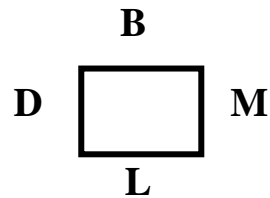


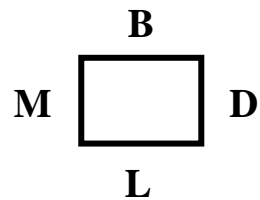
# Tooth Identification

## **\*\* Maxillary & Mandibular , Righth & Left teeth ...**

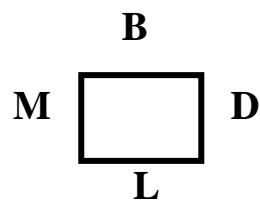
### 1. Maxillary Right tooth



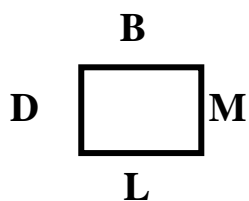
### 2. Mandibular Right tooth



### 3. Maxillary Left tooth



### 4. Mandibular Left tooth



### Note

<b>B → Buccal</b>	<b>L → Lingual</b>
<b>M → Mesial</b>	<b>D → Distal</b>

## **\*\* Permanent Teeth ...**

### **☺ Incisors ..**

- **Upper central incisors left & right ..**

The mesial angle is always sharper than the distal angle (so the mesial angle is the sharp one) . To know if the tooth is right or left just put it in its anatomical position.

- **Upper & lower central incisors ..**

1. Upper is larger and wider than the lower.
2. The contact area in the lower is at the same level and more incisally.
3. The lower central is more regular in shape than the upper.

- **Upper central & lateral incisor ..**

1. Central is always bigger than the lateral but mainly we will differentiate between them by the mesial and distal angles , In lateral incisor the mesial angle is less sharp than the central and the distal angle is more rounded.
2. Central incisor is square but lateral incisor is rectangle.
3. Cingulum and fossa are more prominent in the lateral incisor than in the central (in the upper arch).

- **Lower central & lateral incisors ..**

1. When we look incisally we find that the central is more regular in shape than the lateral , in the lateral the mesial length of the crown (cervico-incisally) is more than the distal length (mesially longer than distally).
2. The crown of the lateral appears to be twisted to the distal side (you can use this feature to differentiate between left and right lower lateral incisor).
3. Central has a symmetrical shape (M & D sides are sharp).
4. Cingulum and fossa are less prominent in the lateral incisor than in the central (in the lower arch).

### **☺ Canines ..**

- **Upper canines right & left ..**

The mesial side of the canine is convex and the distal side is more concave (the mid line between the convex and concave is the labial ridge). The mesial slope is lesser than the distal one.

The canine is the junction between anterior and posterior teeth, so the mesial side looks like the anterior teeth and the distal side looks like the posterior teeth.

- **Lower canine right & left ..**

It is the same as the upper.

Note : The root of mandibular canine is the only root which is inclined **mesially**, while all the other permanent teeth their roots are inclined **distally**.

- **Upper & lower canine ..**

1. The upper has more detailed structure than the lower.
2. The cingulum is more bulky in the upper than in the lower which is smaller (not prominent).
3. The contact areas in the lower are more incisally than that of the upper which is more cervically.

- **Canines & incisors ..**

1. The incisors have abroad incisal edge and the canines have one sharp cusp (cuspid).
2. The canines are more rounded in shape than the incisors.

## ☺ Premolars ..

- **Upper & lower premolars:**

1. The upper premolars occlusally: hexagonal.
2. The lower premolars occlusally: rounded.

- **Upper first & second premolar:**

1. The first has 2 roots but the second has 1 root.
2. The first and second have 2 cusps but in the first the buccal cusp is larger than the lingual one and in the second the 2 cusps have nearly the same length.
3. The first premolar have **mesial marginal groove** but the second doesn't have this groove.

- **Upper first premolar right & left ..**
  1. Use the mesial marginal groove to know whether the tooth is right or left.
  2. The MMR (mesial marginal ridge) is higher than the DMR.
  
- **Upper second premolar right & left ..**  
The distal slope is longer than the mesial slope (the same as in canine).
  
- **Lower first & second premolar ..**
  1. The first and the second have 1 root but the first has 2 cusps and the second has 3 cusps.
  2. The first has an important **mesiolingual groove** and the second doesn't have it.
  3. Note : the first premolar looks like a canine from the buccal aspect but has 2 cusps : buccal (large) and lingual (very small in comparison to the buccal cusp).
  
- **Lower first premolar right and left:**
  1. By the mesiolingual marginal groove (it is on the mesial side).
  2. **DMR** is higher than the **MMR** (this is the only tooth).
  
- **Lower second premolar right and left:**
  1. The second has 3 cusps (1 buccal and 2 lingual), the mesiolingual is the larger than the distolingual.
  2. The mesial marginal ridge is higher than the distal marginal ridge.

## ☺ Molars ..

- **Upper & lower molars ..**
  1. The upper has 3 roots (1 lingual and 2 buccal).
  2. The lower has 2 roots (mesial and distal).
  
- **Upper first & second molar ..**
  1. The first has 5 cusps (MB,DB,ML,DL & carabelli).
  2. The second has 4 cusps (MB, DB, ML & DL).
  3. The oblique ridge is more prominent in the first upper molar.
  
- **Upper first molar right and left ..**
  1. Cusp of carabelli is placed mesiolingually, so we know the mesial aspect.
  2. **ML cusp** is the largest cusp.

- **Lower first and second molar ..**
  1. The first has 5 cusps (ML,DL,MB,DB & distal).
  2. The second have 4 cusps (ML, DL, MB & DB).
  3. The central groove of the second lower molar has a cross shape (+ shape).
  
- **Lower first right and left ..**
  1. By the distal cusp which is found in the buccal aspect.
  2. The **ML cusp** is the largest one.
  
- **Third Molars ..**
  1. Third molars have many variations, but in general they have similar shape as second molars (4 cusps, 2roots if it's lower, and 3 roots if it's upper).
  2. Third molars have many many pits and supplement grooves.
  3. Upper third molars have a heart shape.
  4. Lower third molars have a wrinkled shape.
  5. Roots of third molars may be fused together for all of their length or have a definite point of bifurcation.

## ☺ Summary ...

Upper 1 <sup>st</sup> premolar	Upper 2 <sup>nd</sup> premolar
<ul style="list-style-type: none"> <li>- 2 roots</li> <li>- 2 cusps (B,L) , the buccal one is longer</li> <li>- MMG (mesial marginal groove)</li> </ul>	<ul style="list-style-type: none"> <li>- 1 root</li> <li>- 2 cusps (B,L) , both cusps have the same length</li> <li>- NO MMG (mesial marginal groove)</li> </ul>

Lower 1 <sup>st</sup> premolar	Lower 2 <sup>nd</sup> premolar
<ul style="list-style-type: none"> <li>- 1 root</li> <li>- 2 cusps (B,L) , the buccal one is larger</li> <li>- MMG (mesial marginal groove)</li> </ul>	<ul style="list-style-type: none"> <li>- 1 root</li> <li>- 3 cusps (1B,2L) , B one is the largest , ML is larger than DL</li> <li>- NO MMG (mesial marginal groove)</li> </ul>

Upper 1 <sup>st</sup> molar	Upper 2 <sup>nd</sup> molar
<ul style="list-style-type: none"> <li>- 3 roots (2B , 1L)</li> <li>- 5 cusps (2B,2L,carabelli)</li> </ul>	<ul style="list-style-type: none"> <li>- 3 root (2B , 1L)</li> <li>- 4 cusps (2B,2L)</li> </ul>

Lower 1 <sup>st</sup> molar	Lower 2 <sup>nd</sup> molar
<ul style="list-style-type: none"> <li>- 2 roots (1M , 1D)</li> <li>- 5 cusps (2B,2L,distal)</li> </ul>	<ul style="list-style-type: none"> <li>- 2 root (1M , 1D)</li> <li>- 4 cusps (2B,2L)</li> <li>- Cross-shaped central groove</li> </ul>

## **\*\*Notes ...**

- All of the roots are inclined **distally** except in mandibular canine it is inclined **mesially**.
- In all teeth **MMR** is higher except in mandibular 1st premolar **DMR** is higher.
- Cross-shaped central groove → Mandibular 2<sup>nd</sup> molar.
- Heart-shaped outline → Maxillary 3<sup>rd</sup> molar.

## **\*\*Deciduous Teeth ...**

- Deciduous teeth in general are like the permanent teeth but they are smaller in size.
- The crown → smaller in size , whiter in color , more rounded and its cervical ridge is more prominent.
- The root → thinner , no root trunk (because the bifurcation begins almost immediately at the cervical line) , flaring roots (spread widely).
- Some notes about deciduous teeth ..
  1. Primary maxillary first molar has (4 cusps, 3 roots) , the occlusal view of it looks like permanent maxillary first premolar because the distal cusps (DB & DL) are well-reduced.
  2. Primary maxillary second molar looks like the permanent maxillary first molar (5 cusps and 3 roots) also has an oblique ridge.
  3. Primary mandibular first molar has a strange shape and doesn't resemble any of the other teeth (4 cusps and 2 roots).
  4. Primary mandibular second molar looks like the permanent mandibular first molar (5 cusp, 2 roots) but the buccal cusps are of equal width.

☺ **Best Of Luck Dentists** ☺

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### **References**

Past sheet done by dr. Bashar Adenat  
Past year students (dr. Mohammad Abulhaj)  
Dental anatomy book (Wheeler)  
Dr. Yara Owies's slides , Dr. Firas Suliehat's slides  
Notes from dr. Mahmoud Nsour