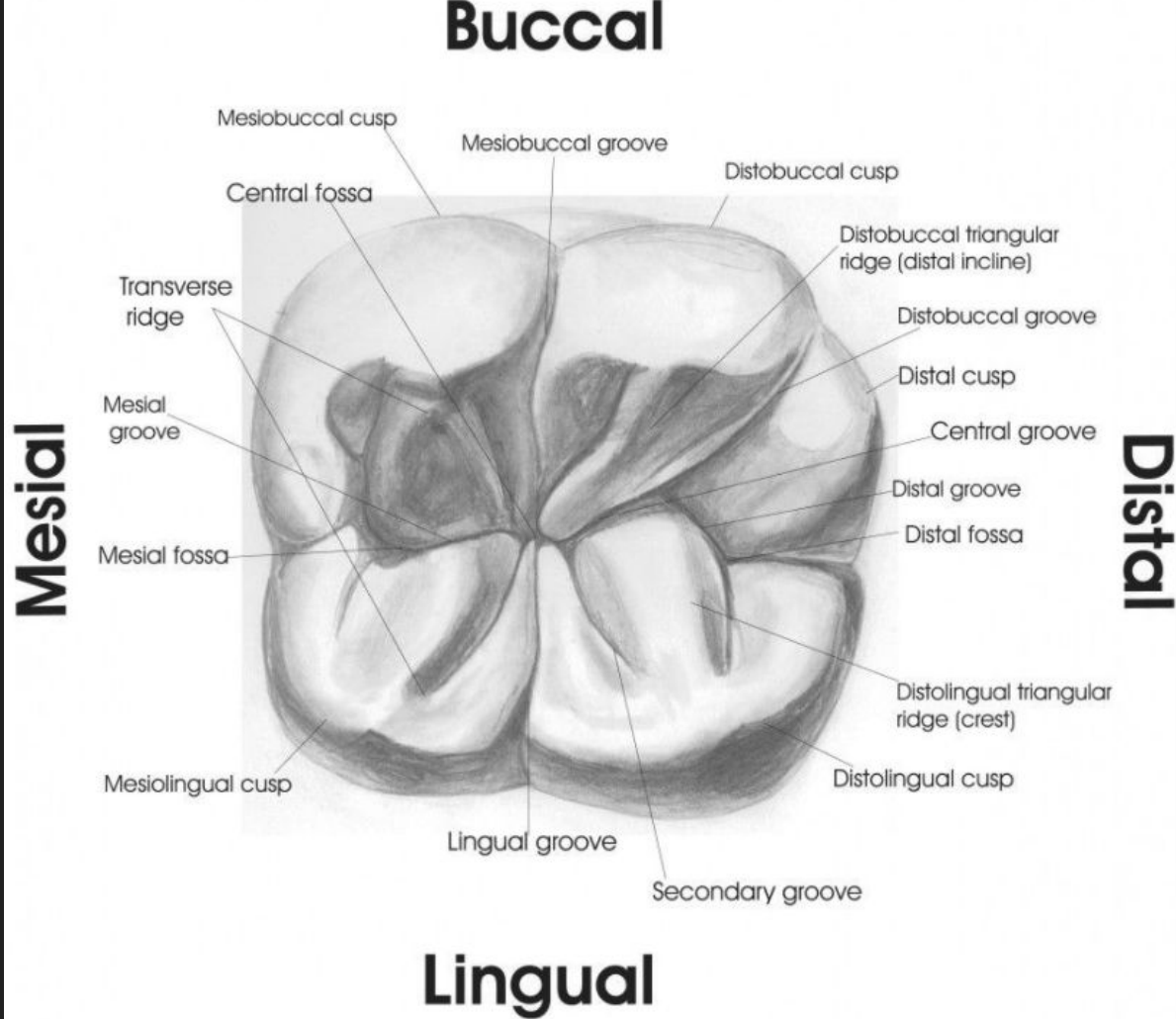


Mandibular First Molar

anatomy for restorative

Defining Features

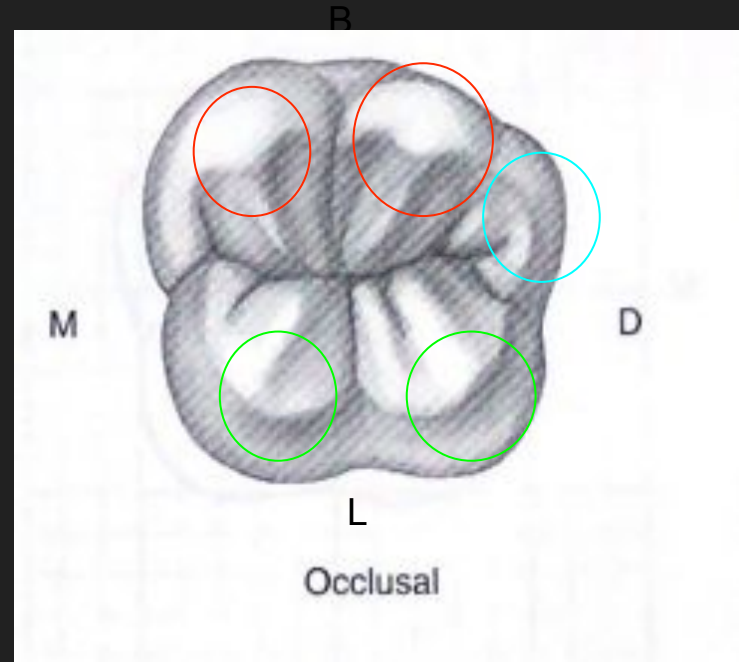


Five Cusps

Two buccal

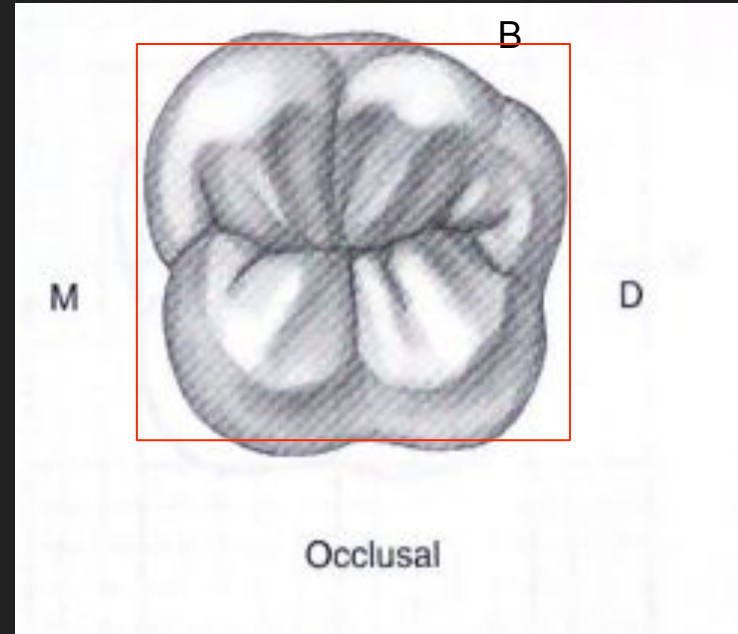
Two **lingual**

One **distal**



Rectangle Shape

Buccal side is bigger

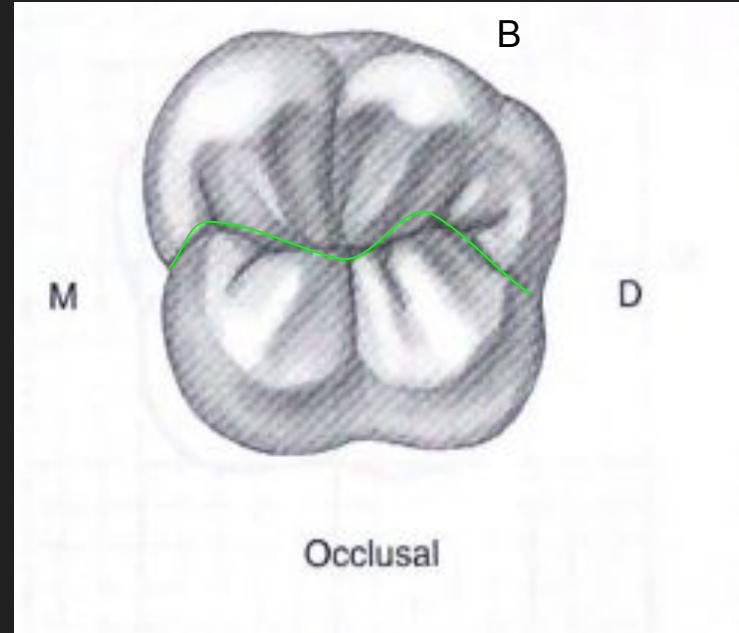


Distinctive central Groove

Some say M shaped central groove

Lewis offset connects in the central pit

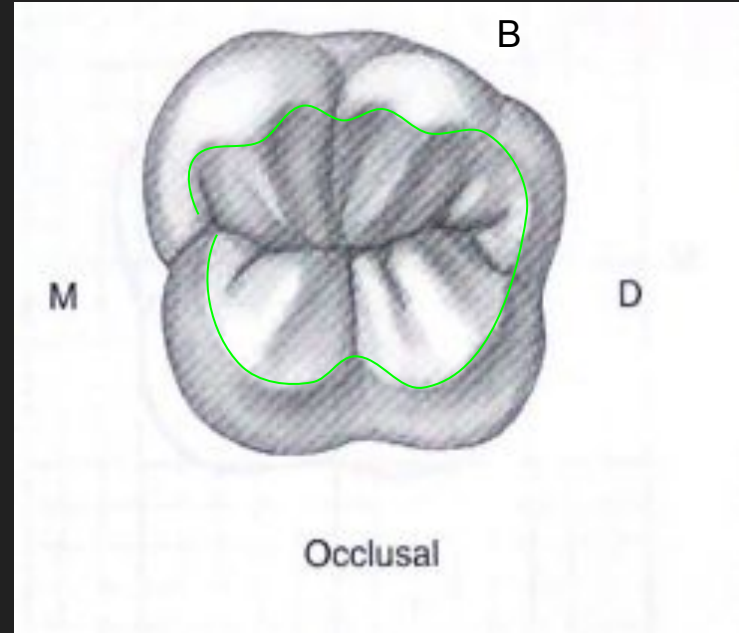
Not always the case



Marginal Ridge

Located more occlusal

Makes the embrasures more rounded



Fossea

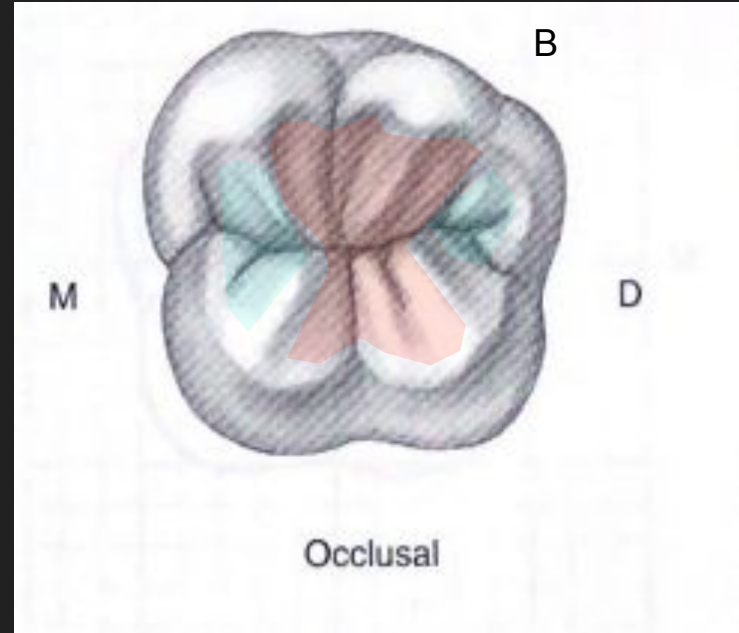
Major :

Central fossea

Minor:

Distal triangular fossea

Mesial triangular fossea

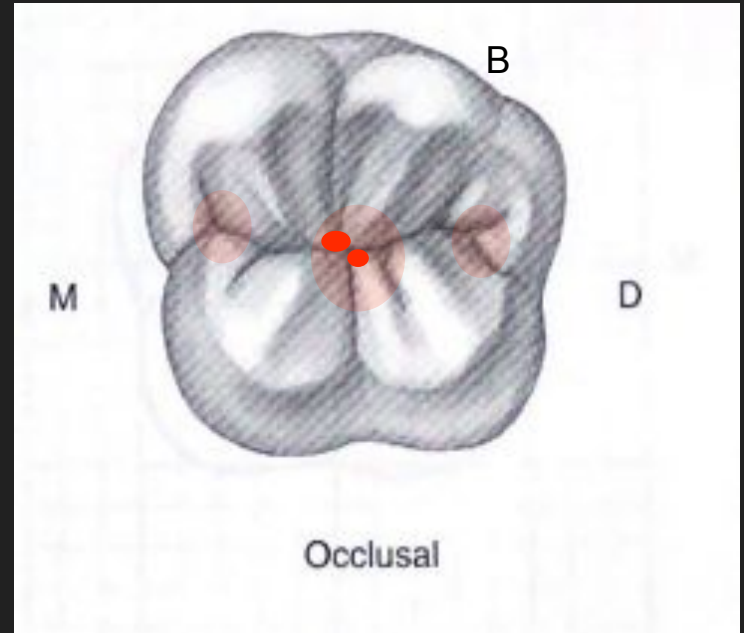


Pits

Central mesial and distal

Pits are the deepest part of fossae

Where groves meet



What's the Difference Between a Fossae and a Pit?

A fossae is a shallow depression



A pit is more defined

Grooves

Central - distal to mesial slightly lingual

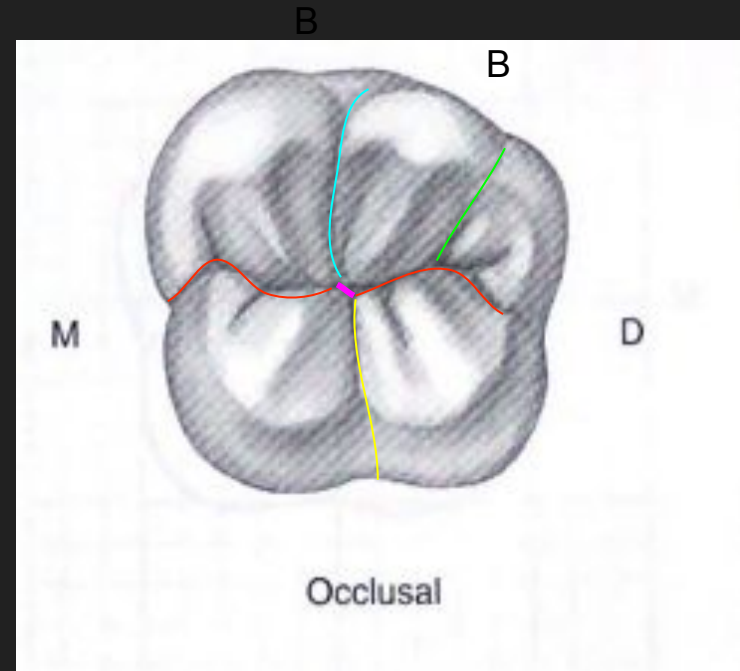
Mesiobuccal - divides buccal cusps

Distobuccal - divides distal cusp from buccal

Lingual - divides distal lingual

Lewis Offset - buccal and lingual pit

in central fossae

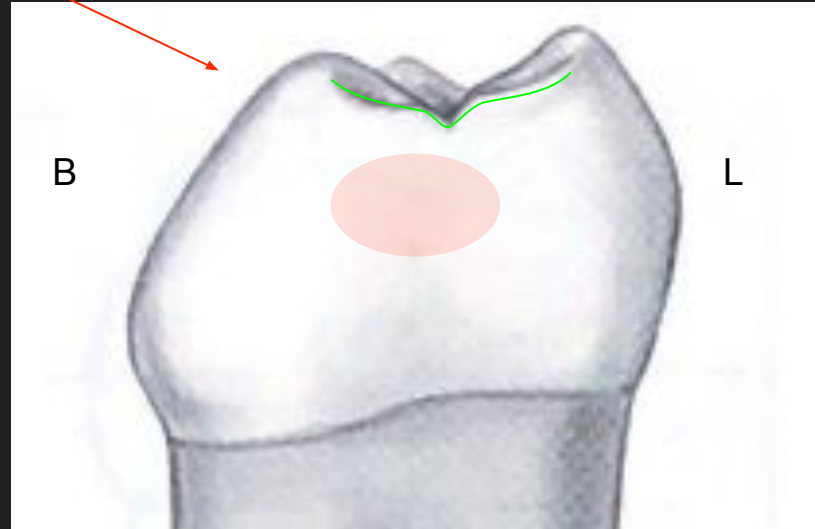


View from the Mesial

Buccal cusp is wide and flat

Marginal ridge 1mm lower than
shortest cusp

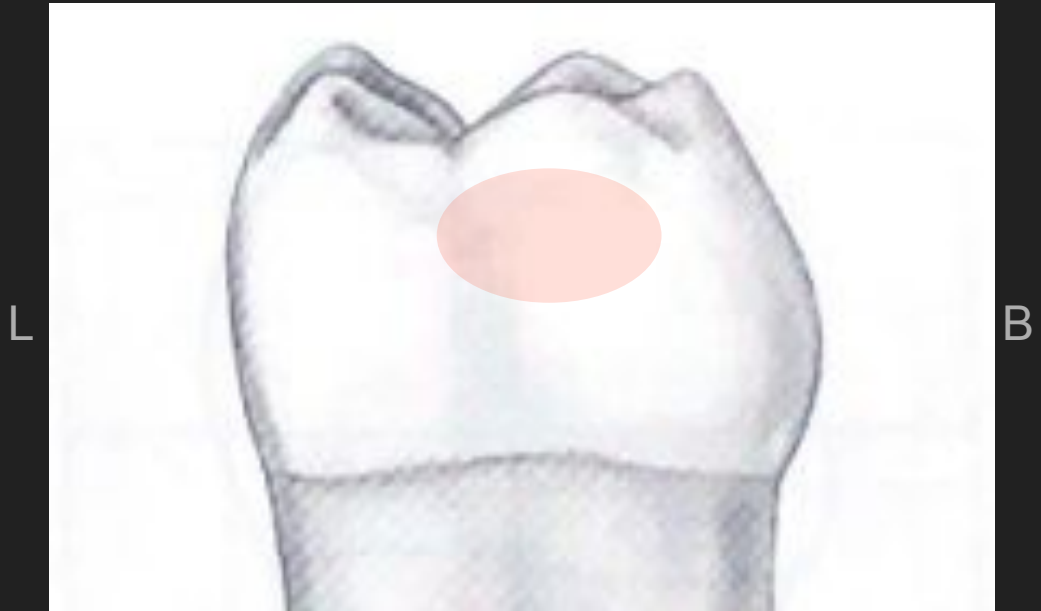
Contact middle $\frac{1}{3}$



View from the Distal

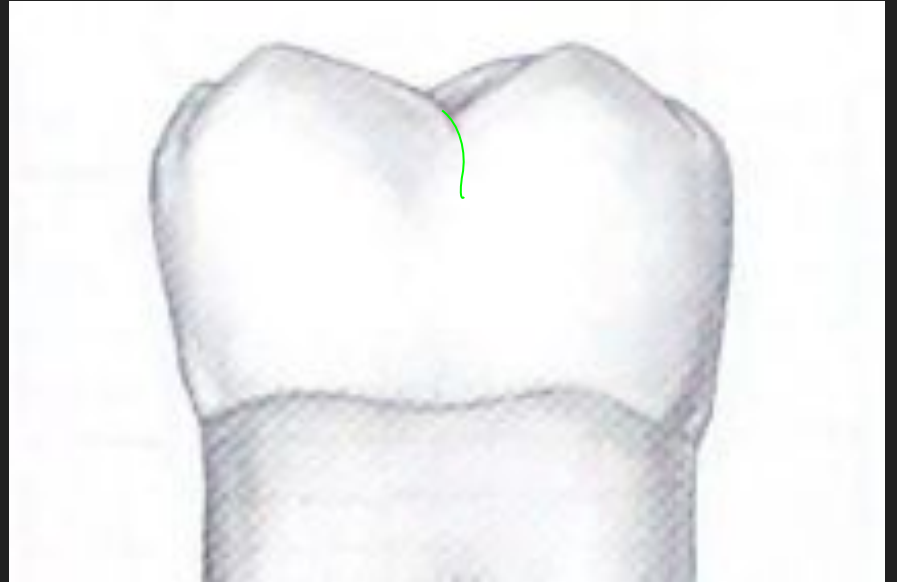
Contact on distal cusp

Marginal ridge less curved



View from the Lingual

Lingual groove extends
over marginal ridge



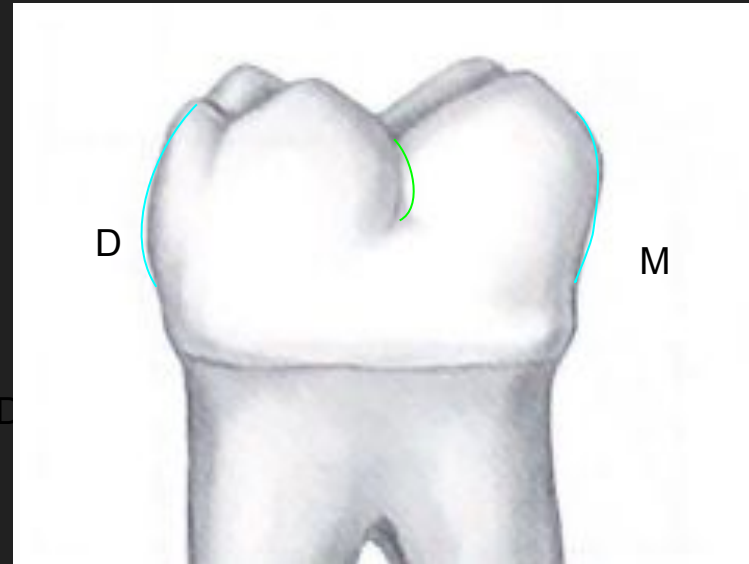
View from the Buccal

Buccal groove and pit

Note the embrasure curves

They go over the marginal ridge

The mesial is quite round



References

Bath-Balough, M., Fehrenbach, J. M. (2006). Dental Embryology, Histology, and anatomy 2nd edition. Maxillary molar drawing. Elsevier inc.
<https://drive.google.com/file/d/1eF4T1QrFzqrd2CZNcnfKiszxHJ5Yg4Z1/view?usp=sharing>

Kavaram. (2012). Picturesque shallow lake in Tioga pass.
<https://depositphotos.com/10240641/stock-photo-the-shallow-lake-on-pass.html>

Wollertz. (2021). Stunning view of Crater Lake. Shutterstock.
<https://www.worldatlas.com/articles/how-deep-is-the-crater-lake.html>