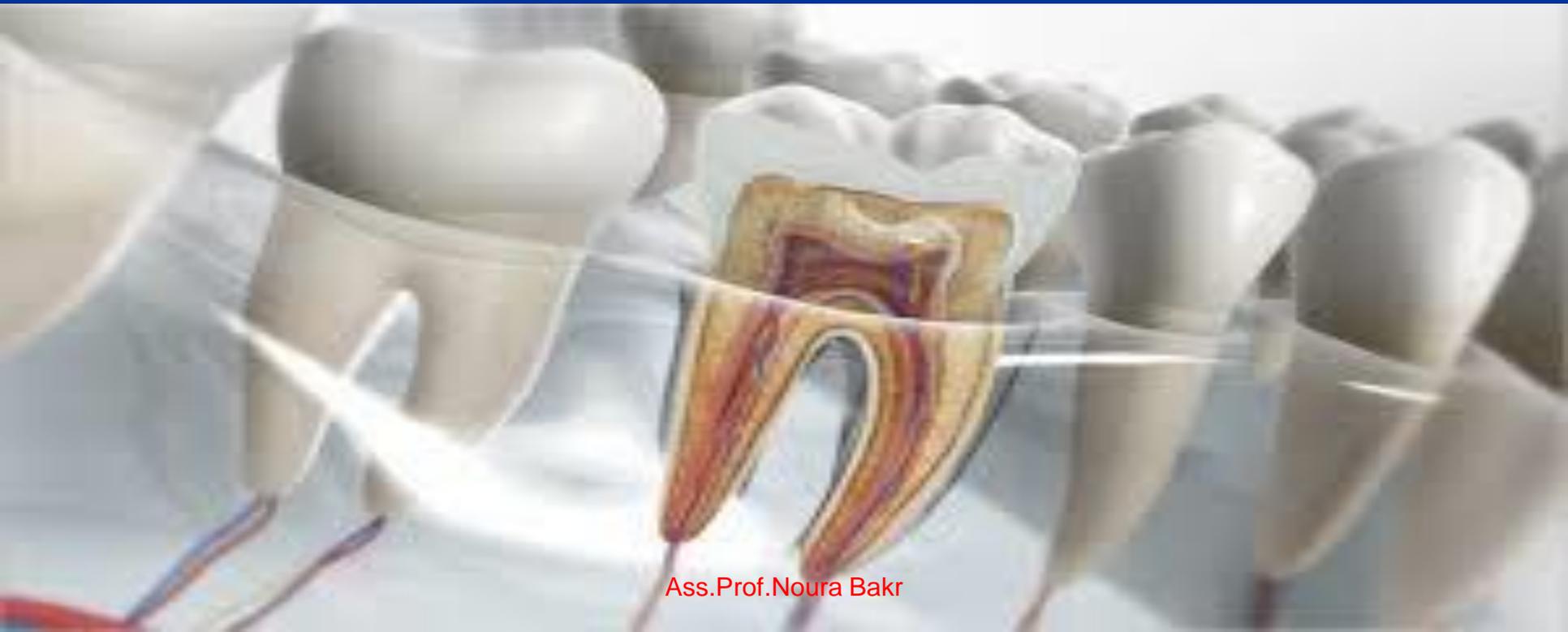


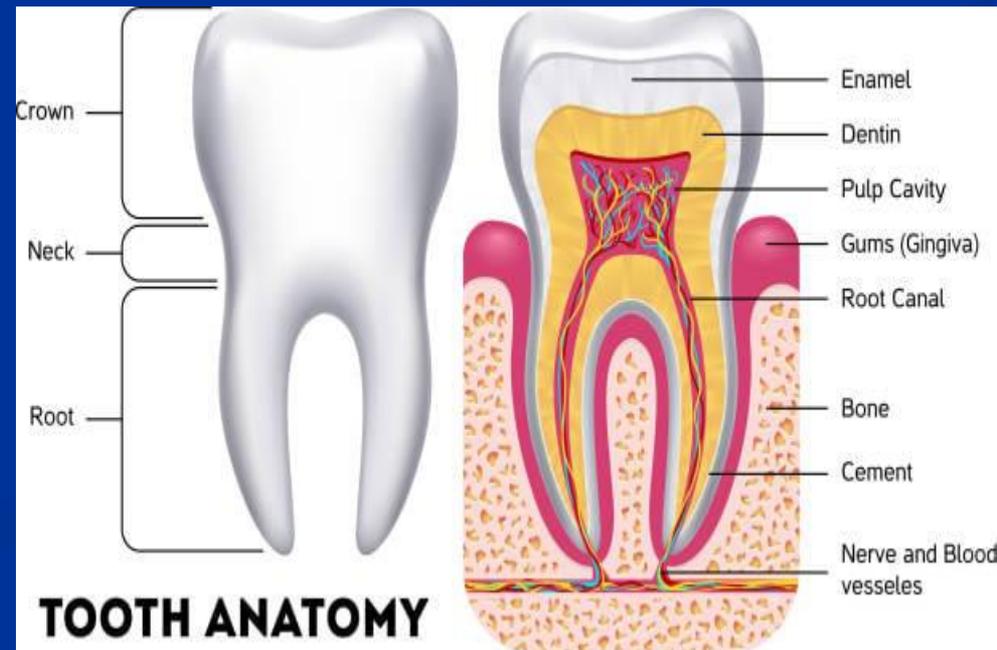
بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Macro and micro-anatomy of the teeth and numbering system



Objectives:

- Macro-anatomy of the tooth
- Micro-anatomy of the tooth
- Junctions of tooth tissues
- Clinical & anatomical crown
- Tooth numbering system
- **Interactive session.**
(Q&A)



Tooth Anatomy

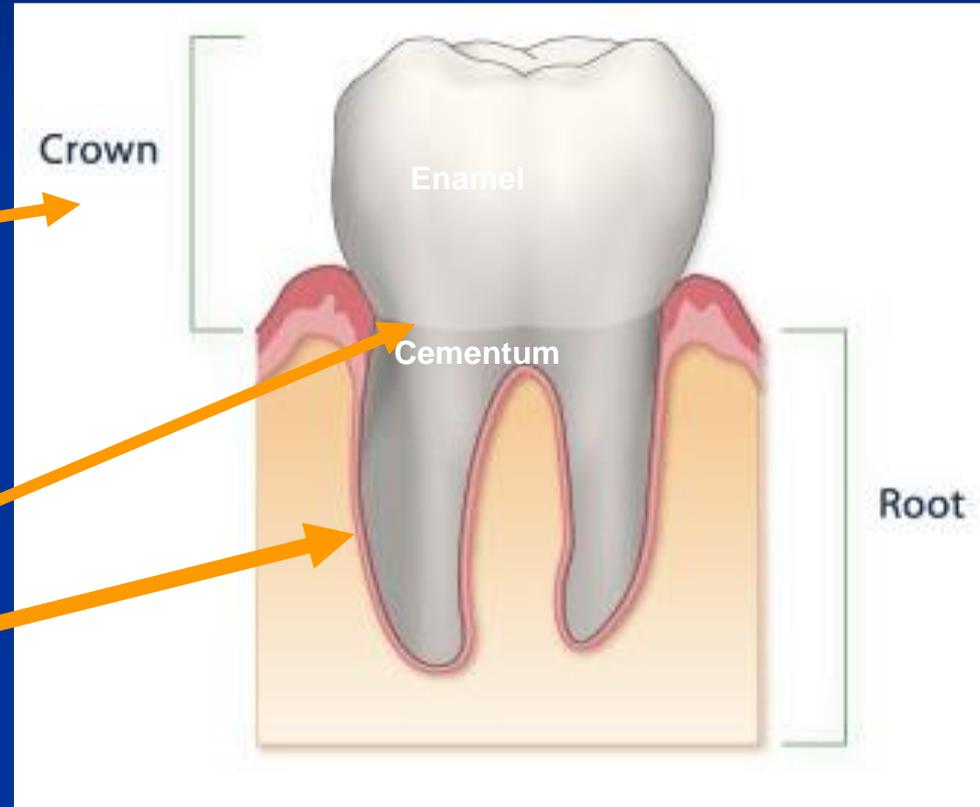
Macro-anatomy of the tooth

Each tooth has three anatomical parts:

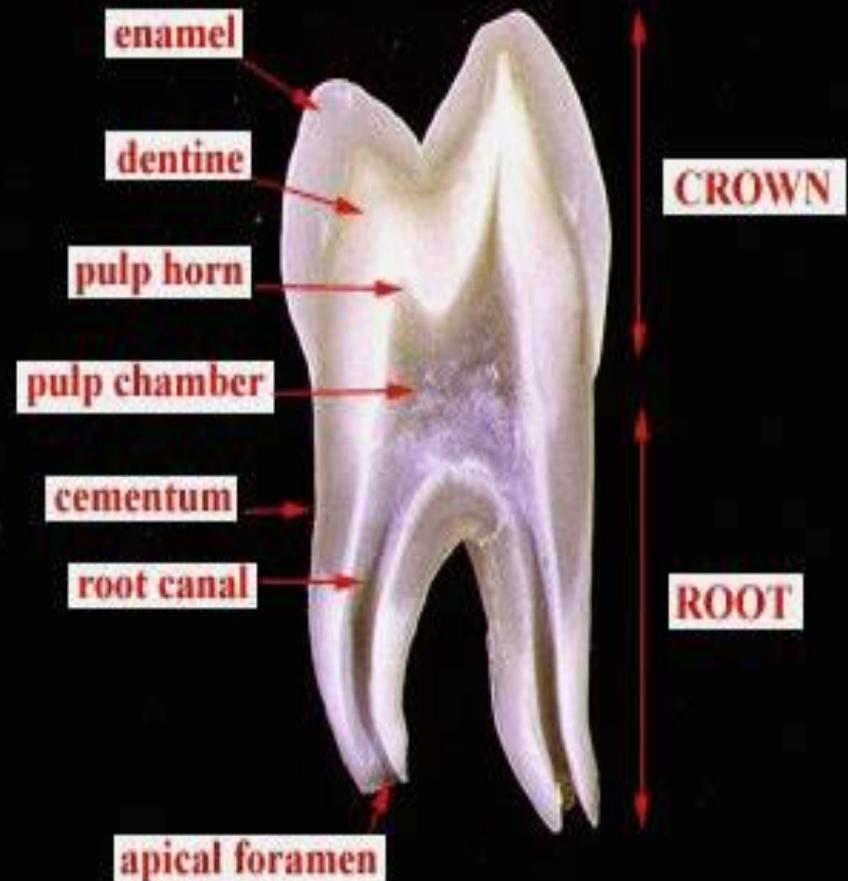
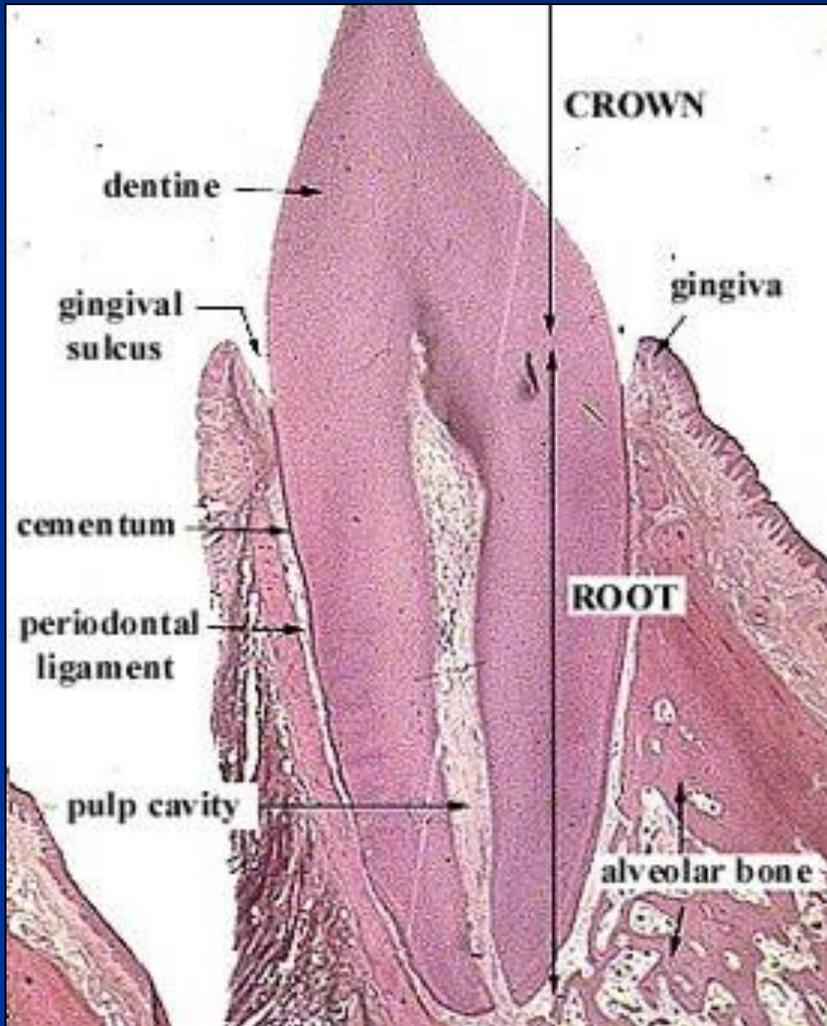
1- Crown

2- The Neck: cervical line .

3- Root (s)



Micro-anatomy of the tooth



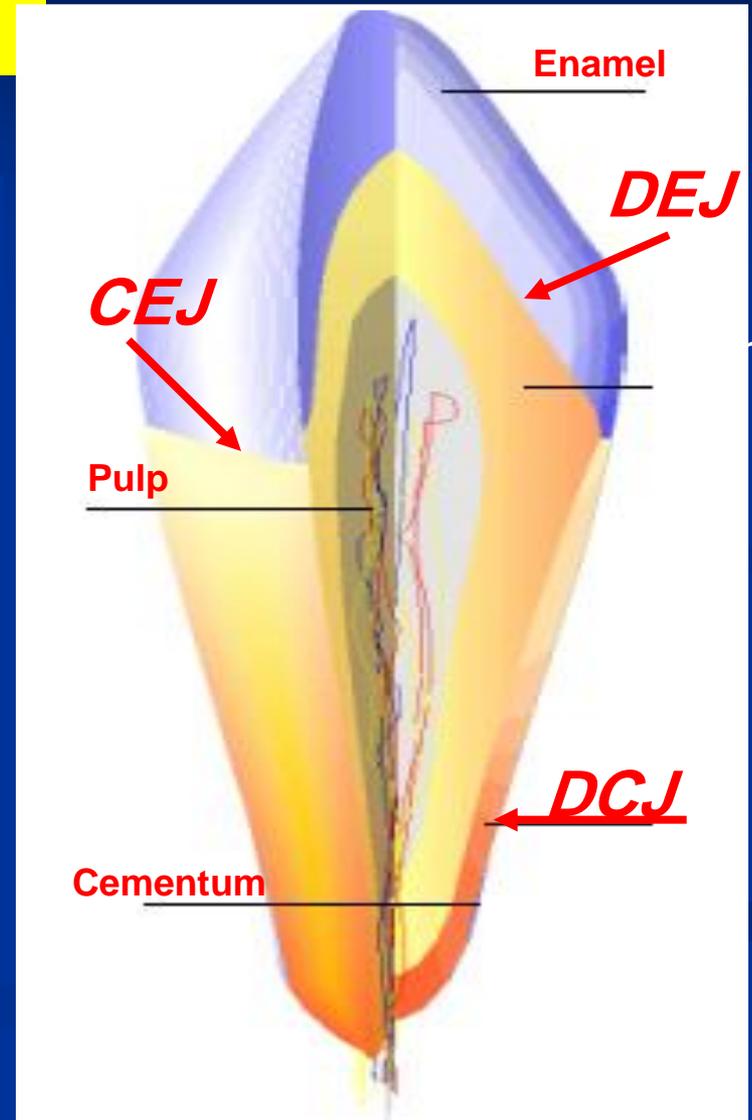
Junctions of tooth tissues

There are three sites of Junction

1- Cemento-enamel junction
(CEJ): Cervical line

2- Dentino-enamel junction
(DEJ):

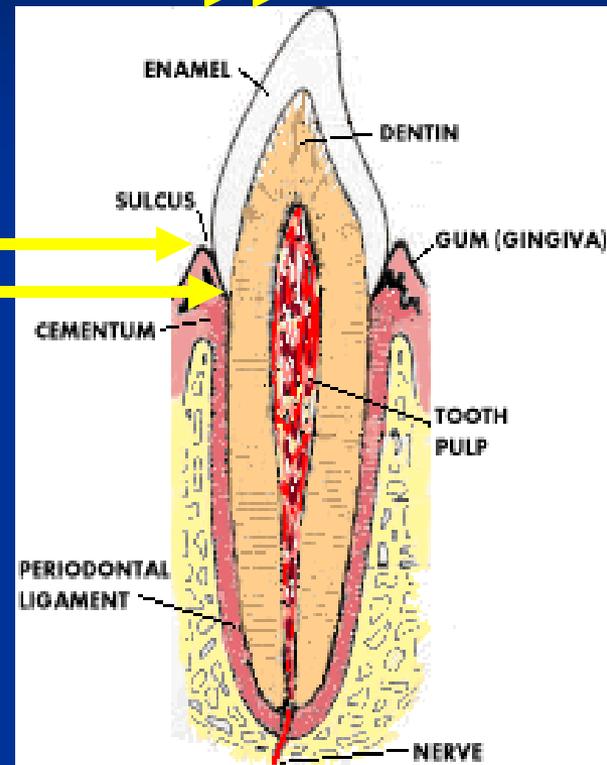
3- Dentino-cemental junction
(DCJ):



Anatomical and clinical crown.

**Anatomical
Crown**

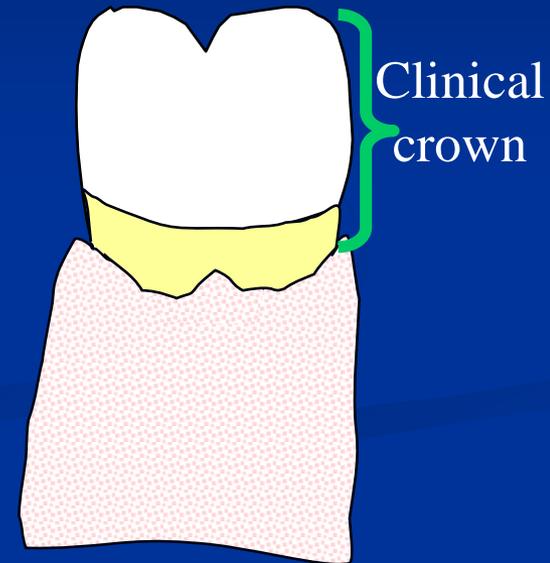
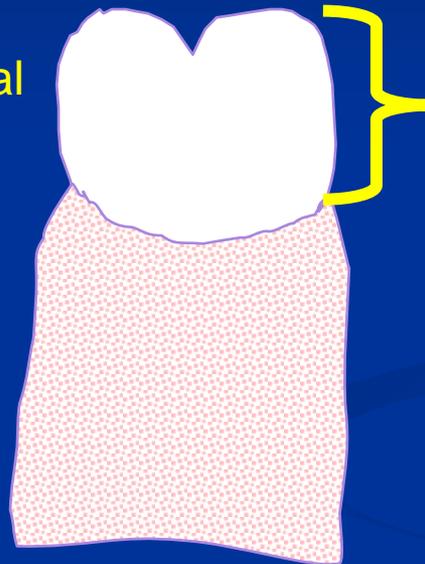
**Clinical
Crown**



Anatomical and clinical crown



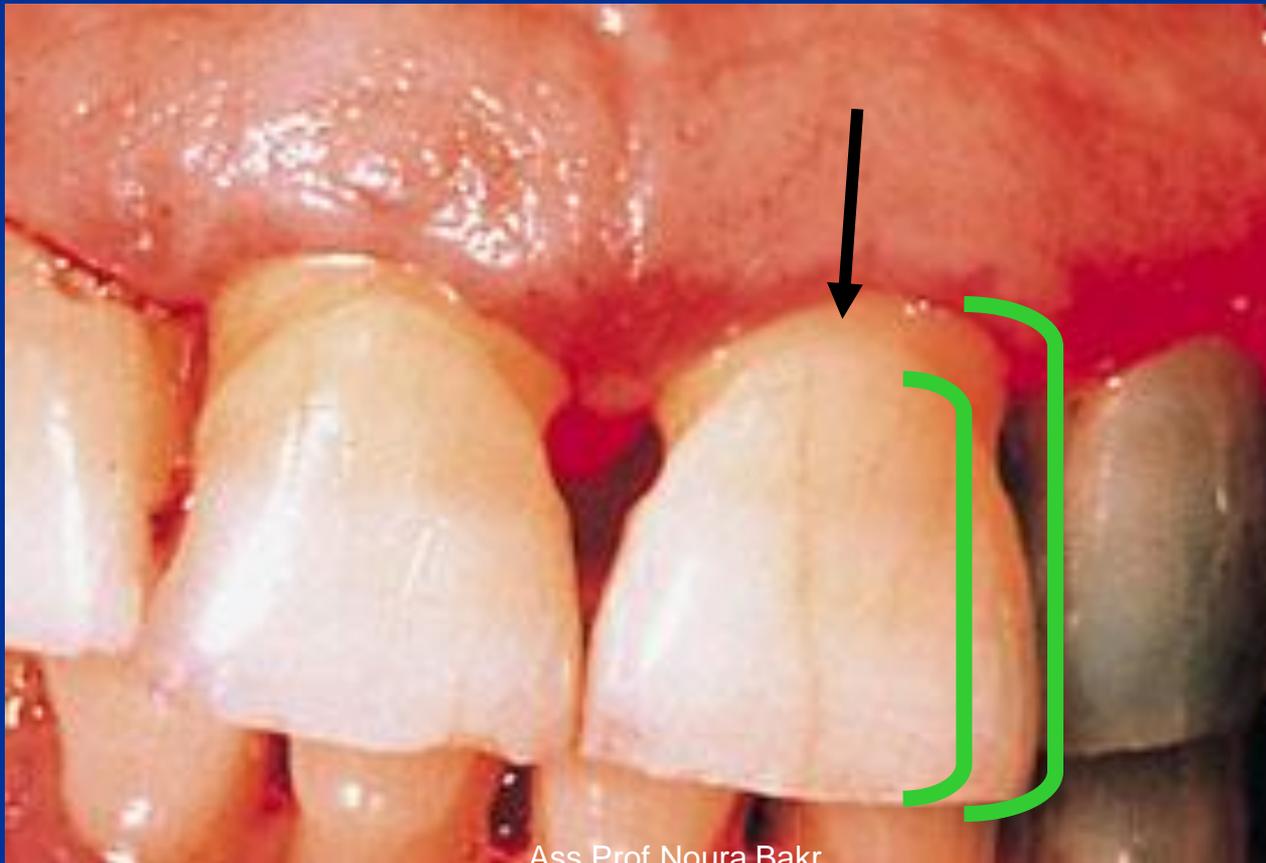
Anatomical crown



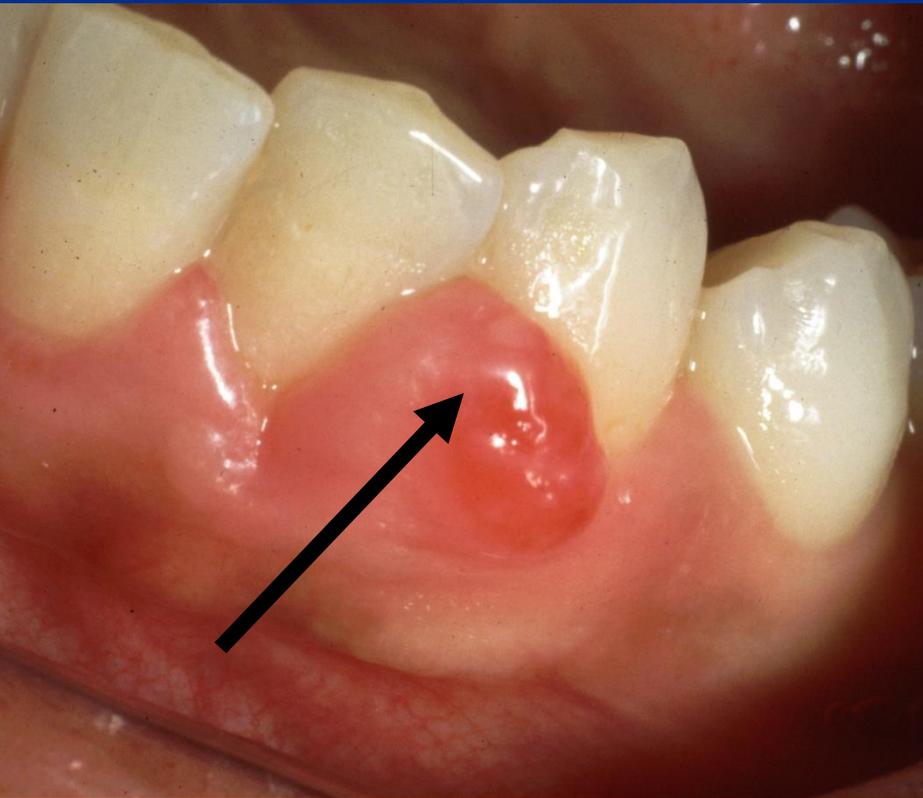
Is the part of a tooth that is visible in the oral cavity above the gum line.

☺ The part of the tooth covered by enamel.

Clinical crown may include all of the anatomical crown and part of the root.



Part of the anatomical crown may be covered by gingiva.



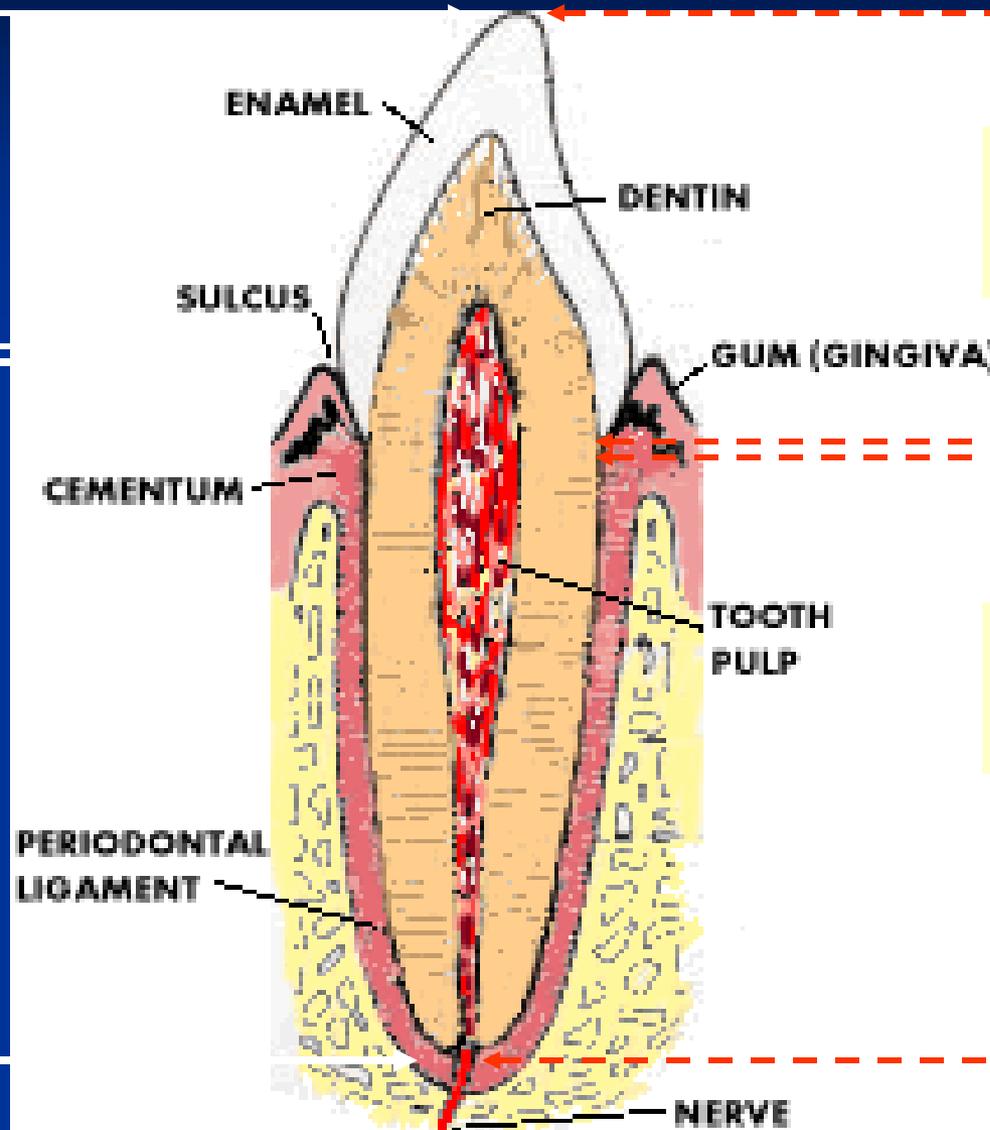
Anatomical And Clinical Crown And Root

Clinical
Crown

Anatomical
Crown

Clinical
Root

Anatomical
Root



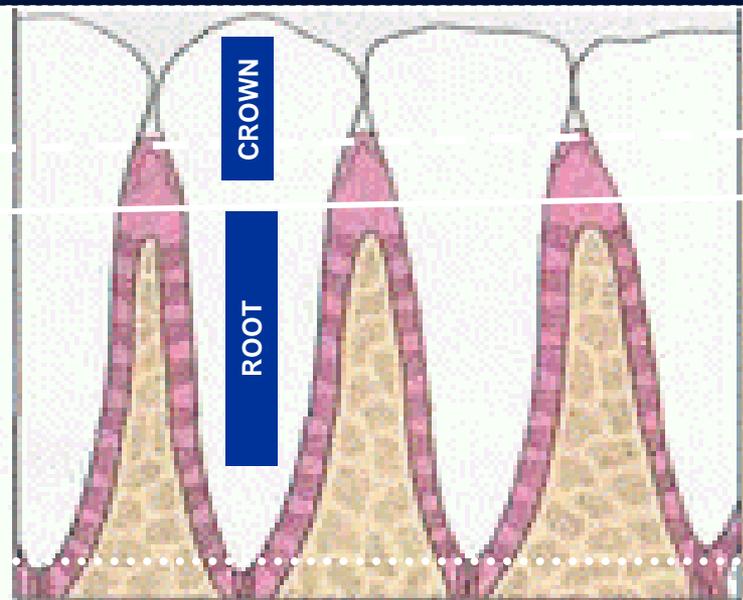
Anatomical And Clinical Crown And Root



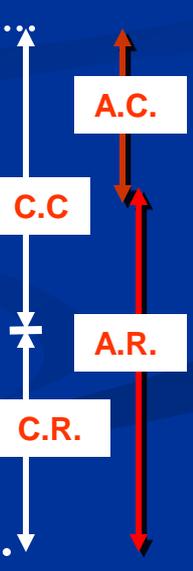
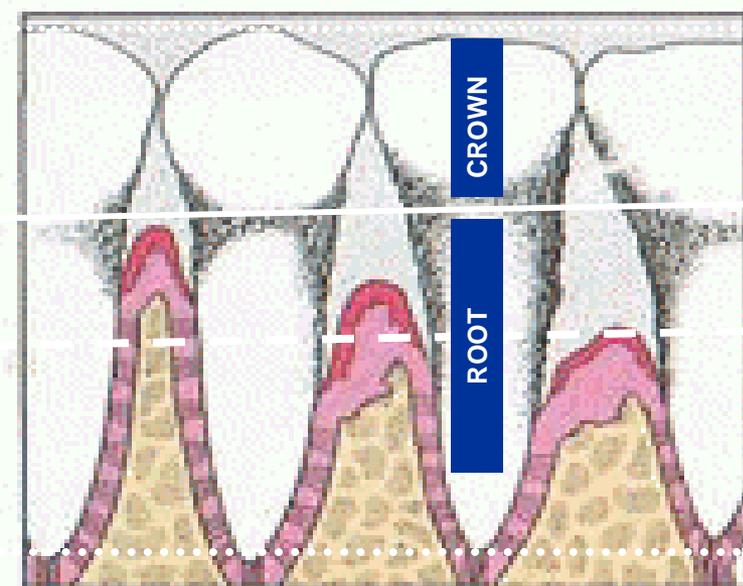
Anatomical And Clinical Crown And Root



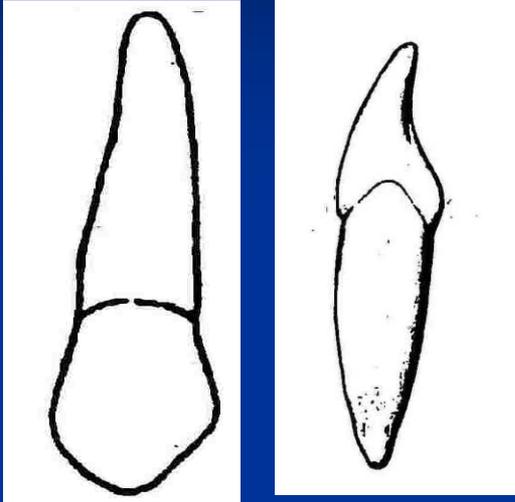
Newly Erupted Teeth



Gingival Recession

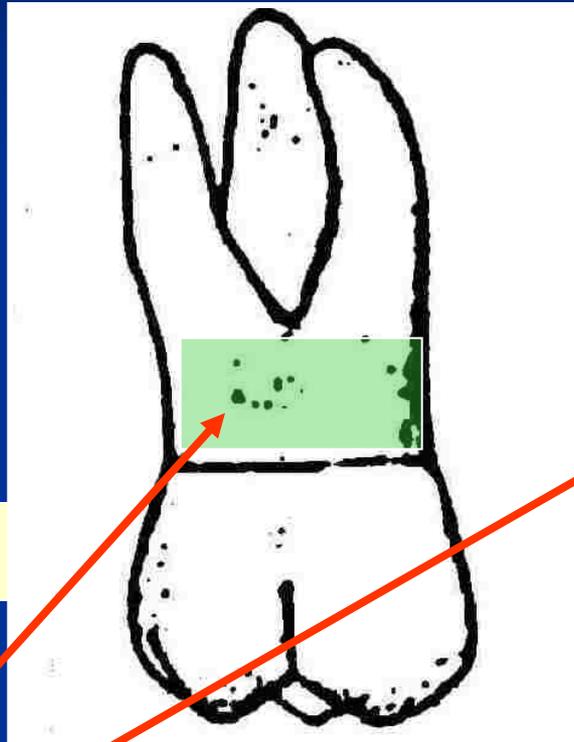


Teeth May Be Divided According To The Number Of Roots

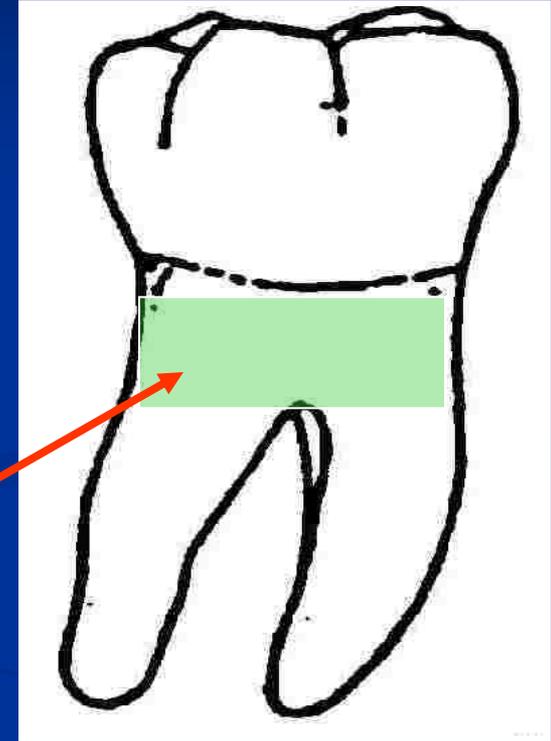


Single rooted teeth

The undivided portion of the root is called: Root Trunk.



Multirooted teeth



- Teeth may be divided according to no. of roots into:



Single rooted teeth



Multirouted teeth

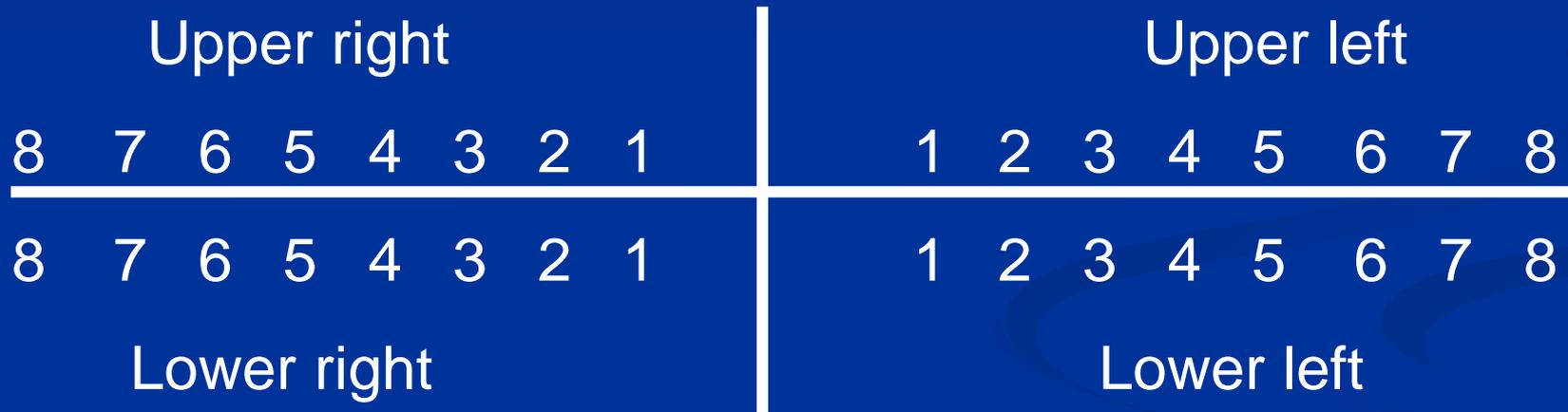


Ass.Prof.Noura Bakr

3-Tooth numbering system

1) Palmer Notation System:

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



8

permanent upper right third molar

3

permanent upper left canine

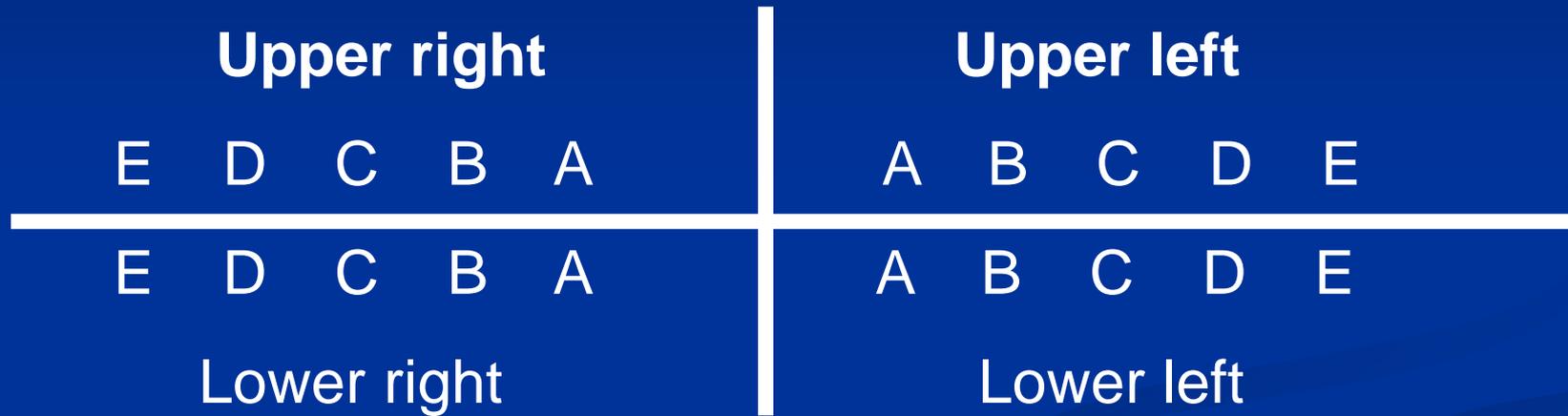
5

Lower left second premolar

1

permanent lower right central incisor

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



D Deciduous upper right first molar

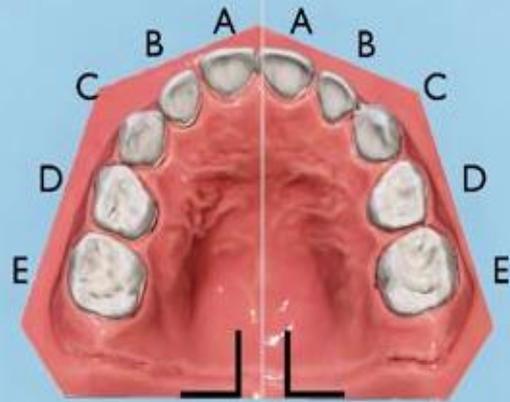
B Deciduous upper left lateral incisor

C Deciduous lower left canine

E Deciduous lower right second molar

Upper Right

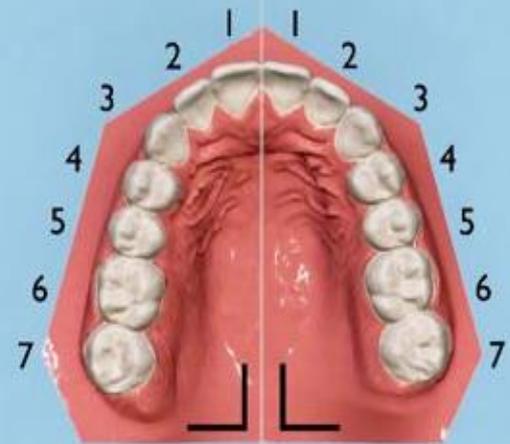
Upper Left



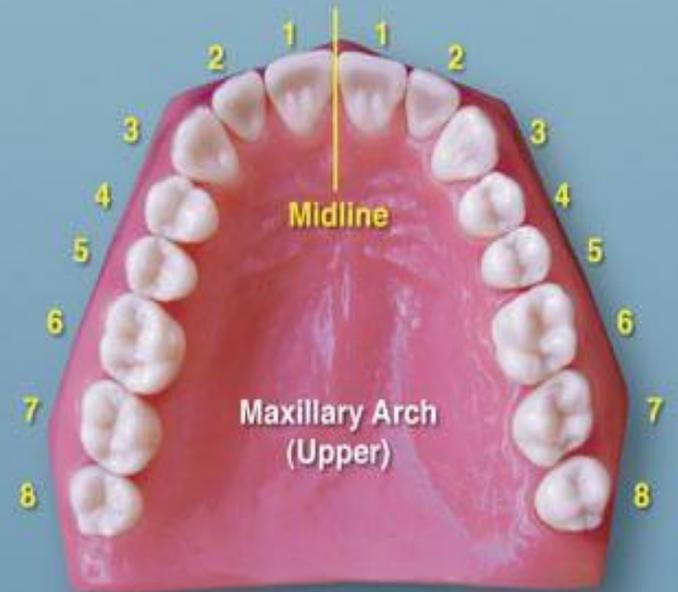
Primary

Upper Right

Upper Left



Secondary



Right

Left

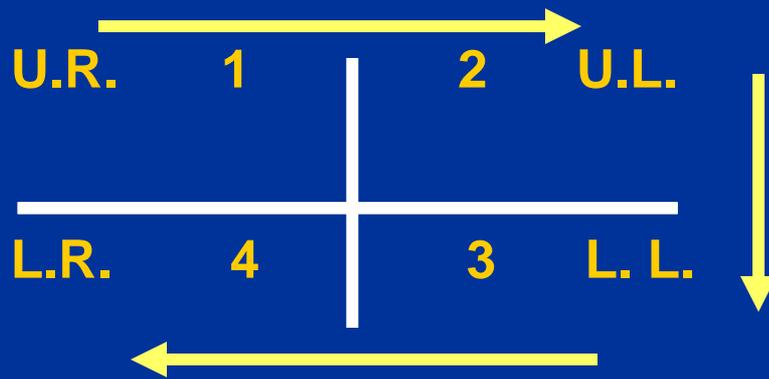


2- The international numbering system (The two digit system)

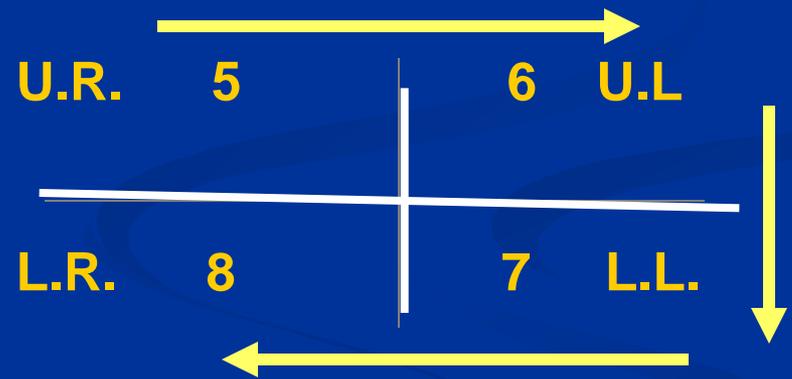
The teeth are designed by using two-digit systems:

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

In the permanent dentition.



In the deciduous dentition.



- 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.

Permanent teeth

18 17 16 15 14 13 12 11

21 22 23 24 25 26 27 28

48 47 46 45 44 43 42 41

31 32 33 34 35 36 37 38

16 Permanent upper right first molar

33 Permanent lower left canine

Deciduous teeth

55 54 53 52 51

61 62 63 64 65

85 84 83 82 81

71 72 73 74 75

55 Deciduous upper right second molar

72

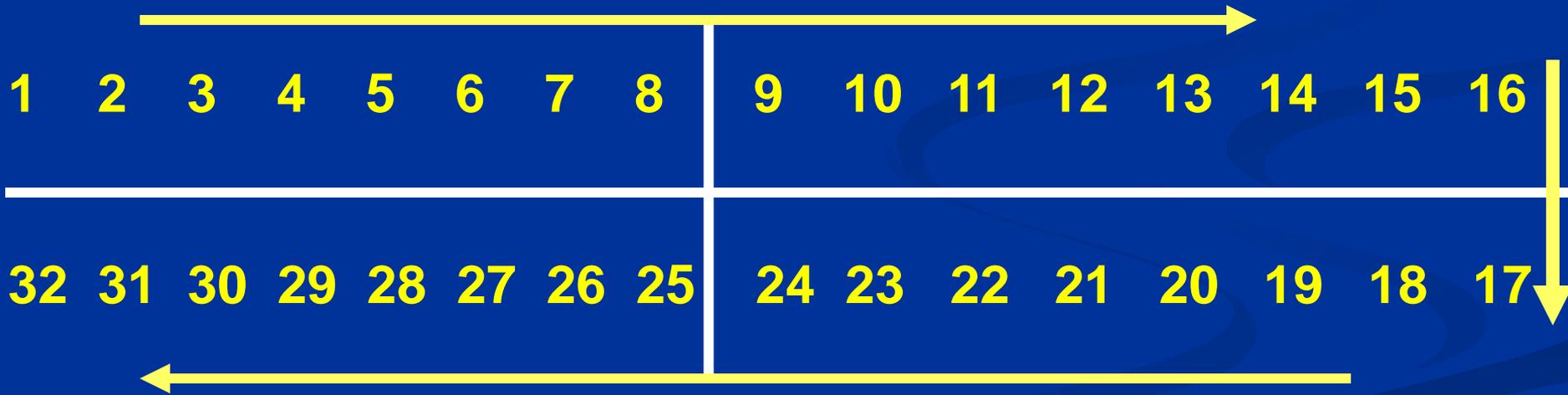
Deciduous lower left lateral incisor



3)The universal numbering system (American numbering system):

The number is always preceded by the sign # to designate that the system is used for universal system.

Permanent teeth (1 – 32)



#23 Permanent Lower right
canine

#16 Permanent upper left third
molar

Deciduous teeth (1 – 20)

The number is preceded by

d #

1	2	3	4	5	6	7	8	9	10
20	19	18	17	16	15	14	13	12	11

Or (A - T) The letter is preceded by # only

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

d# 14 **Deciduous lower left lateral incisor**

#B **Deciduous upper right first molar**

Interactive session (Q&A)

- The junctions of tooth tissues are:

a).....

b).....

c).....

- 2- The functions of teeth are:

a).....

b).....

c).....

d).....

- 3- In the international numbering system (digit system) (33) is.....

- 4-The microanatomy of the tooth is formed of three calcified structures which are....., andand a soft tissue is called.....

THANK YOU

