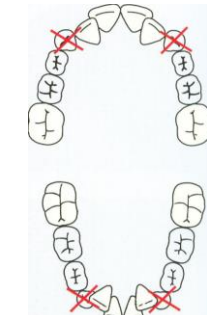
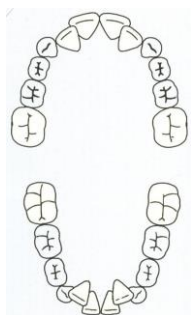
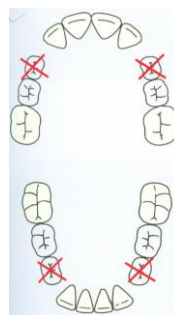


Eruption of Primary Teeth		
6 – 36 Months	6 – 9 Years	9 – 12 Years
<ul style="list-style-type: none"> <li>Anterior teeth erupt in vertical upright position – <b>less overjet</b>.</li> <li>Deep bite – <b>Increased overbite</b></li> <li>Dentition can be either: <ul style="list-style-type: none"> <li><u>Spaced Dentition</u> (physiological/ development spaces). <ul style="list-style-type: none"> <li><b>Primate Spaces</b> can be seen mesial to upper canine and distal to lower canine.</li> </ul> </li> <li><u>Closed</u></li> </ul> </li> <li><b>Terminal Plane</b> – according to distal of upper- and lower-second molars. Can be: <div> <p>Diagram illustrating the Terminal Plane according to the distal of upper- and lower-second molars. It shows three types: A (Mesial step terminal plane, 49%), B (Distal step terminal plane, 14%), and C (Flush terminal plane, 37%).</p> </div> </li> </ul>	<ul style="list-style-type: none"> <li>Early mesial shift occurs in <u>spaced dentition</u> where posterior teeth <b>shift mesially</b> to fill the primate spaces. <u>Closed dentition</u> lacks primate spaces, so <b>no mesial shift</b> happens.</li> <li><b>Incisor Liability:</b>  Primary BA → AB  MD width = X  Permanent 21 → 12  MD width = Y  <math>Y - X = 6-7\text{mm}</math> </li> <li>Interdental spacing: <b>2–3mm</b></li> <li>Inter canine arch growth: <b>3–4mm</b></li> <li>Incisor Liability: <b>1–2mm</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Leeway Space of Nance:</b> size differential between primary and permanent posterior teeth.</li> <li>Primary MD Width of EDC &gt; Permanent MD Width of 543 <ul style="list-style-type: none"> <li>Maxilla= 0.9mm/1.8mm</li> <li>Mandible= 1.7mm/3.4mm</li> <li>→ <b>Width difference will be filled with Late Mesial Shift</b></li> </ul> </li> <li><b>Ugly Duckling Stage (Broadbent Phenomenon 9–11 years)</b> – flaring of the upper central and lateral incisors</li> </ul>

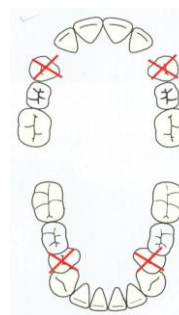
## Serial Extraction



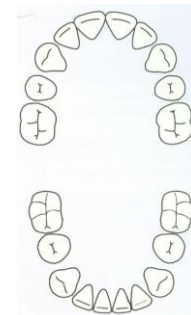
Extract primary canines to allow eruption and optimal alignment of lateral incisors



Extract primary 1<sup>st</sup> molar to accelerate eruption of 1<sup>st</sup> premolar ahead of permanent canines if possible



Extract permanent 1<sup>st</sup> premolar to allow the erupting canine to drift distally into premolar space



**Outcome:**

1. Aligned Incisors
2. Missing first premolar
3. Spacing in posterior segment
4. Canine occupying space of 1<sup>st</sup> premolar

## Habit Breaking Appliances

- **Tongue Thrusting**

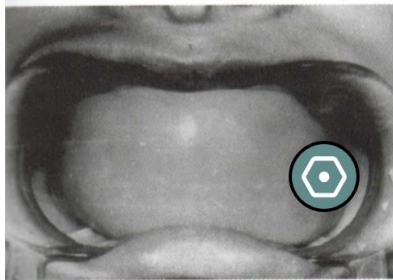


- **Digit Sucking – Blue Grass Appliance**



- **Mouth Breathing:**

- Etiology:
  - Deviated nasal septum
  - Allergic Rhinitis, Nasal polyps
  - Enlarged adenoids or tonsils
  - Short upper lip preventing lip seal
  - Obstruction in bronchial tree
- Appliance: **Oral Screen**



- **Incorrect alignment of dentition due to pressure from the soft tissue**



- **Anterior Crossbite**

- **Corrections:**

- Tongue Blade Therapy



- Lower inclined plane (catalan's appliance)



- Removable Hawley's appliance
    - Fixed appliances

- **Posterior Crossbite**

- Space supervision
- Space maintainer
  - Single unilateral posterior space maintainer



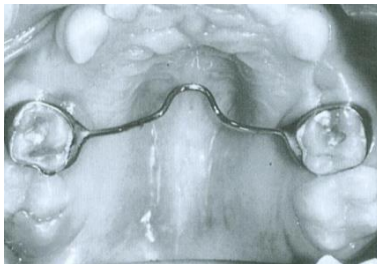
- Distal shoe space maintainer



- Bilateral Loss – Lower
  - Lower lingual holding arch



- Bilateral Loss – Upper
  - Transpalatal Arch (Bar)



- Nance Appliance



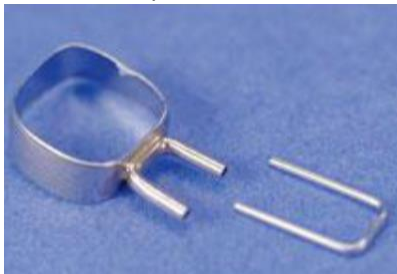
- Fixed Space maintainer for Anterior Teeth



- Bonded space maintainer



- Preformed space maintainer



- Fixed space re-gainer
  - Lip bumper