notation system the maxillary and the mandibular arches are divided into the quadrants the central incisors are represented by A through E for the second deciduous molar.
- In this notation system, the important thing is the symbol that is used together with the upper case alphabet, and that symbol indicates the arch (Maxillary or mandibular) and the quadrant (right or left).



- ❖ The Fédération Dentaire Internationale (FDI) proposed a two-digit tooth numbering system known as an FDI tooth numbering system.
- ❖ This tooth numbering system is adopted by the major organizations around the world such as the World Health Organization (WHO) and the International association for dental research (IADR).

### FDI/ ISO numbering system

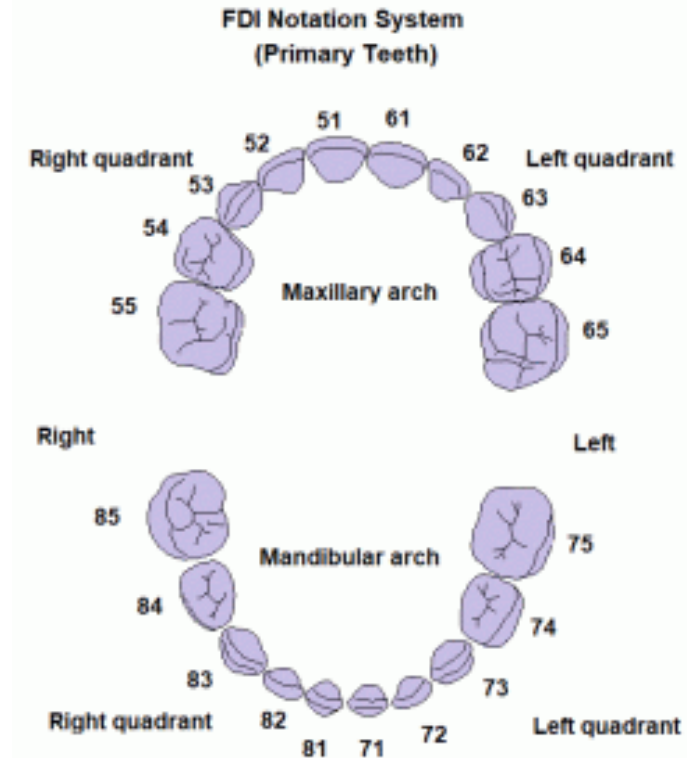
1. A tooth numbering system where the centrals of each quadrant are number 1 and the third molars are number 8.
2. The quadrants are numbered from 1 through 4: upper right, upper left, lower left and lower right.
3. Teeth are charted with the quadrant number followed by the tooth number.
4. In this system, the upper right central would be tooth 1-1, or sometimes abbreviated to 11, while the lower left third molar would be 3-8 or 38.



# FDI tooth numbering system

## Deciduous dentition

- The first digit in this numbering system indicates quadrant
- and the second digit indicates the tooth number.
- for example, the **deciduous maxillary right central incisor** is designated as **51**. The first number that is **5** indicates the maxillary **right upper quadrant** and **1** indicates **central incisor**.
- In this numbering system, the correct pronunciation is five-one, not fifty-one.



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Soon, you will be the ones achieving great things

قريبا ستكونون انتم اصحاب الانجاز