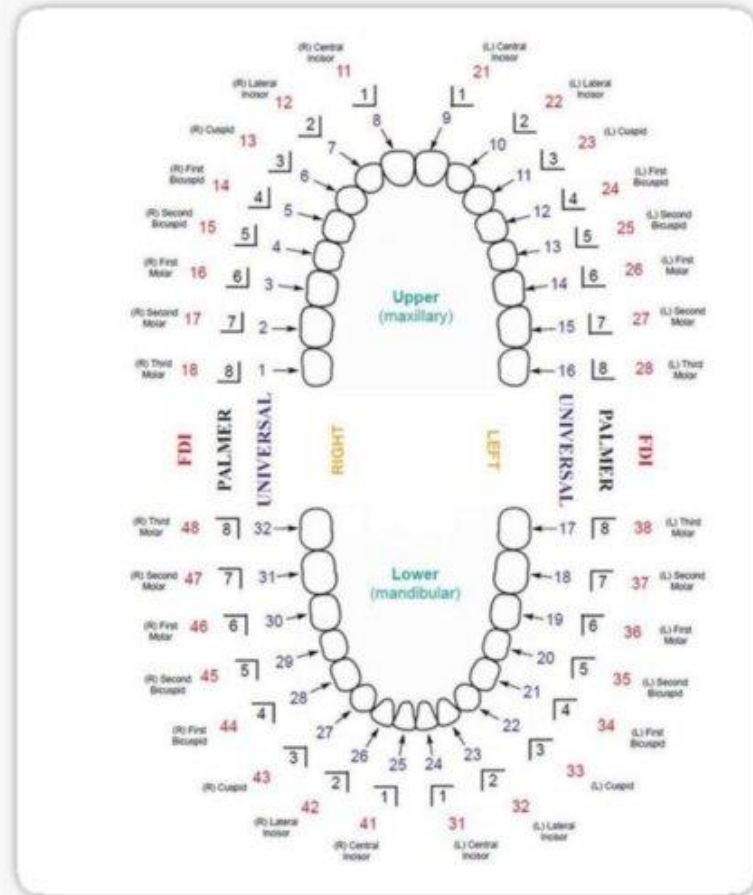




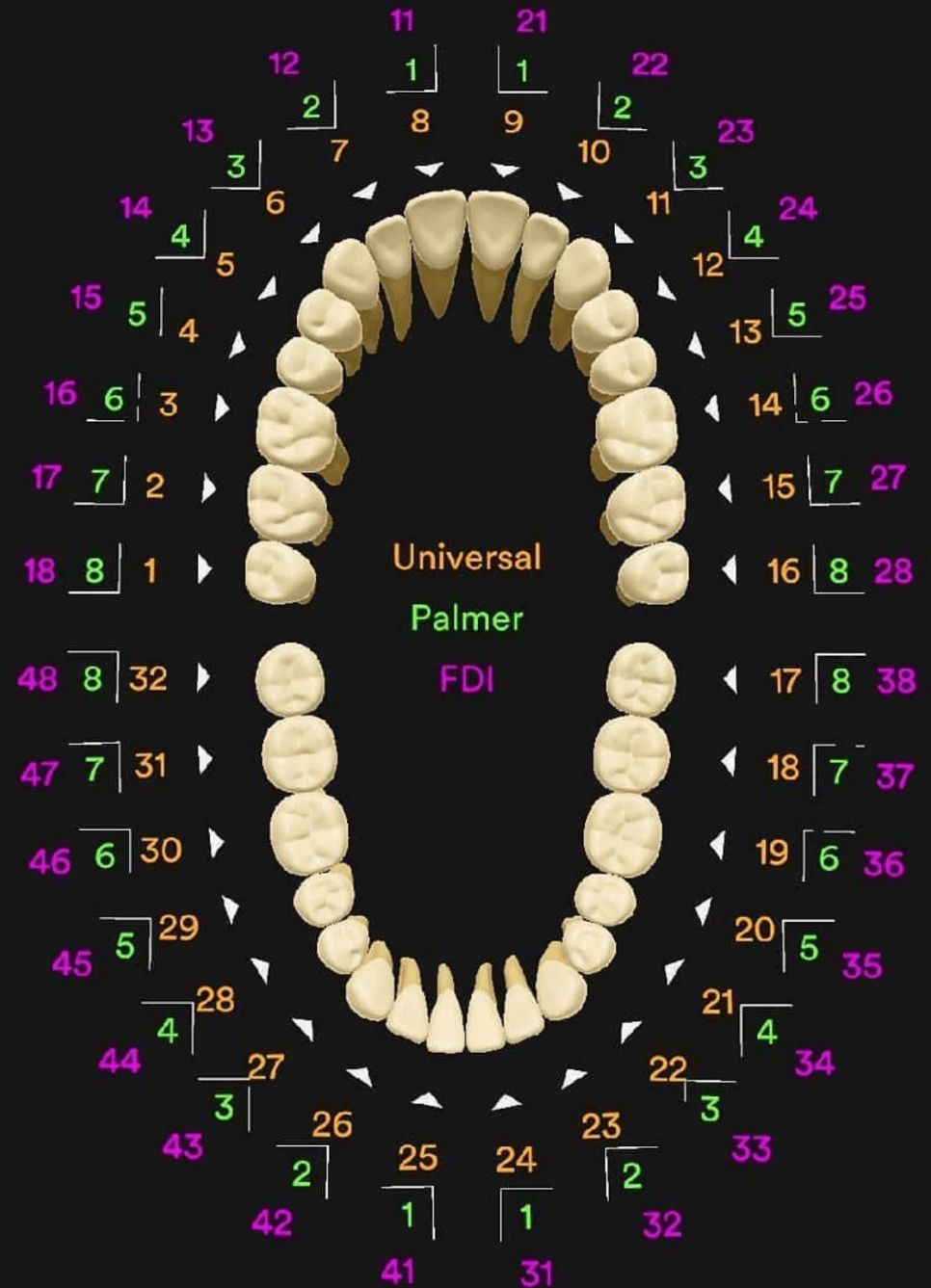
Tooth Numbering system

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Prosthodontics

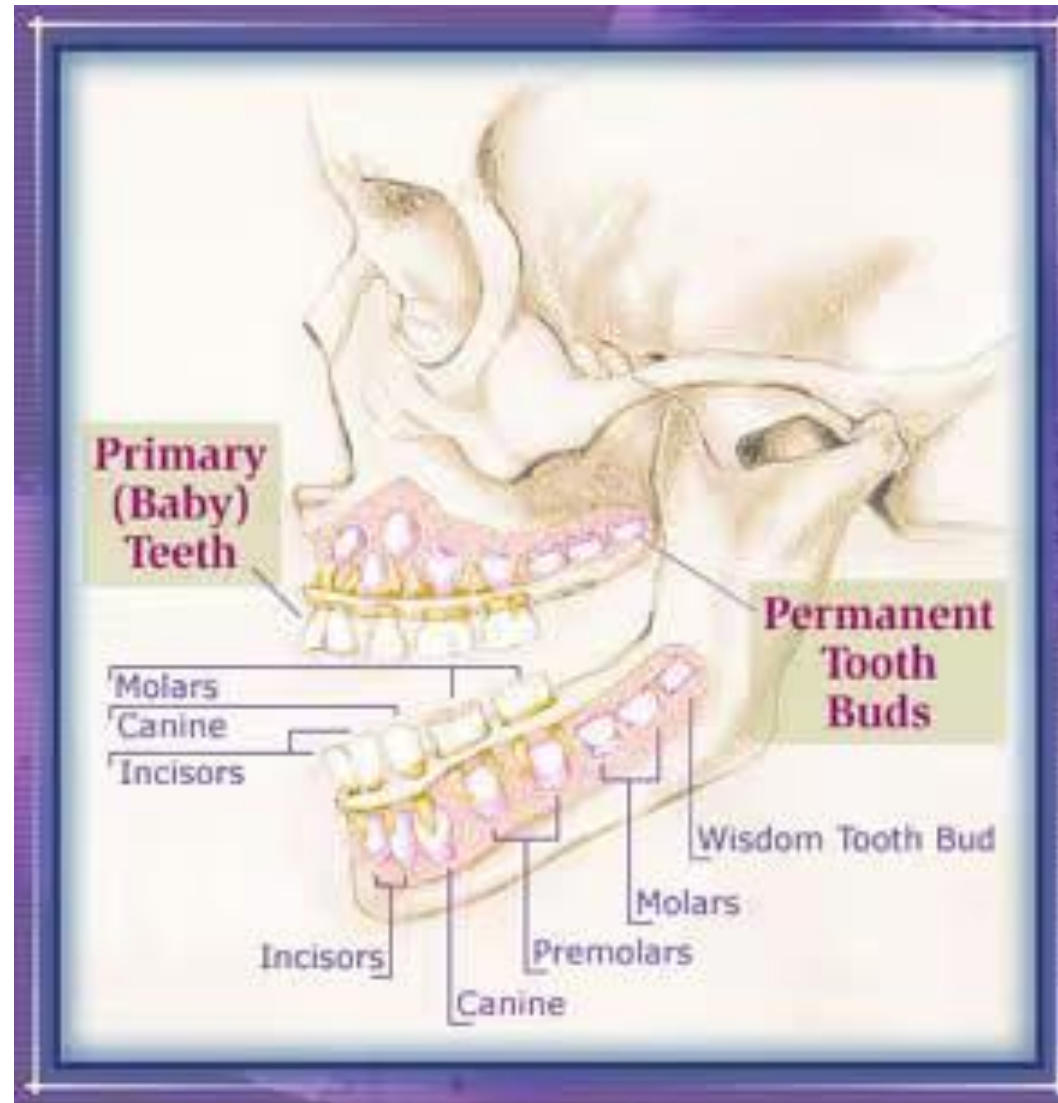


TOOTH NOTATION

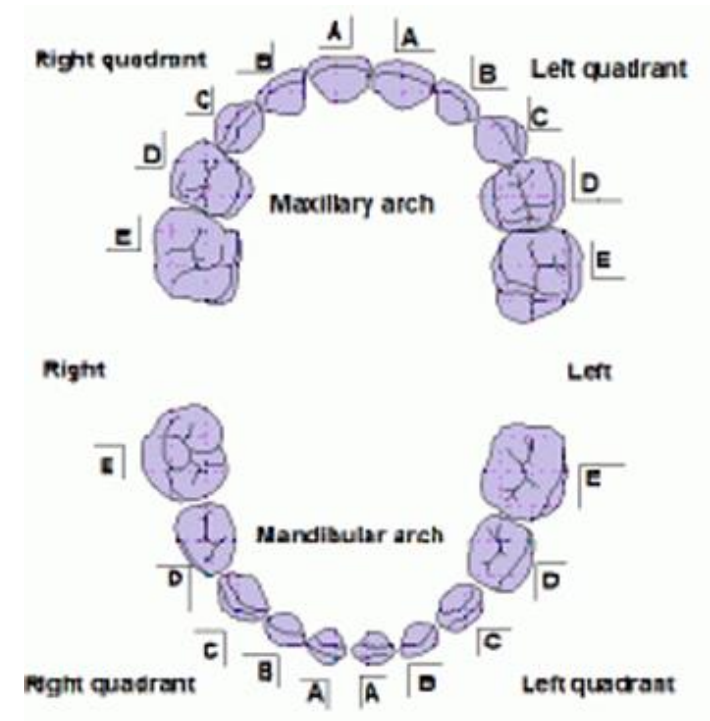
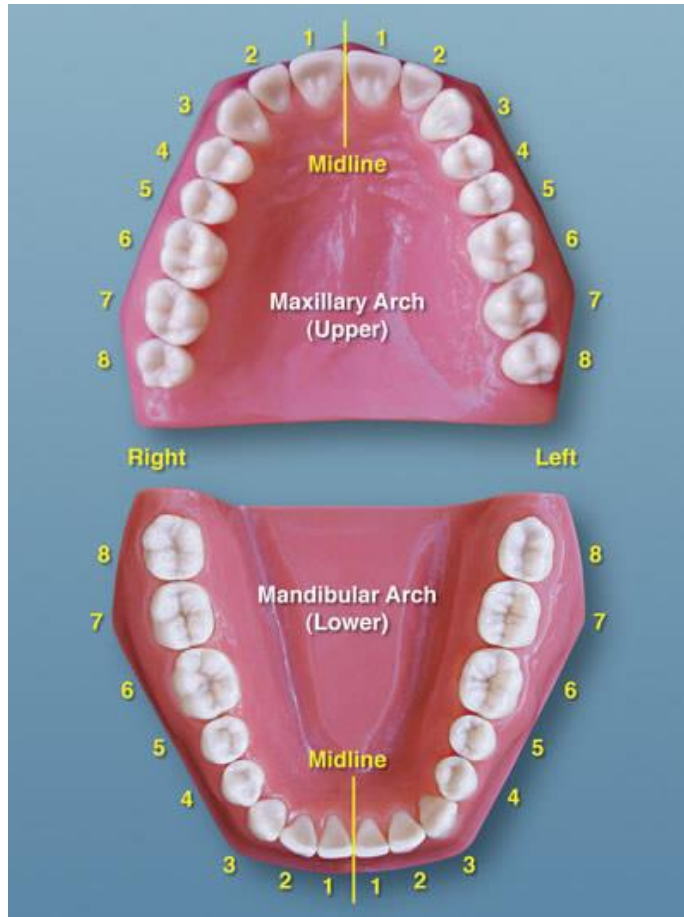
- There are different tooth notations for identifying specific tooth.
- The three most common systems used are the
 1. The “Zsigmondy-Palmer” system.
 2. The “Universal” system or American Dental Association (ADA).
 3. “FDI Federation Dentarie Internation” notation.
- The FDI system is used worldwide, and the Universal is used predominantly in the USA.



The Human Being Dentition = 52

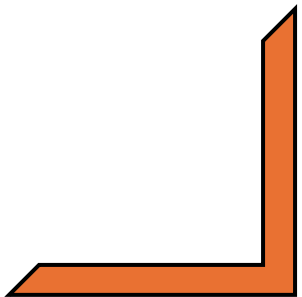


1. Zsigmondy-palmer system/Angular/Grid system

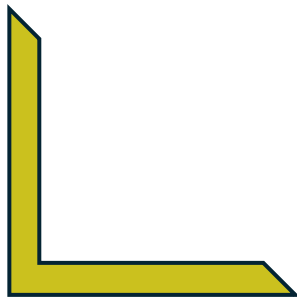


- It's the oldest system
- In this system
 - Primary dentition are denoted by English Upper-case Letter
 - Permanent dentition are denoted by Number
- The palmer notation consist of a **symbol** designing in which quadrant the tooth is found and a number or the letter indicating the position from the midline.

Upper right



Upper left



Lower right



Lower left



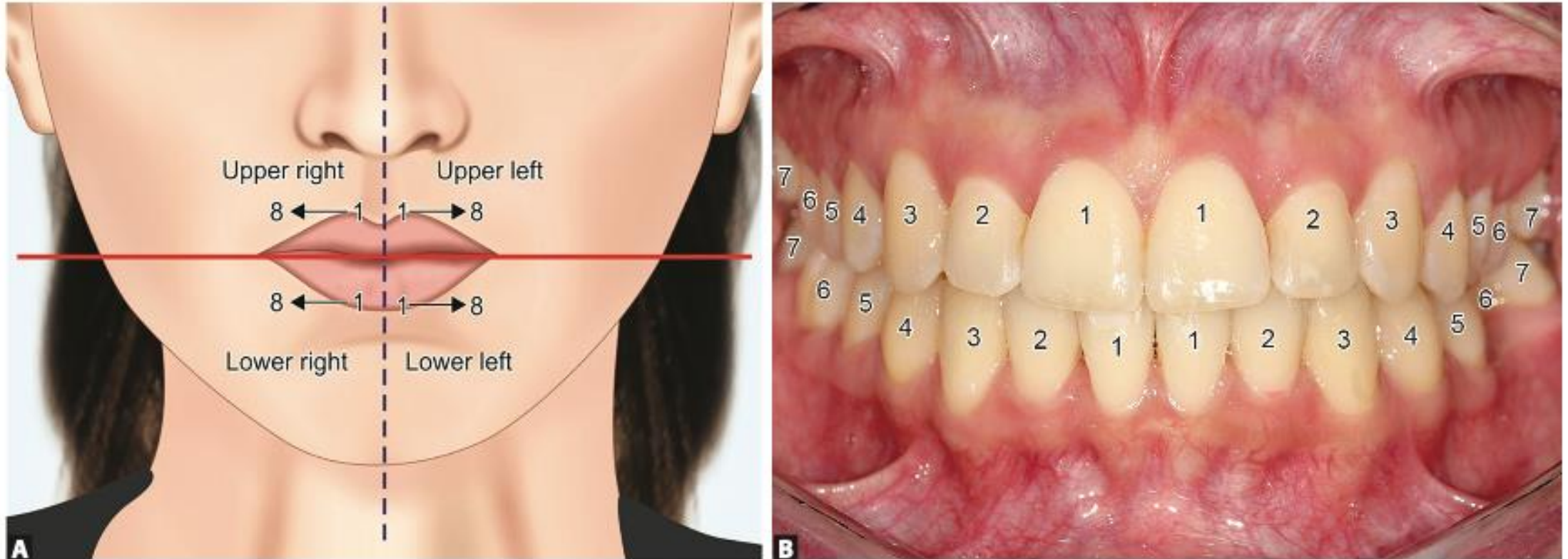
Permanent teeth

- The Zsigmondy/Palmer notation for the permanent dentition is a four-quadrant symbolic system in which, beginning with the central incisors, the teeth are numbered 1 through 8 in each arch. For example, the right maxillary first molar is designated as 6^{└┐}, and the left mandibular central incisor ┐₁. The Palmer notation for the entire permanent dentition is as follows:



8	7	6	5	4	3	2	1		1	2	3	4	5	6	7	8
8	7	6	5	4	3	2	1		1	2	3	4	5	6	7	8

Permanent teeth



Figs. 2.3A and B: Zsigmondy-Palmer tooth notation system for permanent dentition.

PALMER SYSTEM

MAXILLARY RIGHT SIDE

1st quadrant

**PERMANENT
DENTITION**

MAXILLARY LEFT SIDE

2nd quadrant

8 7 6 5 4 3 2 1

1 2 3 4 5 6 7 8

8 7 6 5 4 3 2 1

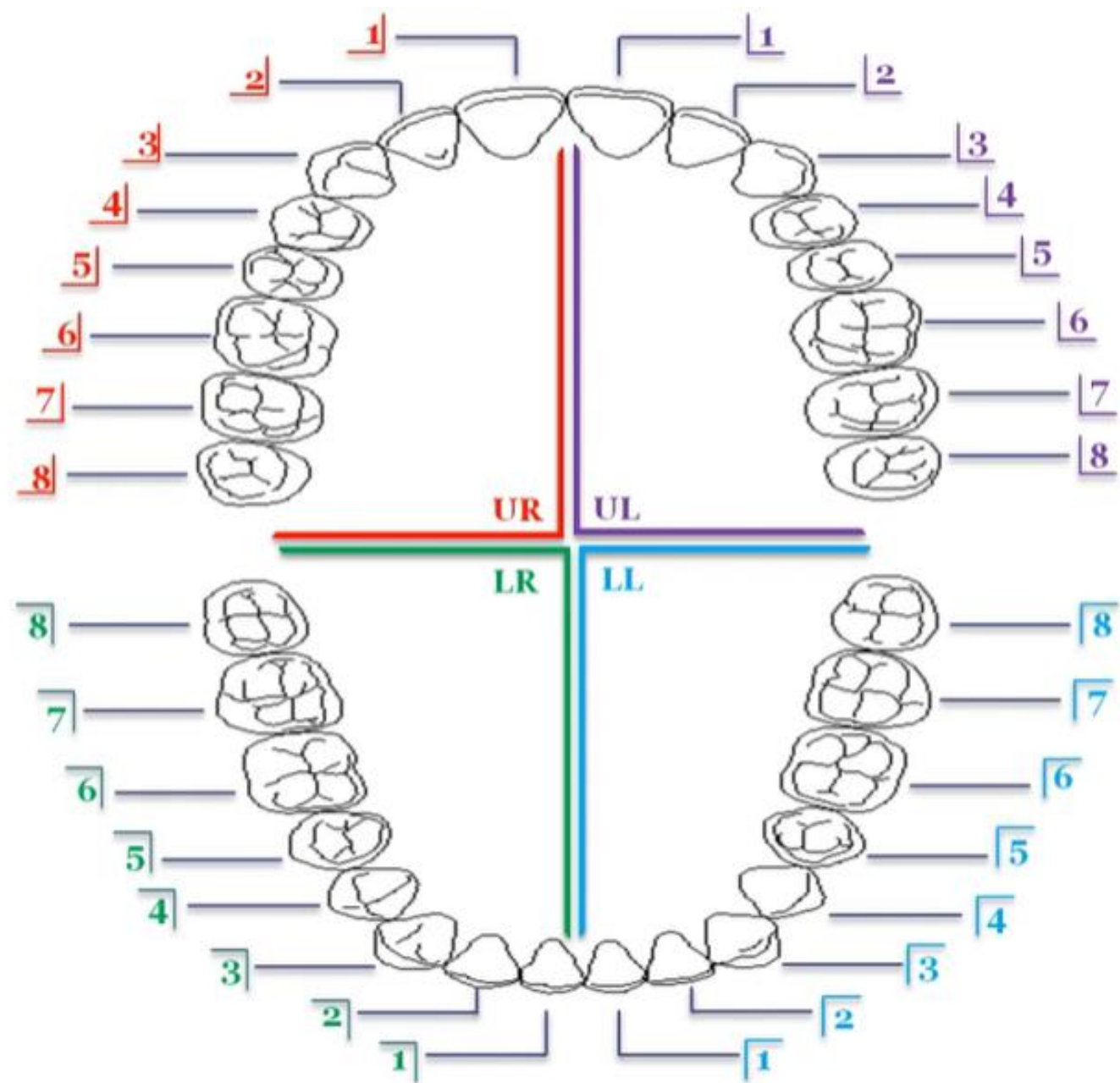
1 2 3 4 5 6 7 8

MANDIBULAR RIGHT SIDE

4th quadrant

MANDIBULAR LEFT SIDE

3rd quadrant



Primary teeth

Primary teeth are designated as A, B, C, D, E, where A is central incisor and E is second molar.



In this system the arches are divided into quadrants



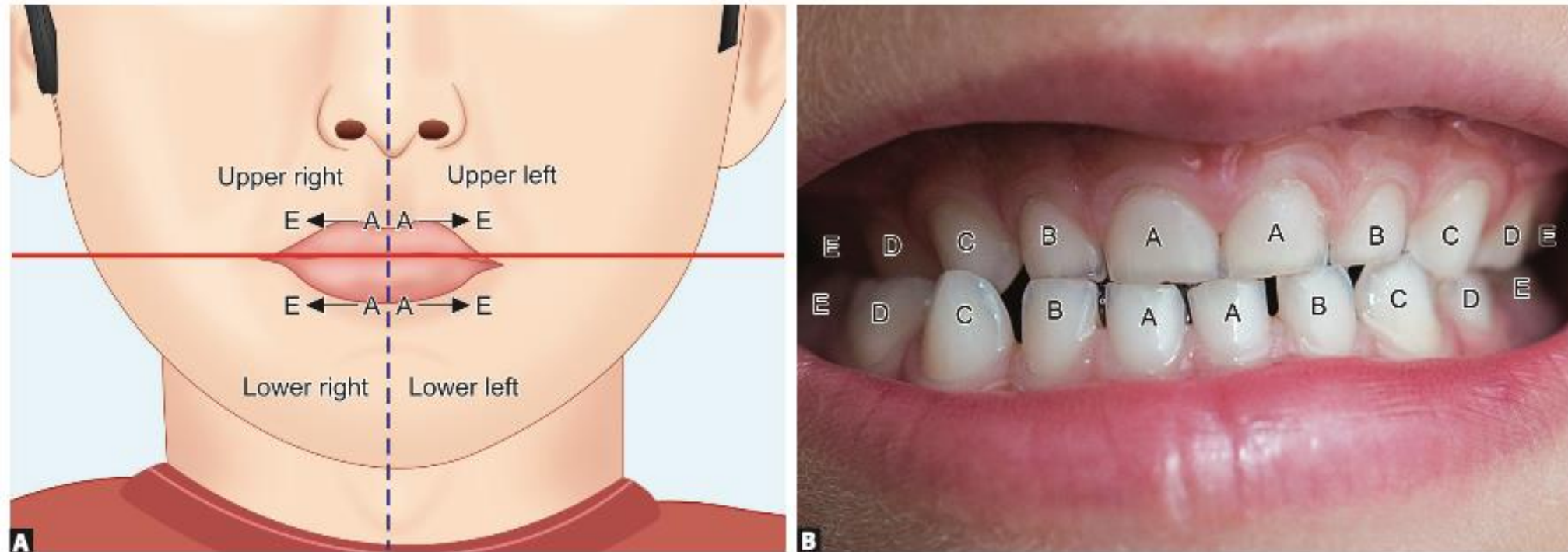
Each quadrant has unique L-shaped symbol to designate the quadrant to which tooth belongs.



The entire dentition being notated as follows: for maxillary right ,maxillary left ,mandibular right and mandibular left

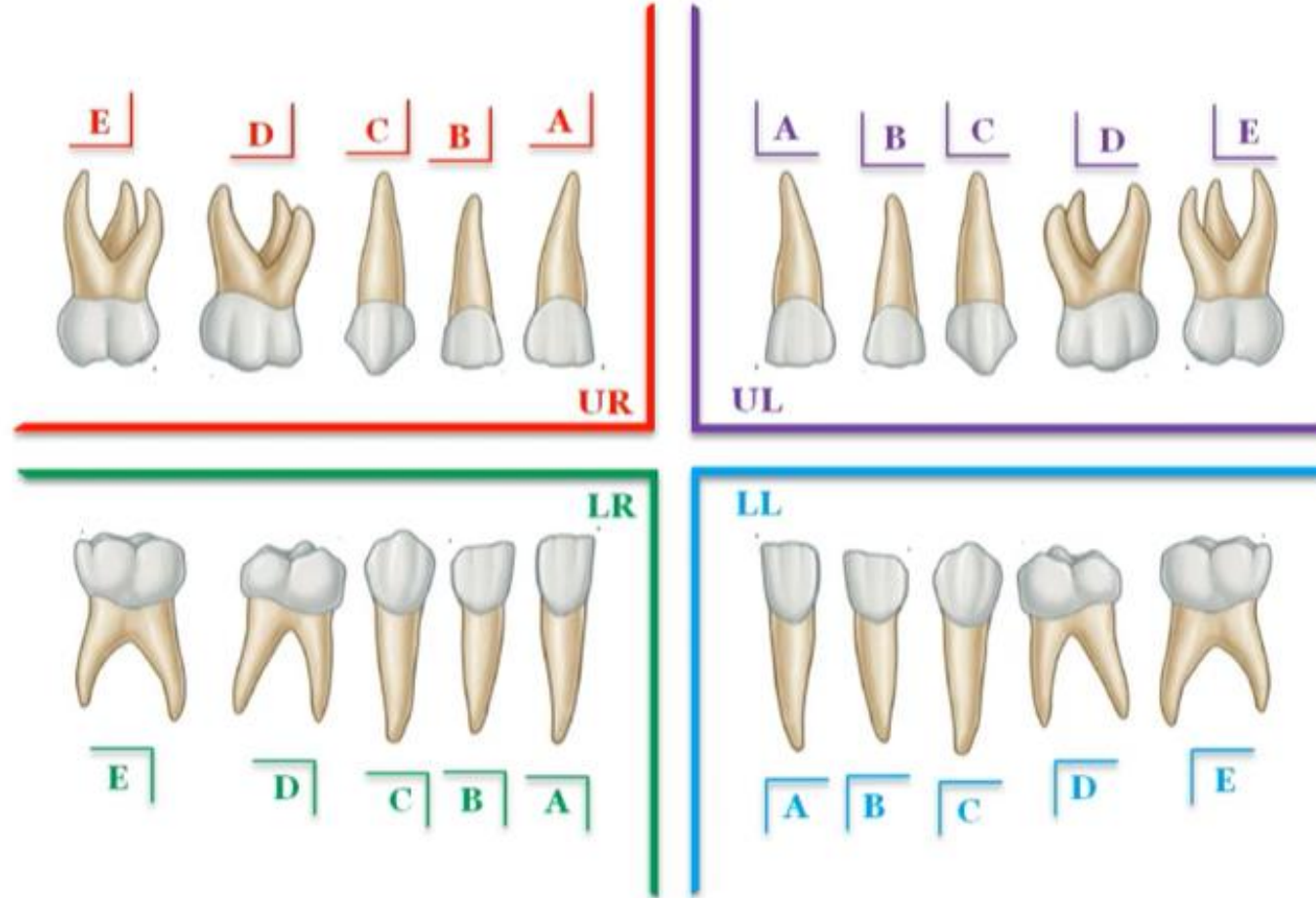
E	D	C	B	A		A	B	C	D	E
E	D	C	B	A		A	B	C	D	E

Primary teeth



Figs. 2.4A and B: Zsigmondy-Palmer tooth notation system for primary dentition.

PALMER SYSTEM FOR BABY TEETH



PALMER SYSTEM

MAXILLARY RIGHT SIDE

1st quadrant

**DECIDUOUS
DENTITION**

MAXILLARY LEFT SIDE

2nd quadrant

EDCBA

ABCDE

EDCBA

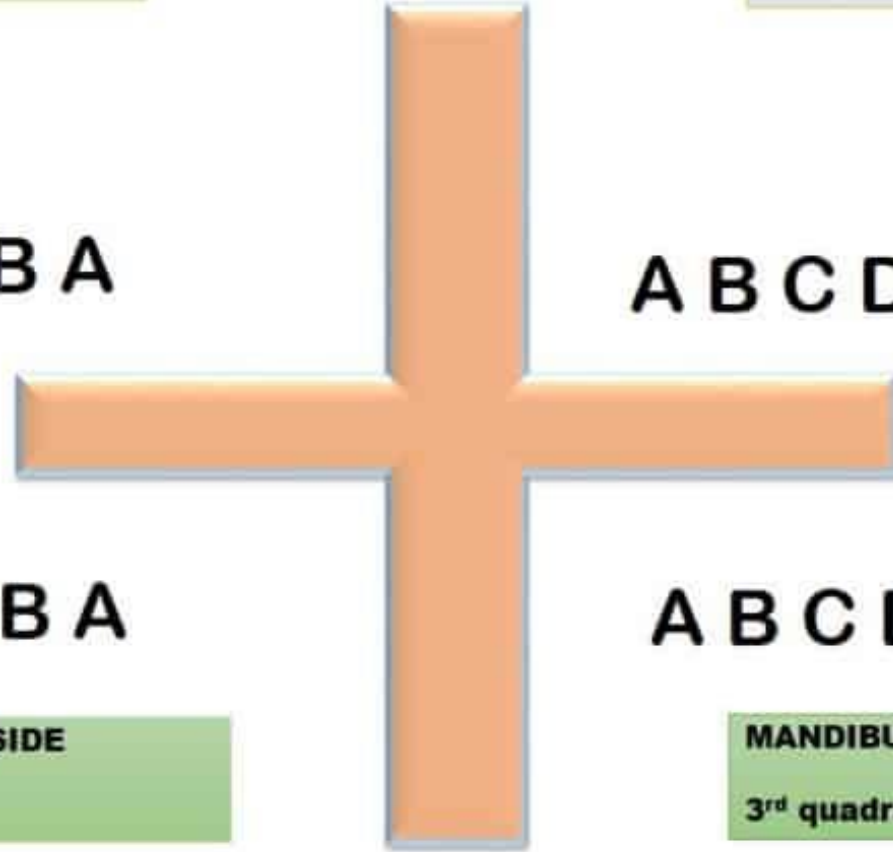
ABCDE

MANDIBULAR RIGHT SIDE

4th quadrant

MANDIBULAR LEFT SIDE

3rd quadrant



Advantages

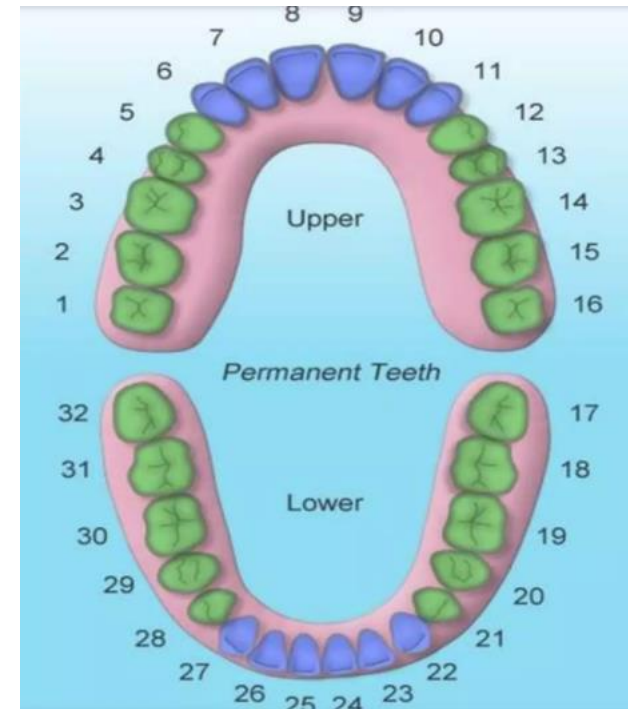
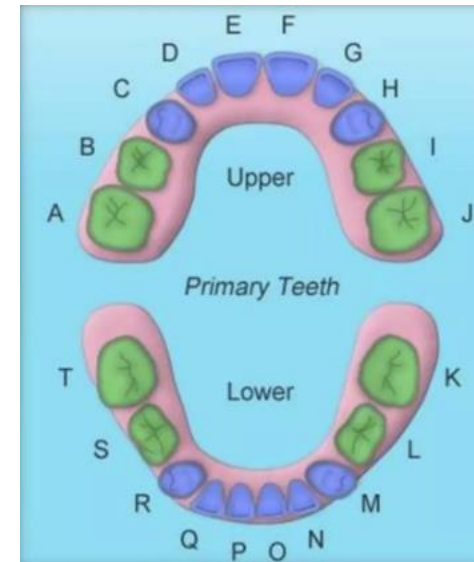
- ❖ Simple and easy to use
- ❖ Less chances of confusion between primary and permanent tooth as there is different notation, e.g. permanent teeth are described by numbers while primary teeth by alphabets.

Disadvantages

- ❖ Difficulty in communication
- ❖ Confusion between upper and lower quadrants, while communication and transferring a data.

2. Universal (National) system/ADA system

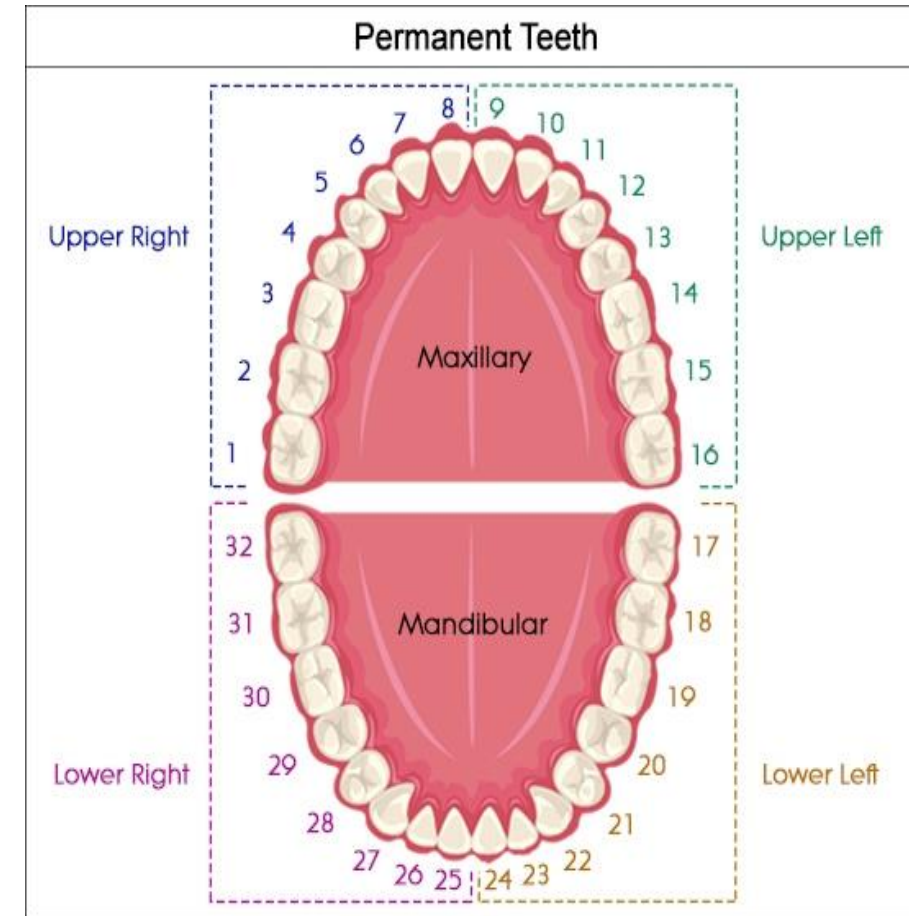
- This system was introduced by the **American Dental Association** in 1968.
It is most popular in the United States.
- Universal numbering system uses a **unique** letter or number for each tooth.



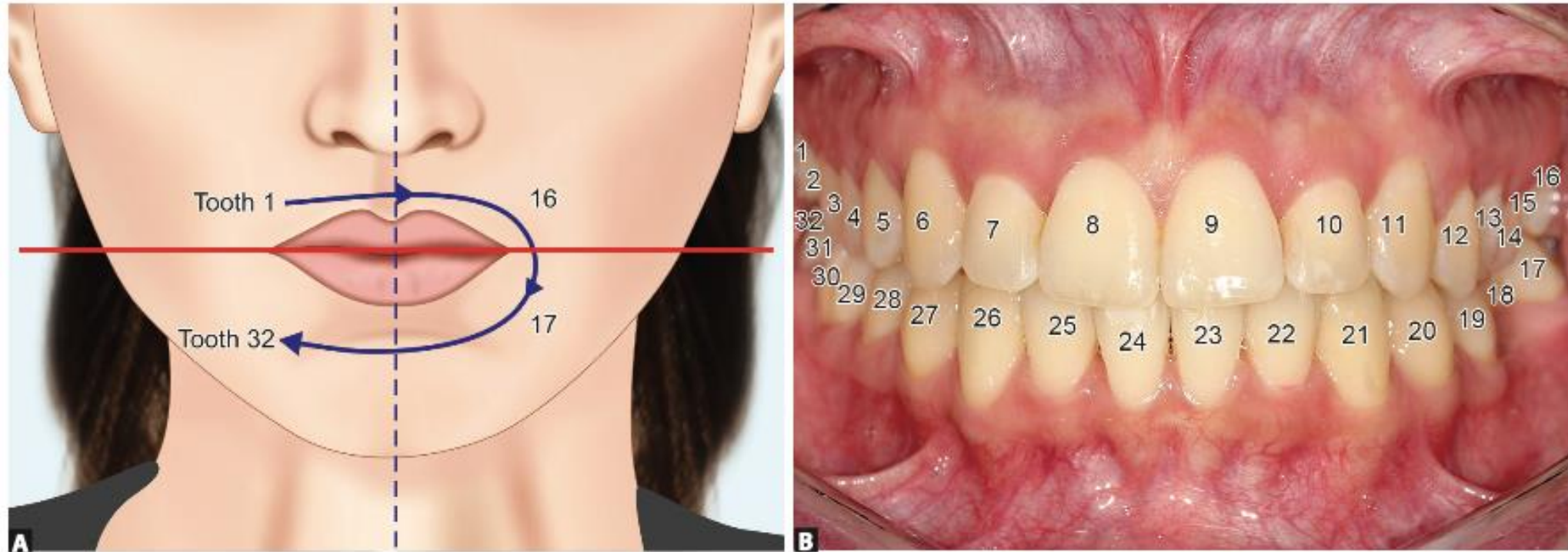
Permanent teeth

- Numbering starts from maxillary right posterior tooth where tooth number **1** is the patient's **upper right third molar** and follows around the upper arch to the **upper left third molar**, tooth **16**, descending to the **lower left third molar**, tooth **17**, and following around the lower arch to the lower right third molar, tooth **32**.
- If a third molar is missing, the first number will be 2 instead of 1, acknowledging the missing tooth.
- If teeth have been extracted or missing, they are also numbered.

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



Permanent teeth : It includes numbers and moving clockwise around the dentition



Figs. 2.5A and B: Universal tooth notation system for permanent dentition.

UNIVERSAL SYSTEM

MAXILLARY RIGHT SIDE

1st quadrant

PERMANENT
DENTITION

MAXILLARY LEFT SIDE

2nd quadrant

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 RIGHT SIDE

4th quadrant

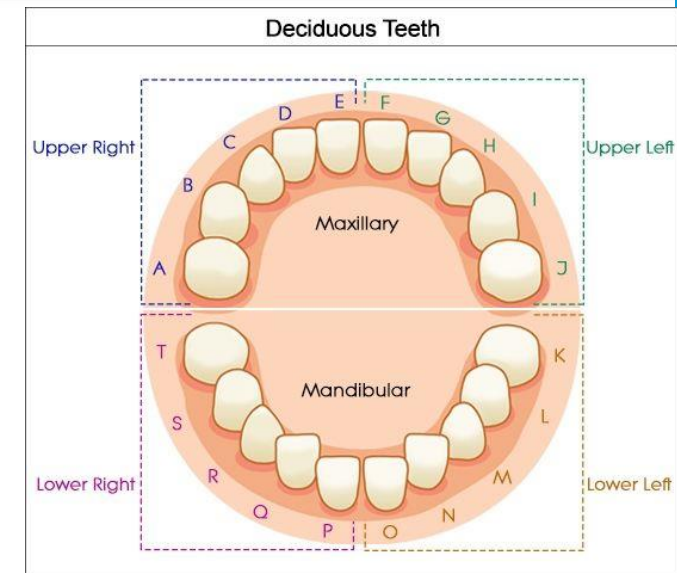
MANDIBULAR LEFT SIDE

3rd quadrant

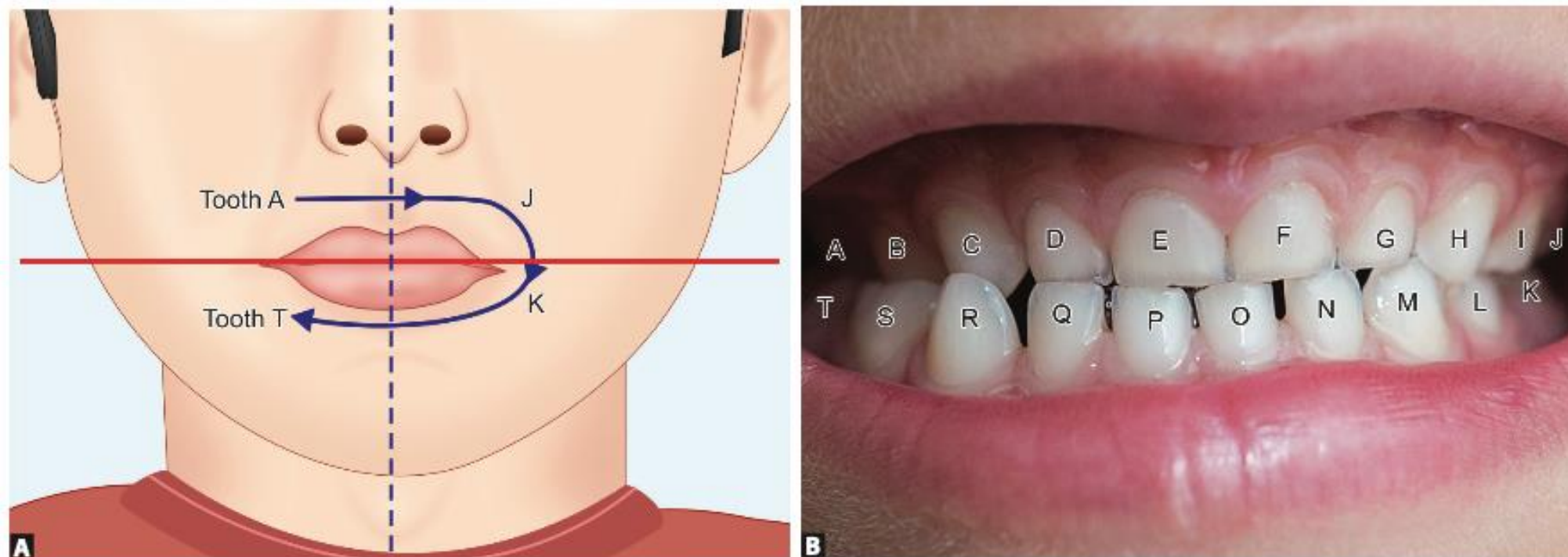
Primary teeth

- Primary teeth are by English upper case letters **A** through **T** instead of numbers 1 to 20, with A being upper right second primary molar and T being the lower right second primary molar.

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



Primary teeth



Figs. 2.6A and B: Universal tooth notation system for primary dentition.

UNIVERSAL SYSTEM

MAXILLARY RIGHT SIDE

1st quadrant

**DECIDUOUS
DENTITION**

MAXILLARY LEFT SIDE

2nd quadrant

A B C D E

F G H I J

T S R Q P

O N M L K

MANDIBULAR RIGHT SIDE

4th quadrant

MANDIBULAR LEFT SIDE

3rd quadrant

Clockwise
around the
dentition

21



Permanent Teeth															
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
Lower Right								Lower Left							

Primary teeth									
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				



1. Advantage

- Unique letter or number for each tooth avoiding confusions.

2. Disadvantage

- Difficult to remember each letter or number of tooth.

3. FDI World Dental Federation – Two Digit System

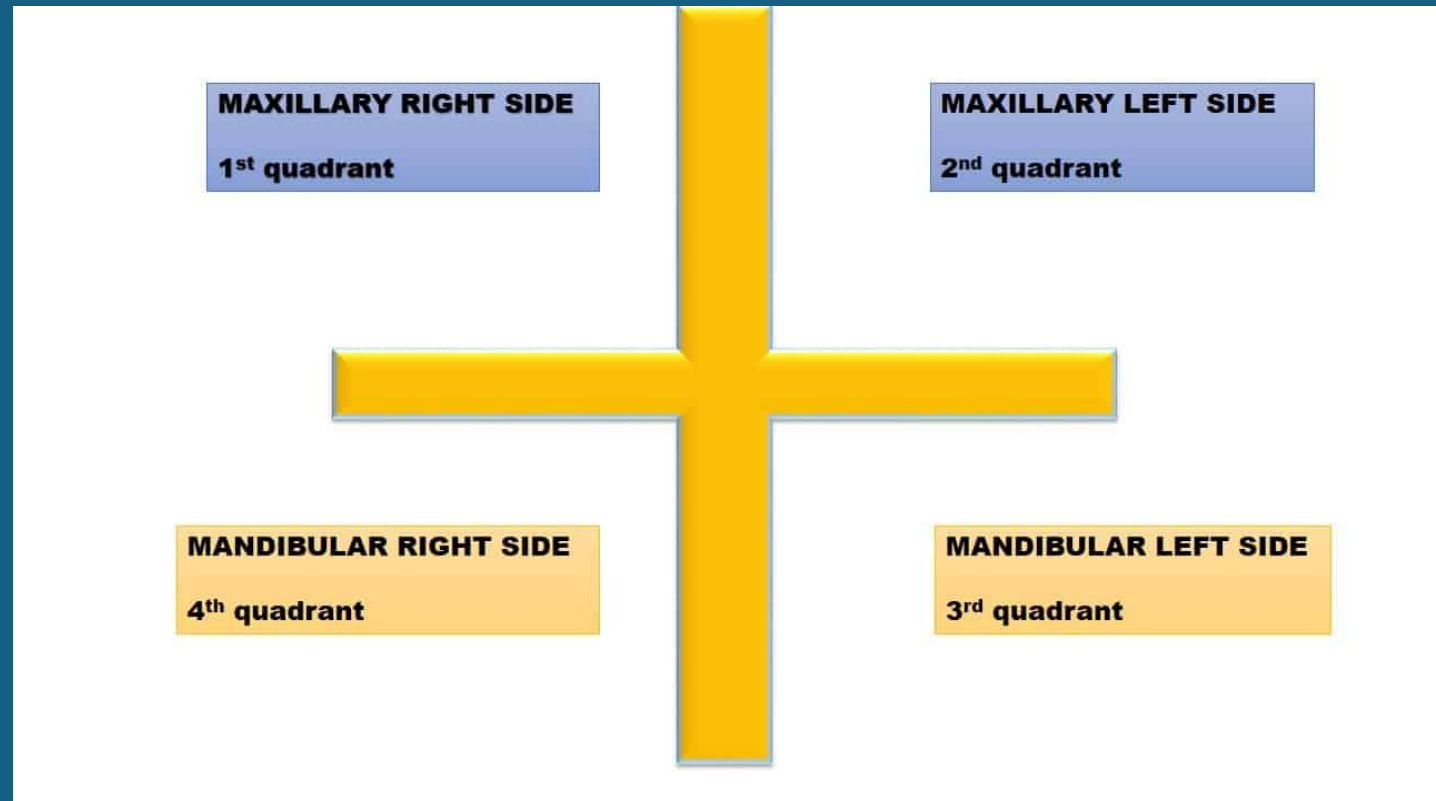
- FDI system is known as a “**Two-Digit**” system because it uses two digits; the **first** number represents a tooth’s **quadrant**, and the **second** number represents the number of the **tooth** from the midline of the face.
- Both digits should be pronounced separately in communication. For example, the lower left permanent second molar is “37”; it is not termed as “thirty-seven”, but “**three seven**”.

FDI

tooth numbering
system for
permanent dentition

QUADRANTS

Upper Right QUAD 1	Upper Left QUAD 2
QUAD 4 Lower Right	QUAD 3 Lower Left



Permanent teeth

- In FDI notation, The first digit indicates the quadrant (1-4) and the second digit indicates the teeth (1-8).
 - Quadrants are designated 1 to 4 (FIRST NUMBER)
 - ✓ 1=upper right
 - ✓ 2=upper left
 - ✓ 3=lower left
 - ✓ 4=lower right
 - ✓ Teeth (SECOND NUMBER)
 - ✓ Central incisor = 1
 - ✓ Lateral incisor = 2
 - ✓ Canine = 3
 - ✓ 1st and 2nd premolars = 4,5
 - ✓ 1st, 2nd, and 3rd molars = 6,7,8
- Upper Right

18	17	16	15	14	13	12	11		21	22	23	24
48	47	46	45	44	43	42	41		31	32	33	34

Lower Right

Upper Right								Upper Left							
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
Lower Right								Lower Left							

Permanent Dentition

Maxillary Right Teeth

Maxillary Left Teeth

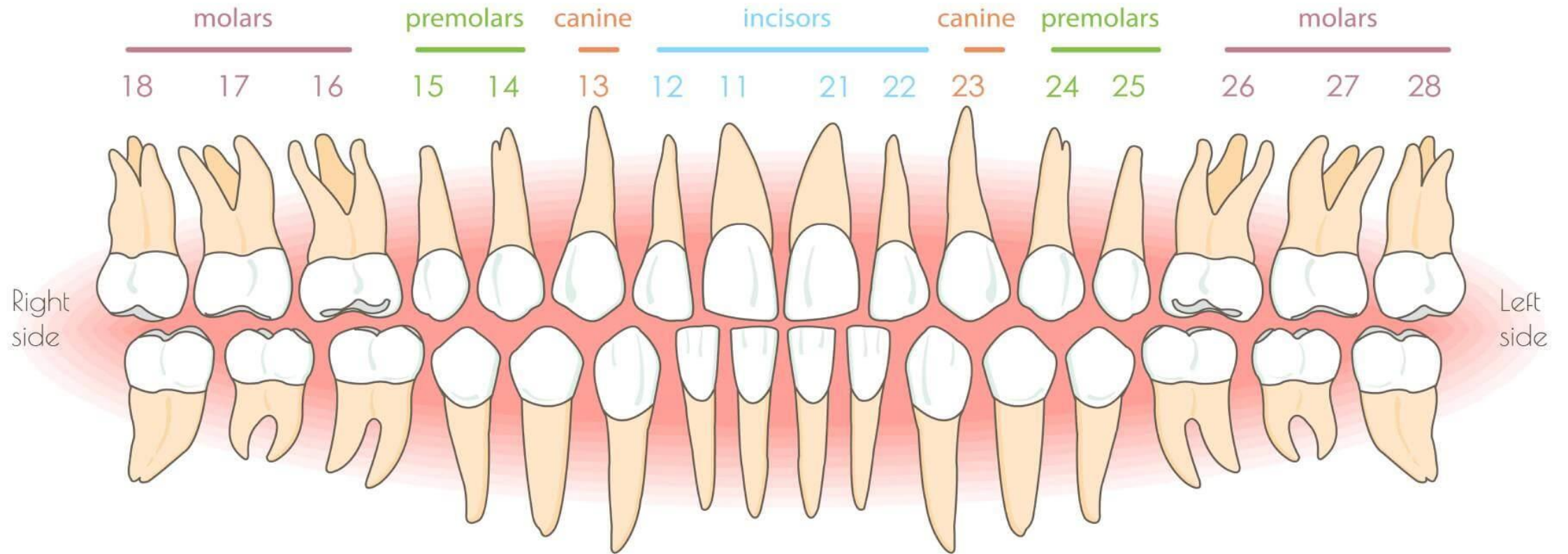
18 17 16 15 14 13 12 11 | 21 22 23 24 25 26 27 28

48 47 46 45 44 43 42 41 | 31 32 33 34 35 36 37 38

Mandibular Right Teeth

Mandibular Left Teeth

Upper jaw



Lower jaw

Primary Teeth

- The first digit indicates the quadrant (5,6,7,8),and the second digit indicates the tooth number.

✓ 5= Maxillary right

✓ 6= Maxillary left

✓ 7= Mandibular left

✓ 8= Mandibular left

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

Primary Dentition

Maxillary Right Teeth

Maxillary Left Teeth

55 **54** **53** **52** **51**

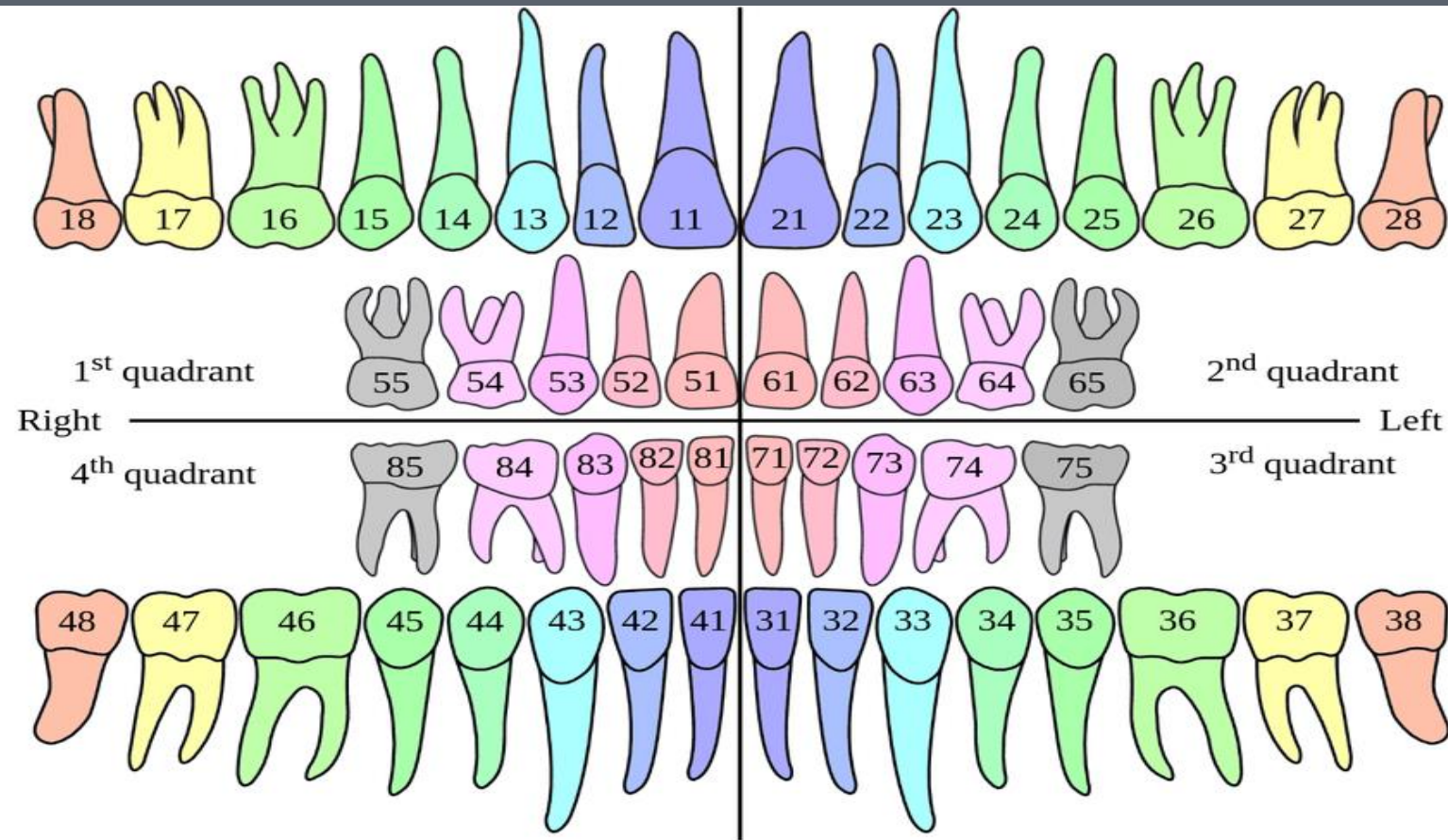
61 **62** **63** **64** **65**

85 **84** **83** **82** **81**

71 **72** **73** **74** **75**

Mandibular Right Teeth

Mandibular Left Teeth



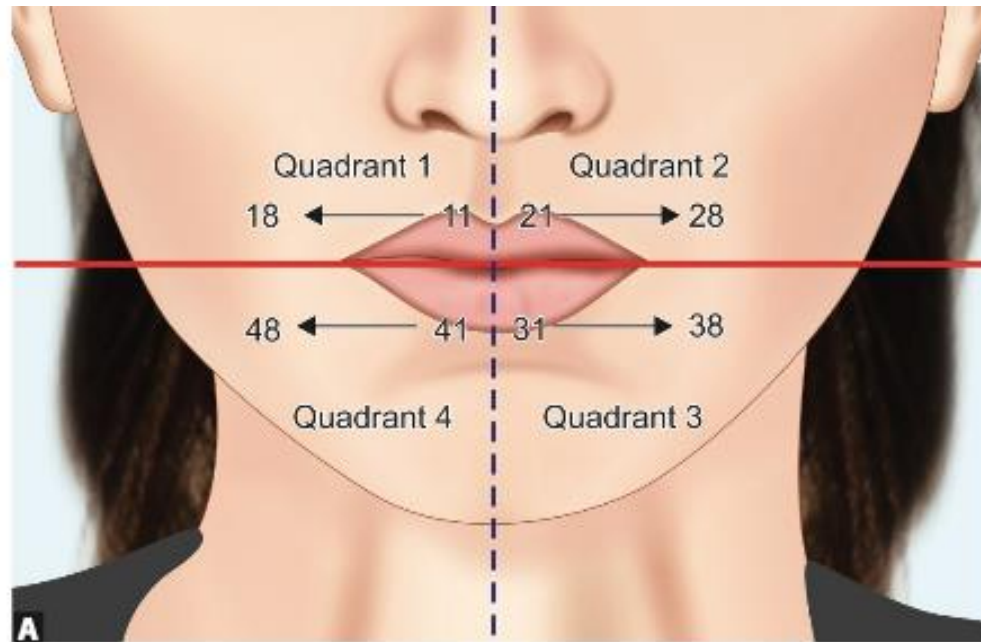
Tooth code (2 nd digit)								
Permanent	1	2	3	4	5	6	7	8
Deciduous	1	2	3			4	5	
Tooth type	Central incisors	Lateral incisors	Canines	First premolars	Second premolars	First molars	Second molars	Third molars

Advantage

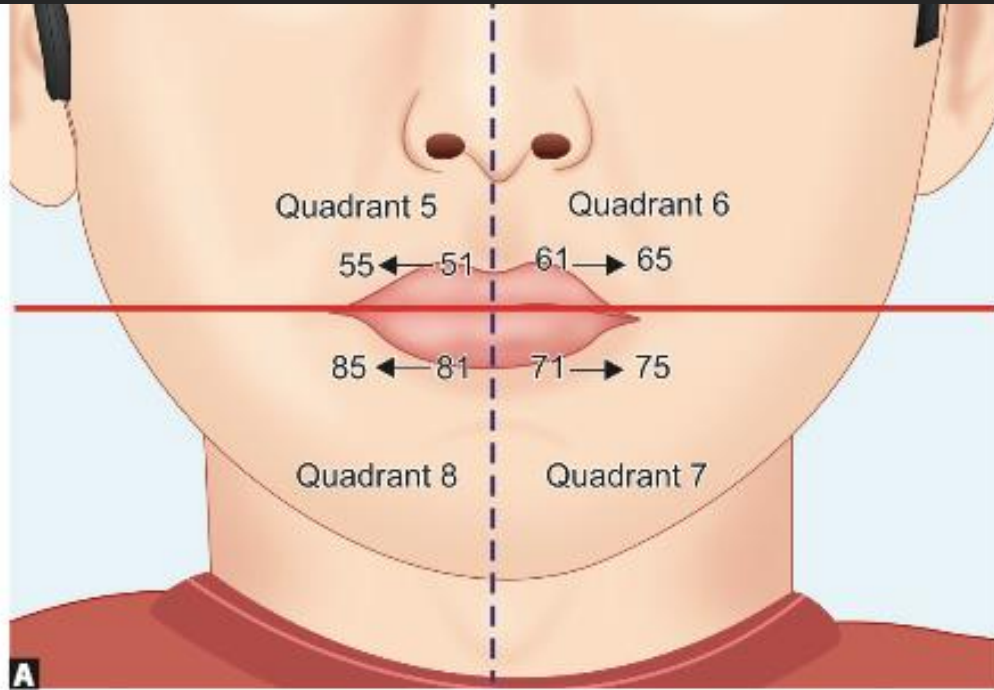
- ✓ Simple to understand
- ✓ Simple to learn
- ✓ Simple to pronounce
- ✓ No confusion
- ✓ Each tooth has specific number
- ✓ Easy to record on computers
- ✓ Easy for charting

Disadvantage

- ✓ May be confused with universal tooth numbering system.



Permanent Teeth



Figs. 2.8A and B: FDI tooth notation system for primary dentition.

Primary Teeth



Thank You For Listening