

## 300 Dental Anatomy Facts

1. The primary tooth that has the most distinctly prominent facial cervical ridge is Mandibular 1st molar
2. The lingual cusp of the maxillary premolars is off set to the mesial the first more than the second.
3. The primary second molar generally exhibits cusp of Carabelli
4. Mamelons that remain beyond the age of 10 generally indicate an open bite
5. Mandibular central incisors and Maxillary third molars generally occlude with only one opposing tooth.
6. The developmental groove between the df cusp and the dl cusp of the mandibular 1st molar is distofacial.
7. The roots of the maxillary second molar tend to be less divergent and have greater distal inclinations.
8. The teeth whose function is primarily biting are incisors and canines.
9. The tooth with the longest root is the maxillary canine.
10. The groove pattern for the mandibular first molar is considered Y or Dryopethicus pattern
11. The groove pattern for the mandibular second molar is consider a cross (+) pattern.
12. When compared to a maxillary canine the mandibular canine has contact areas located more incisally
13. The mandibular 1st PREmolar the mesial marginal ridge located more cervical than the distal.
14. The oblique ridge of maxillary molar forms the distal boundary of the central fossa.

15. A transverse ridge results from the union of the facial and lingual triangular ridges.
16. For multirooted teeth dentin continues to form MOST rapidly at the floor and roof of the pulp chamber.
17. Maxillary incisors are the only anterior teeth that are wider mesio-distally than facio-lingually
19. Mandibular Molars are the only posterior teeth that are wider mesio-distally than facio-lingually
21. Mandibular 1st molar usually has two roots and three canals
22. Mandibular 1st molars usually have two mesial canals.
23. The primary maxillary 2nd molar is the primary tooth that generally has an oblique ridge.
24. The mesiolingual cusp of the Maxillary molars occludes in the central fossa of the mandibular molars
25. The distobuccal cusp of the mandibular molars occludes in the central fossa of the maxillary molars.
26. The primary second molar exhibits more cusps than the primary first molar.
27. The occlusal outline of a mandibular first molar is a pentagon.
28. The lingual concavity of the maxillary anterior teeth is most influenced by the side shift of the mandible.
29. The side shift of the mandible is also known as the Bennett movement.
30. The contact between a max central and lateral incisor makes the lingual embrasure larger than the facial

31. The non-molar tooth that most frequently has a mesial and distal pulp horn is the max central incisor
32. The primary maxillary 1st molar prominent MFcervical ridge.
33. The non-working condyle moves downward, forward and medial
34. The non-molar tooth that most frequently exhibits three roots is the maxillary 1st premolar
35. The dentin that is most highly mineralized is intra or peritubular dentin
36. The primary spacing for the anterior teeth is most frequently caused by the growth of the dental arches
37. The MAX canine is the only tooth that has potential of contacting both anterior and posterior teeth
38. The mesiofacial and distolingual angles from the occlusal outline tend to be acute angles max. molars.
39. This mesiolingual and distofacial angles from the occlusal outline tend to be obtuse angles max. molars.
40. The obtuse corners coincide with the direction of the oblique ridge
41. The occlusal outline from an occlusal view for the maxillary first molar is Rhomboidal
42. There are a total of 12 teeth in the permanent dentition that normally have cingulums
44. The mandibular canine is the anterior tooth that most frequently exhibits a bifurcated root that's facial and lingual

46. The cross section of the mandibular canine at the CEJ is OVOID but wider mediolaterally at the labial
47. The non-molar that is least likely to have a bifurcated root is the maxillary central incisor
48. The size and position of the cusps are more identical for the 2nd maxillary premolar than the first
49. The maxillary 1st premolar has the most pronounced developmental marginal groove of any max tooth
50. The Y type mandibular pre molar has one facial and two lingual cusps
52. The maxillary lateral incisors generally have the most prominent marginal ridges of all anterior teeth
53. Maxillary lateral incisors have the most distinct and deepest lingual fossa's of all anterior teeth.
54. The maxillary 1st premolar is the Posterior tooth that has the greatest cervico-occlusal crown height
55. The oblique ridge connects mesiolingual and distofacial cusps.
56. The occlusal outline for the mandibular 1st premolar occlusal view is diamond shaped
57. The last primary teeth to erupt is Maxillary second molars
58. The softest dental tissue is cementum
59. The hardest dental tissue is enamel
60. All premolars are wider faciolingually than mesiodistally
61. The maxillary 2nd premolar has two cusps that are of equal height

62. The upper compartment of the tmj is that space between the disc and the articular fossa and eminence
63. When a 4th pulp canal is present in a maxillary first molar it is located in the mesiofacial canal
64. The crown form of canines from a facial view is Pentagonal
65. Mandibular central incisors have proximal contacts at approximately the same levels on mesial & distal
66. The maxillary 1st premolar has a mesial concavity that makes it difficult to adapt a matrix band
67. When viewed from the occlusal the arrangement of the teeth are parabolic
68. Viewed from the occlusal the 4 posterior teeth in the mandibular arch are aligned in a straight line
69. Primary 2nd molar is the only primary posterior tooth to have oblique & transverse ridges &DL groove
70. The thickest section of the articular disc when seen in the sagittal plane is the posterior border
71. Except for third molars the maxillary lateral incisor exhibits the most deviation in crown morphology
72. The Oblique fibers of the periodontal ligament provide the major support for a tooth during function
73. The largest root of the maxillary molar is the palatal
74. The smallest root of the maxillary molar is the distofacial
75. The pulp chamber of a mature tooth contains blood vessels and nerves

76. The mandibular primary primate space is located between canine and first molar
77. The occlusal table of a posterior tooth makes up 55-65% of the total facio-lingual dimension
78. In a healthy mouth the alveolar process is thinnest around the facial of the mandibular central incisors
79. The crown of the mandibular second molar inclines to the mesial and lingual
80. The epithelial attachment is always an actual part of a tooth's periodontium
81. Continued eruption of a tooth through the surrounding tissue makes the clinical crown appear longer
82. The maxillary first primary molar has a crown that somewhat resembles a permanent premolar
83. The maxillary first primary molar has a root that resembles a typical permanent molar.
84. Anterior guidance plays the greatest role in discluding the posterior teeth in latero-protrusive
85. Viewed from the occlusal the basic coronal outline of a mandibular second premolar pentagonal
86. Ligaments associated with the TMJ serve to protect surrounding and supporting tissues from damage
87. Facial view of a primary mandibular 1st molar the CEJ is apically positioned toward the mesial
- 1/3
88. The Mandibular 1st molar has the greatest m-d diameter of all molars
89. Other than 3rd molars the tooth that is most often congenitally missing is the maxillary lateral incisor

90. The mesio-distal width of the mandibular lateral incisor is wider than the mandibular central incisor

91. The mesio-distal width of the maxillary lateral incisor is narrower than the maxillary central incisor

92. A key feature that differentiates a mandibular 1st & 2nd molar is the number of developmental grooves

93. Another key feature that differentiates a mandibular 1st & 2nd molar is the number of cusps

94. The incisal embrasure between the maxillary centrals is smaller than between the central and the lateral

95. The premolar that has a longer mesio-facial cusp ridge than disto-facial cusp ridge is the maxillary 1st

96. The facial cusp of the maxillary 1st premolar is offset to the distal

97. A common trait of maxillary premolars is that their lingual cusps are off set to the mesial

98. For molar teeth the root canals join the pulp chamber apical to the cemento-enamel junction

99. The transseptal periodontal fibers travel from one root to an adjacent root surface

100. The usual pattern of eruption for primary teeth is centrals, laterals, 1st molars, canines, 2nd molars

101. In the rare event of a second canal for a mandibular 1st premolar it is most likely located to the lingual

102. The mesiolingual developmental groove on tooth # 21 originates from the occlusal pit

103. The mesiolingual developmental groove on tooth # 21 extends onto the proximal surface
104. The physiologic rest position is established when the mastication muscles are in tonic equilibrium
105. The overjet and overbite provide some degree of protection for lips, cheeks and tongue
106. The incisal ridge of an anterior tooth is the first to calcify
107. A crown of the maxillary first molar has a shorter distolingual groove than the second molar
108. The principle muscles that retrude the mandible are the posterior fibers of the temporalis
109. Hypercementosis is an excess of calcified tissue formation at the root apex
111. The premolar with the steepest cusp inclines is the maxillary 1st premolar
112. The primary mandibular 1st molar usually exhibits a distal triangular fossa
113. The maxillary lateral incisor is usually equal to or larger than the maxillary central in root length
114. The distoincisor angle of the maxillary lateral has the greatest convexity of all maxillary anterior teeth
115. The geometric form of anterior teeth when viewed from the proximal is triangular
116. The distolingual cusp of maxillary molar is the only one that is not part of the molar cusp triangle
117. The mandibular central incisors have contact points at the same incisocervical level
118. Mandibular molars have long axis of their root apices facial and their crowns lingual
119. Caries stimulates the production of secondary dentin

120. The largest cusp of the mandibular first molar is the mesio-facial
121. In cervical cross section the root of the mandibular canine is flattened in a mesio-distal direction
122. The primary central incisor exhibits a prominent cervical ridge both on the facial and lingual surfaces
123. Collagenous is the predominant connective tissue for periodontal ligament fibers
124. The mandibular 1st premolar has a uniquely prominent triangular ridge
125. The mandibular 1st premolar has frequently both a separate mesial and distal pit
126. The temporomandibular ligament limits the extent of jaw opening
127. The temporomandibular ligament initiates translation of the condyle down the articular eminence
128. The tooth that is most likely forced into the maxillary sinus during an extraction is the first molar
129. The styloglossus muscle is an extrinsic muscle of the tongue that causes it to retract
130. Facial view the apex of the lingual root is in line with the facial groove of the tooth.
131. The premolar that is most likely to have a crescent-shaped central developmental groove is  
Mand 2nd
132. The maxillary 3rd molar is the molar that most frequently has only 3 cusps
133. Mesiolingual groove is an identifying characteristic for the mandibular 1st premolar
134. Bennett movement occurs during the earliest stage of lateral movement
135. The lateral pterygoid muscles are primarily responsible for protrusive movement

136. The lingual cusp of the mandibular first premolar is approximately  $\frac{2}{3}$  the height of the facial cusp

137. The first succedaneous tooth to erupt in the mouth is the permanent mandibular central incisor

138. The Y type mandibular 2nd premolar has the same number of occlusal pits as the mandibular 1st molar

139. From the facial or lingual view canines have a pentagonal outline

140. The Maxillary 1st molar has a distal concavity that can pose special problems in matrix placement

141. The cervical cross section of the maxillary 1st premolar exhibits a kidney shaped root outline

143. The middle facial lobe of the maxillary canine includes the cusp tip

144. The number of lobes that form the anterior teeth is 4

145. The number of lobes that form the posterior teeth coincides with the number of cusps

146. The Curve of Spee is the anterior-posterior curvature of the occlusal surfaces as seen in a facial view

147. The oblique periodontal ligament fibers reduces the likelihood of forceful impaction into the alveolus

148. The height of contour is in the gingival  $\frac{1}{3}$  for the facial surfaces of all teeth.

150. From a facial view the crown of a primary canine has a mesio-incisal slope longer than the disto-incisal

151. The cusp tip of the primary canine is generally off set to the distal.

152. A primary molar lacks an identifiable root trunk
153. The maxillary canine from a proximal view tends to be positioned with the most nearly vertical axis
154. Concrescence is the cemental union of 2 fully formed teeth that were originally separate entities
155. The apex of a tooth is fully formed 2-3 years after it erupts in the mouth.
156. The right lateral pterygoid is the prime mover in effecting a left working movement
157. The mesial surface of the crown of the mandibular canine is almost parallel to the long axis
158. The smallest cusp of the mandibular 1st molar is the distal cusp
159. The cross sectional outline at the cervical is roughly triangular for the permanent maxillary 2nd molar
160. The TMJ has 2 synovial cavities
161. The cervical line of permanent teeth has the greatest depth of curvature on the mesial aspect
162. From a proximal view the incisal ridge of the crown is on line with the center of the root
163. The primary mandibular central incisor has the smallest faciolingual crown dimension
164. The primary mandibular first molar has the most distinct transverse ridge
165. The condyle on the working side generally rotates about a vertical axis and translates laterally
166. Occlusal view the greatest faciolingual diameter of a mandibular 2nd molar is in the mesial 1/3
167. More of the occlusal surface can be seen from the mesial than distal for a mandibular 1st premolar

168. The Bennett movement is the bodily shift of the mandible toward the working condyle
169. The DL groove of a MAX lateral incisor is an anatomical feature that complicates root planning
170. Perikymata are a result of normal enamel apposition
172. The mandibular centrals and laterals most frequently have concave areas on M & D root surfaces
173. The mandibular canine has a less prominent cingulum than the maxillary canine
174. The mandibular canine is narrower mesiodistally than the maxillary canine.
175. The mandibular canine has a continuous convex facial surface from incisal to apical end
176. Accessory pulp canals may be found in the cervical third of the root
177. Accessory pulp canals may contain nervous and vascular tissue
178. Accessory pulp canals may be found in furcation areas of molars.
179. Accessory pulp canals allow the pulp tissue to communicate with the periodontal ligament space
180. The TMJ is protected by snovial fluid, fibrocartilage, ligament suspension, and masticatory muscles
181. The most prone facial & lingual surfaces of molars are the lingual of max and the facial of mandibular
182. The function of the pulp is to form and supply nutrients to dentin and transmit sensory stimuli
183. In delayed resorption of primary incisors the permanent incisors usually erupt lingually
184. The disk of the TMJ is moved forward principally by the lateral pterygoid

185. Primary molars differs from permanent molars in that their roots are more divergent
186. The primary teeth that differ most from permanent teeth are the first molars
187. The highest and sharpest cusp on a primary mandibular first molar is the mesiolingual
188. The maxillary central has the greatest facio-lingual axial inclination
189. The primary function of the dental pulp is to form dentin
190. The shortest interdental papilla is between the mandibular second premolar and first molar
191. In cross section the root of the mandibular canine is irregularly oval
192. The percentage of dentin that is organic is 20-30%
193. The anterior tooth that most likely would demonstrate a lingual pit cavity is maxillary lateral incisor
194. Calcification of the primary roots is normally completed at 3-4 years of age
195. Interradicular fibers are not periodontal fibers.
197. The maxillary first molar has the greatest faciolingual diameter of the crown for all teeth
198. Tooth contact almost exclusively determines intercuspal position
198. Physiological rest position is a muscle guide position
199. Centric relation is a ligament guided position
200. Centric occlusion=CO= intercuspal position
201. The ideal position and height of lingual cusps of MAND 1st molar accommodates working movement

202. The maxillary canine has the longest root
203. The premolar that most frequently has a single central pit is the mandibular second
204. Developmental grooves separates cusp ridges from marginal ridges
205. The maxillary lateral incisor most often is in abnormal relation and contact with adjacent teeth
206. The lingual cusp of a mandibular 1st premolar is similar in development to the cingulum of a canine
207. Teeth are in contact in intercuspal position during NON masticatory swallowing
208. The mesiolingual cusp of the maxillary 1st molar is largest and longest posterior cusp
209. Contraction of the lateral pterygoid produces forward movement of the condyle from the articular fossa
210. The maxillary 1st molar has a wider m-d width toward the lingual than toward the facial
- 210 the maxillary 1st molar tends to taper toward the facial rather than toward the lingual
211. Physiological rest position is also known as Postural Position
212. The primary maxillary 1st molar most often bears the greatest resemblance to a premolar
213. In Posselt's envelope of motion maximum intercuspal position is the most superior point
214. The molar that has the most distinct transverse ridge separating the mesial fossa is the mandibular 1st
215. The glenoid fossa is a depression in the temporal bone, just anterior to the auditory canal
216. The center of the oblique ridge on a Maxillary 1st molar is at the same level with the marginal ridge

217. Oligodontia is a developmental abnormality characterized by the presence of fewer teeth than usual

218. tooth #5 & 12 are the non molar teeth having the sharpest demarcation between pulp chamber & canal

219. Dense avascular fibrous connective tissue covers the articulating osseous structures of the TMJ

220. The mandibular first premolar is the only premolar that frequently only has one pulp horn

221. The facial surfaces of mandibular molars are located medial to the border of the ascending ramus

222. The facial masticatory mucosa (attached gingival) is narrowest for the mandibular first premolar

223. The dentinoenamel junction occurs at the junction of the dental papilla & the inner enamel epithelium

223. Of the 3 furcations of a maxillary 1st molar the mesial is the closest to the cervical line

224. Of the 3 furcations of a maxillary 1st molar the distal is the furthest from the cervical line

225. The lateral pterygoid muscle is NOT an elevator (Closer) of the mandible.

226 Maintenance of the epithelial attachment is NO a function of the periodontal ligament.

227. Periodontal ligament fibers are made up of collagen

228. Periodontal ligament fibers support the tooth connecting to the dental alveolar bone via the cementum

229. The primary first mandibular molar does NOT look like any permanent tooth

230. The primary first maxillary molar resembles a premolar

231. 3rd molars have the greatest morphological variation. Maxillary laterals are after that.

232. Max 3rd molars from an occlusal view are frequently heart shaped because they are missing the DL cusp

233. Mandibular centrals distinguished by the cervical curvature, which is greater on the mesial than distal

234. Marginal ridge heights for posterior teeth are generally more occlusal on mesial than on the distal

235. The mandibular first premolar has its mesial marginal ridge more cervical than the distal

236. Supernumerary teeth when seen in the maxilla are usually found between the centrals or as 4th molars

237. The primate space develops in the maxillary primary dentition between the lateral and canine

238. The primate space develops in the mandibular primary dentition between the canine and 1st molar

239. The main component of enamel is inorganic matter (NOT collagen)

240. The direction of primary enamel rods in the cervical third is in an occlusal direction

241. The direction of enamel rods in permanent teeth in the cervical third is in a gingival direction

242. The lower compartment of the tmj is located between the condyle and the disc

244. The usual overjet is 2-4 mm

245. The difference in space from the primary to the permanent dentition is 2-4 mm

247. The lingual cusp of the mandibular 1st premolar in normal occlusion does not occlude
249. When the mandible moves from CO to edge to edge the condyles move forward & downward
250. Max central incisor has greatest MD crown dimension of any ANTERIOR tooth
251. Max central has measurement that is nearly identical for Inciso-Cervical versus Mesio-distal
252. Max central has GREATEST cervical curvature (on mesial) of any other tooth
253. Max lateral mesio-distal crown width SMALLEST of any MAXILLARY tooth
254. Max lateral has MOST crown shape variations
255. Max lateral has mesio-distal measurement that is nearly identical to facio-lingual. Closest of all ANTERIOR teeth ...
256. Max lateral has distal contact that farthest cervically of any INCISOR
257. Max lateral has distal contact centered both Inciso-cervically and facio-lingually
258. Mand Central- SMALLEST crown dimensions of ANY tooth
259. Mand Central- most symmetrical crown
260. Mand Central- has sharpest set of incisal angles (mesial and distal)
261. Mand Central- Proximal contacts at same level
262. Mand. Lateral- crown twisted on root
263. Maxillary Canine GREATEST OVERALL total tooth length
264. Maxillary Canine has a distal bulge
265. Maxillary Canine has GREATEST F-L crown dimension of any ANTERIOR tooth

266. Maxillary Canine cusp tip located facial to ling axis
267. Maxillary Canine has GREATEST cervical prominence of any ANTERIOR tooth
268. Maxillary Canine distal contact is centered
269. Maxillary Canine has longest root of any other tooth
270. Mandibular Canine has longest CROWN dimension of any other tooth
271. Mandibular Canine has straightest mesial alignment of crown to root
272. Mandibular Canine makes a C shape from crown tip to root apex
273. Mandibular Canine has incisal edge lingual to long axis
274. Mandibular Canine has the LONGEST ROOT length of any MANDIBULAR tooth
275. Max 1st premolar only premolar with longer mesial cusp ridge
276. Max 1st premolar r only tooth with mesial marginal ridge groove and mesial crown concavity and mesial root depression.
277. Max 2nd premolar symmetrical POSTERIOR tooth
278. Max 2nd premolar has cusp heights closer in height to each other than any other PREMOLAR
279. Max 2nd premolar r has fossa that re closest in size compared to any other posterior tooth
280. Mandibular 1st premolar facio-lingually smallest of any posterior tooth
281. Mandibular 1st premolar is closest of all MANDIBULAR TEETH in FL versus M-D diameter
282. Mandibular 1st premolar most variation of all posterior teeth in facial versus lingual cusp height
283. Mandibular 1st premolar only tooth with a mesio-lingual groove

284. Mandibular 1st premolar has mesial marginal ridge that is more cervical than distal marginal ridge
285. Mandibular 2nd premolar ONLY premolar with multiple lingual cusps
286. Mandibular 2nd premolar ONLY premolar with a lingual groove
287. Mandibular 2nd premolar ONLY premolar with a central fossa
288. Max 1st Molar closest in size FL vs MD of any MAXILLARY POSTERIOR tooth
289. Mand 1st Molar LARGEST M-D crown dimension of ANY other tooth
290. Mand 1st Molar LARGEST FL crown dimension of ANY other MANDIBULAR tooth
291. Mand 1st Molar LARGEST Occluso-cervical crown dimension of any MANDIBULAR molar
292. Mand 1st Molar has three facial cusps
293. Mand 1st Molar has the LONGEST root of any other molar
294. Mand 1st Molar has GREATEST root separation of ANY OTHER tooth
295. Mand 1st Molar MESIAL root has GREATEST F-L dimension of any other root
296. Mand 2nd Molar- Cruxiform occlusal pattern
298. 3rd Molars have most variation in crown morphology
299. 3rd Mandibular Molar has GREATEST distal root inclination of any other tooth
300. 3rd Mandibular Molar has SHORTEST root of any mandibular tooth