

Introduction and Nomenclature

-Dens = tooth, Dental = anything related to tooth.

- Human is a Hetrodont which means that he has **different shaped** teeth.
- Human is a Diphyodont which means that he has **two sets** of teeth (deciduous teeth and permanent teeth).



Canine to canine



premolars & molars

Human dentition

- In human two dentitions are present:

1. **Deciduous (primary).**
2. **Permanent (secondary).**

Transitional phase when both deciduous & permanent teeth are present is called mixed dentition period.

Deciduous teeth

- So named because they are shed like the leaves of deciduous trees in autumn.
- Erupts from 6 months to 2 years.
- Total number of deciduous teeth is 20.
- Other non-scientific names for deciduous teeth include milk teeth, baby teeth & temporary teeth.

Permanent dentition

- Teeth of the second or adult dentition.
- There are 32 permanent teeth.
- Erupt from 6-21 years of age.

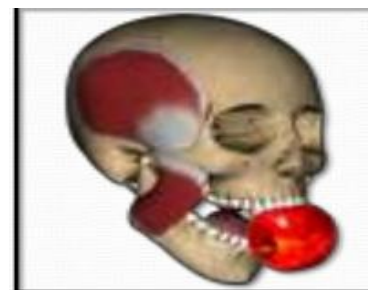
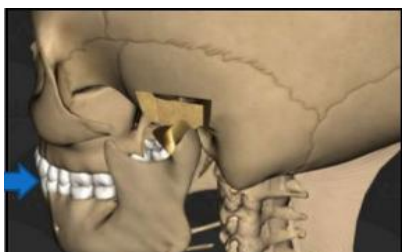
Dentition Period

Dentition	Age	Teeth Present
Primary dentition period	6 months to 6 years of age	Only Primary teeth
Mixed dentition period	6 years to 12 years of age	Both Primary & Permanent Teeth
Permanent dentition period	12 years of age & continues rest of life	Only Permanent Teeth

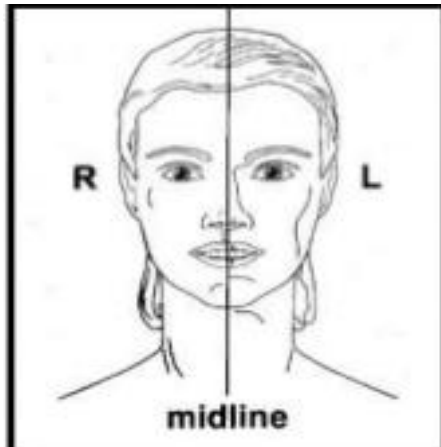
Dental anatomy is the study of the development, morphology, function of each of the teeth in human dentition and the way in which the teeth relate to other in the same dental arch and to the opposing arch.

Occlusion: manner in which mandibular teeth contact maxillary teeth.

Mastication: term for the process of biting or chewing food.

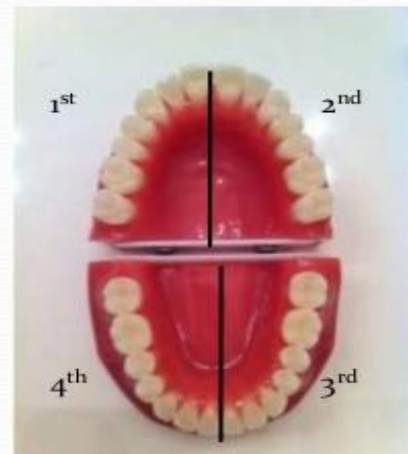


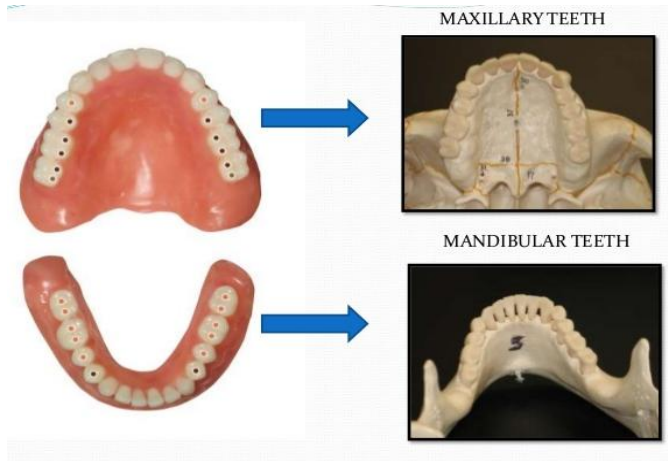
Mid line: is an imaginary vertical line which divided each arch as well as human body into approximately equal halves.



Note: -The right side of the patient mouth is actually to the left of the viewer (dentist), while the left side of the mouth is to the right of the viewer (dentist).

- **Quadrants:** two approximately equal portions of each arch divided by midline
- Four in entire mouth & termed as:
 1. maxillary (upper) right
 2. maxillary (upper) left
 3. mandibular (lower) left
 4. mandibular (lower) right





Dental formula for the deciduous teeth:

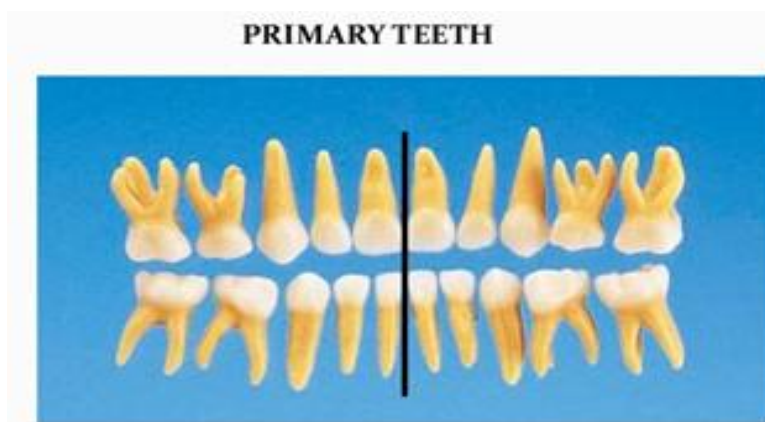
$$I \frac{2}{2} C \frac{1}{1} M \frac{2}{2} = 10$$

I means incisors (central + lateral)

C means canine.

M means molars (first + second).

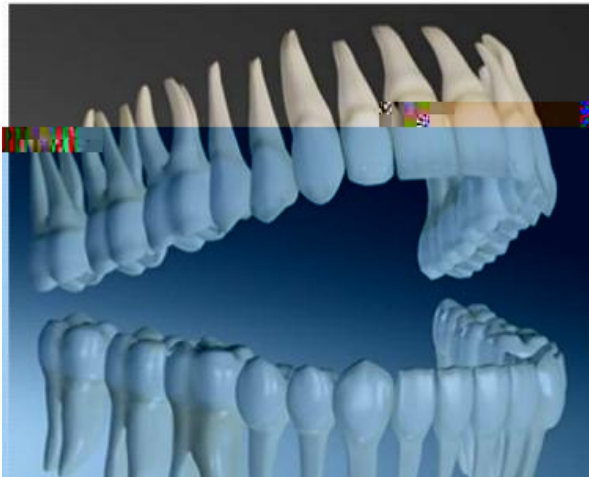
This formula should be read as: incisors, two maxillary and two mandibular; canines, one maxillary and one mandibular; molars, two maxillary and two mandibular or 10 altogether on one side, right or left.



Dental formula for the permanent teeth:

premolars have now been added to the formula, two maxillary and two mandibular, third molar also added, one maxillary and one mandibular, so dental formula for each side is :

$$I \frac{2}{2} C \frac{1}{1} P \frac{2}{2} M \frac{3}{3} = 16$$

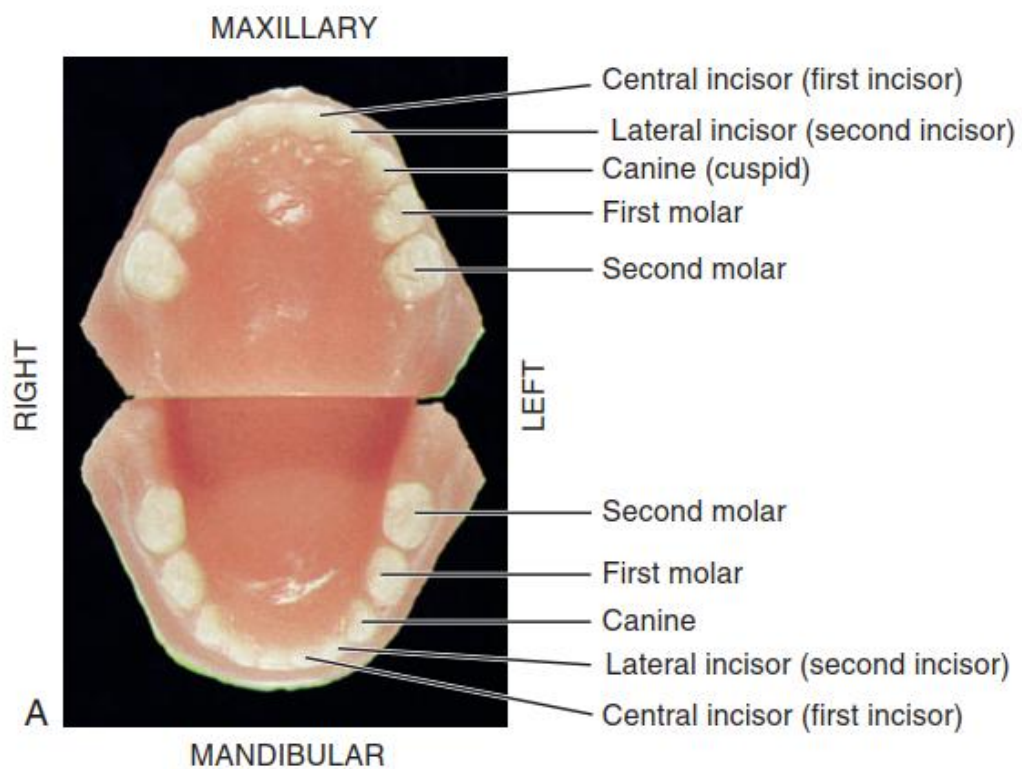
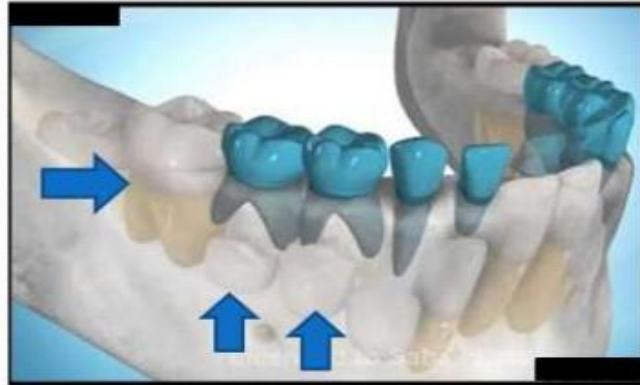


Succedaneous teeth:

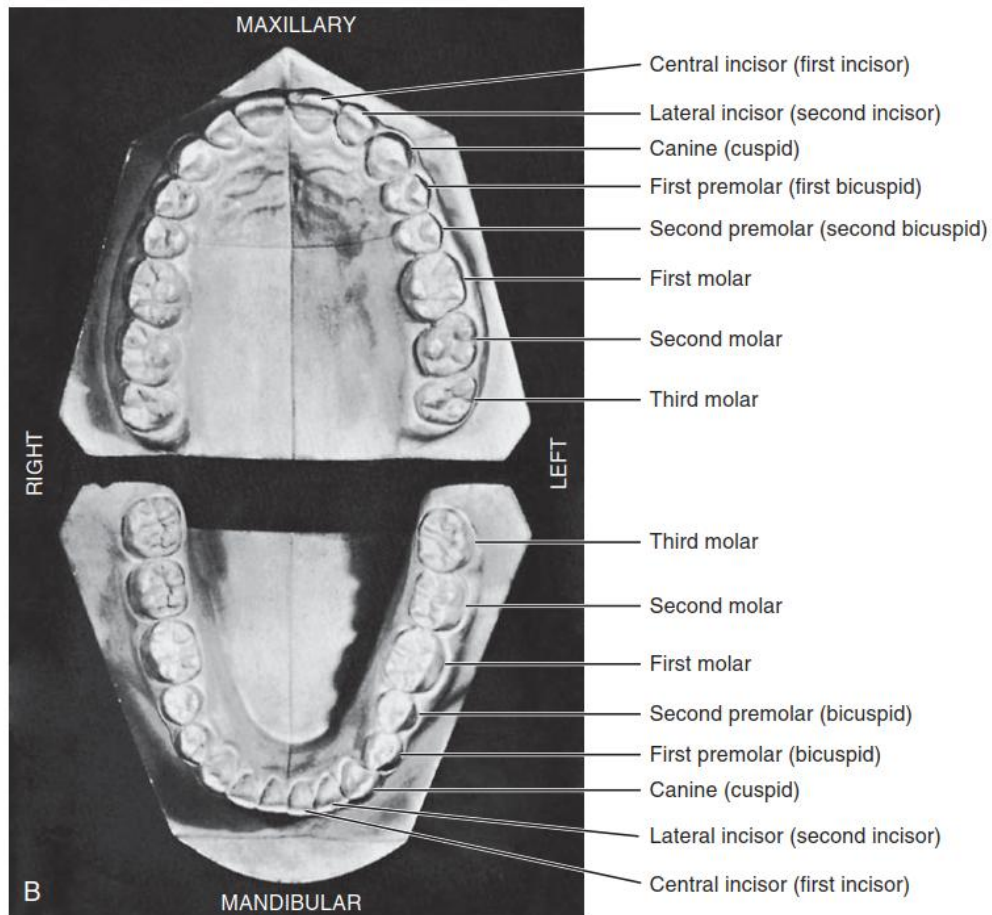
- Simply means succeeding deciduous teeth.
- Twenty deciduous teeth to be replaced, there must be twenty succedaneous teeth.
- Incisors and canines replace their deciduous counterparts.



- Premolars - which replace deciduous molars
- Molars are not considered as succedaneous teeth



Deciduous teeth



Permanent teeth