•Normally, the second molar is smaller than the first molar by a fraction of a millimeter in all dimensions.

CERVICO- OCCLUSAL LENGTH OF CROWN	LENGTH OF ROOT	MESIODISTAL DIAMETER OF CROWN	MESIODISTAL DIAMETER OF CROWN AT CERVIX	LABIO- OR BUCCOLINGUAL DIAMETER OF CROWN	LABIO- OR BUCCOLINGUAL DIAMETER OF CROWN AT CERVIX	CURVATURE OF CERVICAL LINE—MESIAL	CURVATURE OF CERVICAL LINE—DISTAL
7.0	13.0	10.5	8.0	10.0	9.0	1.0	0.0
CERVICO- OCCLUSAL LENGTH OF CROWN	LENGTH OF ROOT	MESIODISTAL DIAMETER OF CROWN	MESIODISTAL DIAMETER OF CROWN AT CERVIX	LABIO- OR BUCCOLINGUAL DIAMETER OF CROWN	LABIO- OR BUCCOLINGUAL DIAMETER OF CROWN AT CERVIX	CURVATURE OF CERVICAL LINE—MESIAL	CURVATURE OF CERVICAL LINE—DISTAL
7.5	14.0	11.0	9.0	10.5	9.0	1.0	0.0

- The crown has four welldeveloped cusps, two buccal and two lingual, of nearly equal development.
- Neither a distal nor a fifth cusp is evident, but the distobuccal cusp is larger than that found on the first molar.



• The tooth has two well-developed roots, one mesial and one distal. These roots are broad buccolingually, but they are not as broad as those of the first molar, nor are they as widely separated.



Detailed Description



BUCCAL ASPECT

- Crown- somewhat shorter cervico-occlusally and narrower mesiodistally than is the first molar.
- Only one developmental groove lies buccally—the buccal developmental groove.
- It demarcates between the mesiobuccal and the distobuccal cusps (=MD)
- The cervical line



• The roots- shorter, closer together, their axes are nearly parallel, may be fused, inclined distally, shows a more acute angle,



LINGUAL ASPECT

• The crown and root of the mandibular second molar converge lingually but to a slight degree; little of the mesial or distal surfaces may therefore be seen from this aspect.



 The mesiodistal calibration at the cervix lingually is always greater accordingly than that of the first molar.



• The curvatures mesially and distally on the crown that describe the contact areas are more noticeable from the lingual aspect. They prove to be at a slightly lower level, especially in the distal area, than those of the first molar...



- o Differences in measurement.
- The cervical ridge is less pronounced, and the occlusal surface may be more constricted buccolingually



- The cervical line shows less curvature, being straight and regular in outline buccolingually.
- The mesial root is somewhat pointed apically.



- absence of a distal cusp and a distalluccal groove.
- The contact area is centered on the distal surface buccolingually and is placed equidistant from cervical line and marginal ridge.



OCCLUSAL ASPECT

- o small distal cusp is not present.
- No distobuccal developmental groove is evident occlusally or buccally.
- The buccal and lingual developmental grooves meet the central developmental groove at right angles at the central pit on the occlusal surface.
- These grooves form a cross, dividing the occlusal portion of the crown into four nearly equal parts.



CHARACTERISTICS

- Rectangular from the occlusal aspect.
- Considerable prominence cervically on the mesiobuccal lobe only.
- more curvature of the outline of the crown distally than mesially, showing a semicircular outline to the disto-occlusal surface in comparison with a square outline mesially.

