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| **Permanent Tooth** | **11** | **12** | **13** | **14** |
| **Vital Characteristics (first)** | * Wide M-D, almost as high as crown height. (Square) * M-I angle 90° rounded on D-I | * Slightly wider M-D than crown height (more rectangle) * M-I angle 90° rounded on D-I | * Bell shaped, prominent cingulum * M cusp slope is shorter than D cusp slope * Distal portion is wider/more concave | * Hexagonal from the occlusal aspect * May have two roots (bifurcation) * Mesio-marginal ridge * M cusp slope longer than D cusp slope (exception) |
| **Important Characteristics** | - M-D diameter is greater than La-LIi | - Incisal edge twists  - More asymmetrical | - Tip of cusp is centred La-Li | * B and P cusp heights are quite equal, B slightly larger. * Much larger and more prominent cusps than Md |
| **Minor details (last)** | * Roots are rounded/triangular in cross-section * Roots twist/curve distally | * Roots are rounded/triangular in cross-section * Roots twist/curve distally | * Root may curve mesially or distally * Root wider M-D than La-Li | * Roots twist/curve distally |

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| **Permanent Tooth** | **41** | **42** | **43** | **44** |
| **Vital Characteristics (first)** | * Crown height greater than M-D (tall rectangle) * Very prominent cingulum * Symmetrical, parallel M and D edges | * Incisal edge twists distally * Prominent cingulum * Slightly wider and longer than centrals * Distal contact areas are generally slightly curved | * M-D edges are parallel * Smaller cusp height than Mx * M cusp slope shorter than D cusp slope * D portion more concave | * Li cusp much smaller than B cusp * Rounded diamond from O aspect * Li tilt * M cusp slope shorter than D cusp slope * Transverse cusp ridge towards mesial (M-L groove) |
| **Important Characteristics** | * Flattened M-D root cross-section * Distal may be more cervical | - More fan-shaped  - More asymmetrical than centrals | - Flattened cingulum  - Cusp occupies ¼ to 1/3 of crown height | * Rhomboidal from proximal view |
| **Minor details (last)** | * Roots twist/curve distally | * Roots twist/curve distally | * Root is wider La-Li than M-D * Root may curve distally or mesially | * Roots twist/curve distally |
| **Permanent Tooth** | **15** | **16** | **17** | **18** |
| **Vital Characteristics (first)** | * 2/3 cusp height (1 B, ½ Li) * D-Li groove * Cusp height similar * M cusp slope shorter than D cusp slope * Significant lingual tilt | * Oblique ridge from D-B to M-P * 2 Pa cusps often longer than 2 Bu cusps * May have Crabelli’s cusp (MePa) | * Slightly smaller than 6 * 4 cusps * M-P cusp is the largest * ?? | * Heart shaped * Very variable * If doesn’t look like standard 6 or 7. |
| **Important Characteristics** | * Symmetrical slopes * Li cusp more mesial | * Anterior developmental groove (L shape) * Palatal groove than often ends in a pit | - Anterior developmental groove (L shape) | * Roots often fused |
| **Minor details (last)** | * 1 root * Roots tend to curve distally | * 3 roots (2 B, 1 P) * Roots tend to curve distally | * 3 roots (2 B, 1 P) * Roots tend to curve distally | * 3 roots |

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| **Permanent Tooth** | **45** | **46** | **47** | **48** |
| **Vital Characteristics (first)** | * Buccal and lingual cusps are more equal * 2/3 cusps (D-L is smallest) * Square shaped * H pattern on occlusal aspect | * 5 cusps (3 B, 2 Li) * M-B > D-B > other cusps * Rounded on the distal aspect | * Smaller than 6 * 4 cusps (2 B, 2 Li) * M-B cusp is largest * Hot cross bun | * More rounded occlusal aspect * Extra grooves * Distal surface usually more convex than mesial |
| **Important Characteristics** | * M cusp slope is   shorter than D  - Li cusp more mesial |  | * Distal surface usually more convex than mesial | * Often fused roots |
| **Minor details (last)** | * Roots twist/curve distally * 1 root | * Roots twist/curve distally * 2 roots (M, D) | * 2 roots (M, D) | * Roots twist/curve distally |