-Grooves: MLDG; mesial dev'tal and distal (crescent-shaped) dev'tal grooves -Fossae: mesial fossa (linear in form and more sulcate) and distal fossa (more circular) -Pits: mesial and distal dev'tal pits with accessory supplemental grooves -snake's eye appearance

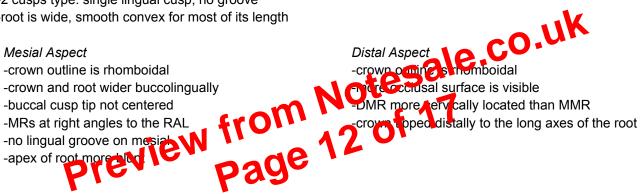
Mandibular Second Premolar

-has two types; 3-cusps type (develops from 5 lobes) and 2-cusps type (develops from 4 lobes) -larger than first PM, monorooted – longer and larger than first PM

Buccal Aspect -crown outline is trapezoidal -shorter buccal cusps and less pointed that buccal cusp of first PM -higher contact areas

Lingual Aspect

-crown outline is trapezoidal
-lingual lobes well developed than first PM, exhibiting a well-develop lingual cusp/s
-3 cusps type: presents 2 lingual cusps: Mesiolingual and Distolingual cusp separated by a short lingual DG.
-2 cusps type: single lingual cusp, no groove
-root is wide, smooth convex for most of its length



Occlusal Aspect

3-cusps Type
-occlusal outline appears square
-buccal cusp largest, mesiolingual, distolingual –smallest
-Ridges: cusp ridges, BTR, MLTR, DLTR, MMR, DMR
-Grooves: Mesial dev'tal groove, distal dev'tal groove, lingual dev'tal groove (Y-shaped grooves)
-Pits: central pit, mesial dev'tal pit, distal dev'tal pit
-Fossae: mesial triangular fossa, distal TF,

2-cusps type

-occlusal appears rounded -one buccal cusp and one well developed lingual cusp -Ridges: cusp ridges; BTR, LTR. MMR, DMR -Grooves: central dev'tal groove (crescent-shaped) -Fossa: mesial and distal fossa (circular) -Pits: mesial and distal dev'tal pits

MAXILLARY MOLARS

-non succedaneous teeth -develops from 4 lobes; 2 buccal lobes and 2 lingual lobes -root: 2 buccal and 1 lingual

Maxillary First Molar

-located at the center of a fully developed adult jaw anteroposteriorly; "cornerstones" of the dental arches

- -4 well-developed , functioning cusps (ML, MB, DL, DB)
- -3 well developed, separated roots (MB, DB, Lingual)

Buccal Aspect

- -crown outline is trapezoidal
- -MB cusp: broader, slopes meet at an obtuse angle
- -DB cusp : sharper cusp, smaller, may be as long and often longer than MB
- -BDG divides the two cusps, ends in a buccal pit
- -mesial outline nearly straight, distal outline is convex
- -MCA 2/3 distance from CEJ to tip of MB cusp
- DCA middle of the middle third
- root axes inclined distally, roots originate from a common root base (trunk)
- -MB root apex in line with the tip of the MB cusp
- -deep dev'tal groove on the root trunk

Lingual Aspect

-crown outline is trapezoidal

- -ML cusp- boarder, larger, longest, MD width is about 3/5 of the MD crown diameter
- a 5th cusp is attached to the ML cusp, approx. 2mm from cusp ridge- Cusp of a ratell, Suttined by the fifth cusp groove

3 Of

-DL cusp- spheroidal and smooth; separated from the ML cush b, the ingual dev'tal groove

-lingual root is conical, largest, apex in line lingual groote

Mesial Aspect

- -crown outline is tracelo
- MMR is irregular with some tubercle. bove the MMR (junction of middle and occlusal 3rd)
- -buccal outline is slightly convex
- -cusps tip is more clearly centered and within the confines of the root base.
- -buccolingual measurement is greater mesially than distally
- -MB root is broad and flattened with blunt apex
- -point of bifurcation is near the CEJ
- -lingual root is longer, narrower and is banana-shaped, apex is rounded

Distal Aspect

-crown outline is trapezoidal -crown taper distally on the buccal surface, less BL measurement than M -DMR dips sharply cervically, no tubercles -cusp tips within the confines of the root trunk -DB root is narrower than MB -bifurcation is more apical apical

Occlusal Aspect

-crown outline is rhomboidal; wider mesially than distally and wider lingually than buccally

- -four major cusps- arrange accdg to size: ML, MB, DL, DB, fifth cusp
- 3 primary cusps (ML, MB and DB) forms the Maxillary Molar Primary Cusp Triangle (Cope Osborn Theory)
- DL and 5th cusp considered as secondary cusp
- -Ridges: cusps ridges, MRs; MBTR, DTR and MTR of ML cusp, DBTR, DLTR, Transverse ridge,
 - Oblique R (formed by the DBTR and DTR of ML cusp)