**Name: inam ullah**

**ASSIGNMNT: Dental morphology**

**ID NO: 14766**

**SUBMITTED TO: DR Salma Ishaq**

**DICIPLINE : BS DT**

**DEPARTMENT : AHS**

**SEMISTER: 4th**

## 

**Characteristic of primary teeth**

## Smaller in size than Permanent teeth.

## There are typically 20 primary teeth — 10 upper and 10 lower. Commonly, most of them erupt by the time the child is about 2½ years old.

## The deciduous teeth start falling out around age 6 to be replaced by 32 permanent adult teeth.

## They are whiter in colour than the analogous PT

## Less Mineralized

## Shorter crown with respect to their roots

## Crown have marked constriction at the cervix

## The enamel seems to bulge close to the cervical line

## The layer of enamel and dentin arev thinner than on PT

## Pulp cavity are proportionally larger

## PT exhibit fewer anomalies

## How are deciduous teeth different from adult teeth?

The differences between primary teeth and [adult teeth](https://www.healthline.com/health/teeth-names) include:

* **Enamel.**Enamel is the hard outer surface that protects your teeth from decay. It’s usually thinner on primary teeth.
* **Color.**Deciduous teeth often look whiter. This can be attributed to thinner enamel.
* **Size.**Primary teeth are typically smaller than permanent adult teeth.
* **Shape.**Front permanent teeth often come in with bumps that tend to wear off over time.
* **Roots.** Roots of baby teeth are shorter and thinner because they’re designed to fall out.

## Deciduous teeth

## 

* These are the first teeth to erupt into the oral cavity.
* The primary dentition is comprised of 20 teeth.
* The deciduous teeth start falling out around age 6 to be replaced by 32 permanent adult teeth.
* Often these teeth are referred to as deciduous teeth.
* These teeth will be exfoliated (lost) as the permanent teeth erupt.
* In each arch of the mouth, there are two central incisors, two lateral incisors, two canines, and four molars.
* The teeth are usually recognized by a letter of the alphabet beginning with “A” (Maxillary right second molar) and ending with “T” (Mandibular right second molar).
* There are no premolars or third molars in the primary dentition
* commonly known as baby teeth, milk teeth, temporary teeth,
* And primary teeth – are the first set of [teeth](https://en.wikipedia.org/wiki/Teeth) in the growth development of humans and other [diphyodont](https://en.wikipedia.org/wiki/Diphyodont) mammals.
* They [develop](https://en.wikipedia.org/wiki/Tooth_development) during the [embryonic](https://en.wikipedia.org/wiki/Embryo) stage of development and erupt (that is, they become visible in the [mouth](https://en.wikipedia.org/wiki/Mouth)) during [infancy](https://en.wikipedia.org/wiki/Infancy).
* They are usually lost and replaced by [permanent teeth](https://en.wikipedia.org/wiki/Permanent_teeth),
* But in the absence of permanent replacements, they can remain functional for many years.
* **Primary Dentition.**

|  |  |  |
| --- | --- | --- |
| **Tooth** | **Eruption Date (Avg.)** | **Exfoliation Date (Avg.)** |
| **Maxillary** | | |
| Central Incisor | 8-12 Months | 6-7 Years |
| Lateral Incisor | 9-13 Months | 7-8 Years |
| Canine | 16-22 Months | 10-12 Years |
| 1st Molar | 13-19 Months | 9-11 Years |
| 2nd Molar | 25-33 Months | 10-12 Years |
|  | | |
| **Mandibular** | | |
| Central Incisor | 6-10 Months | 6-7 Years |
| Lateral Incisor | 10-16 Months | 7-8 Years |
| Canine | 17-23 Months | 9-12 Years |
| 1st Molar | 14-18 Months | 9-11 Years |
| 2nd Molar | 22-31 Months | 10-12 Years |

**Development**

**Formation**

* Primary teeth start to form during the embryo phase of [human life](https://en.wikipedia.org/wiki/Human_development_(biology)).
* The development of primary teeth starts at the sixth week of tooth development as the [dental lamina](https://en.wikipedia.org/wiki/Dental_lamina).
* This process starts at the midline and then spreads back into the posterior region.
* By the time the embryo is eight weeks old, there are ten buds on the upper and lower arches that will eventually become the primary (deciduous) dentition.
* These teeth will continue to form until they [erupt](https://en.wikipedia.org/wiki/Tooth_eruption) in the mouth.
* In the primary dentition, there are a total of twenty teeth: five per quadrant and ten per arch.
* The eruption of these teeth ("[teething](https://en.wikipedia.org/wiki/Teething)") begins at the age of six months and continues until 25–33 months of age during the primary dentition period.
* Usually, the first teeth seen in the mouth are the [mandibular centrals](https://en.wikipedia.org/wiki/Mandibular_central_incisor) and the last are the

[**maxillary second molars**](https://en.wikipedia.org/wiki/Maxillary_second_molar)**.**

* The primary teeth are made up of [central incisors](https://en.wikipedia.org/wiki/Maxillary_central_incisor), [lateral incisors](https://en.wikipedia.org/wiki/Maxillary_lateral_incisor), [canines](https://en.wikipedia.org/wiki/Canine_tooth), first [molars](https://en.wikipedia.org/wiki/Molar_(tooth)), and [secondary molars](https://en.wikipedia.org/wiki/Mandibular_second_molar)
* There is one in each quadrant, making a total of four of each tooth.
* All of these are gradually replaced with a permanent counterpart except for the primary first and second molars; they are replaced by [premolars](https://en.wikipedia.org/wiki/Premolar).

**Teething age of primary teeth:**

* Central [incisors](https://en.wikipedia.org/wiki/Incisor): 6–12 months
* Lateral [incisors](https://en.wikipedia.org/wiki/Incisor): 9–16 months
* First [molars](https://en.wikipedia.org/wiki/Molar_(tooth)): 13–19 months
* [Canine teeth](https://en.wikipedia.org/wiki/Canine_tooth): 16–23 months
* Second molars: 22–33 months

### Exfoliation

* The replacement of primary teeth begins around age six, when the permanent teeth start to appear in the mouth, resulting in mixed dentition.
* The upper and lower central incisors are shed at age six to seven years.
* The upper and lower lateral incisors are shed at seven to eight years.
* The upper canines are shed at ten to twelve years.
* The lower canines are shed at nine to twelve years.
* The upper and lower first molars are shed at nine to eleven years.
* The upper and lower second molars are shed at ten to twelve years.
* The erupting permanent teeth cause [root resorption](https://en.wikipedia.org/wiki/Root_resorption), where the permanent teeth push on the roots of the primary teeth,
* Causing the roots to be dissolved by [odontoclasts](https://en.wikipedia.org/wiki/Odontoclast) (as well as surrounding alveolar bone by osteoclasts) and become absorbed by the forming permanent teeth.
* The process of shedding primary teeth and their replacement by permanent teeth is called exfoliation.
* This may last from six to twelve years of age. By age twelve, there usually are only permanent teeth remaining.
* However, it is not extremely rare for one or more primary teeth to be retained beyond this age, sometimes well into adulthood, often because the secondary tooth fails to develop

**Function**

* Primary teeth are essential in the development of the mouth.
* The primary teeth maintain the arch length within the jaw, the bone and the permanent teeth replacements develop from the same tooth germs as the primary teeth
* The primary teeth provide guides for the eruption pathway of the permanent teeth.
* Also the [muscles](https://en.wikipedia.org/wiki/Muscle) of the [jaw](https://en.wikipedia.org/wiki/Jaw) and the formation of the jaw bones depend on the primary teeth to maintain proper spacing for permanent teeth.
* The roots of primary teeth provide an opening for the permanent teeth to erupt.
* The primary teeth are important for the development of the child's speech, for the child's smile and play a role in [chewing](https://en.wikipedia.org/wiki/Mastication) of food, although children who have had their primary teeth removed (usually as a result of [dental caries](https://en.wikipedia.org/wiki/Tooth_decay)) can still eat and chew to a certain extent.

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**