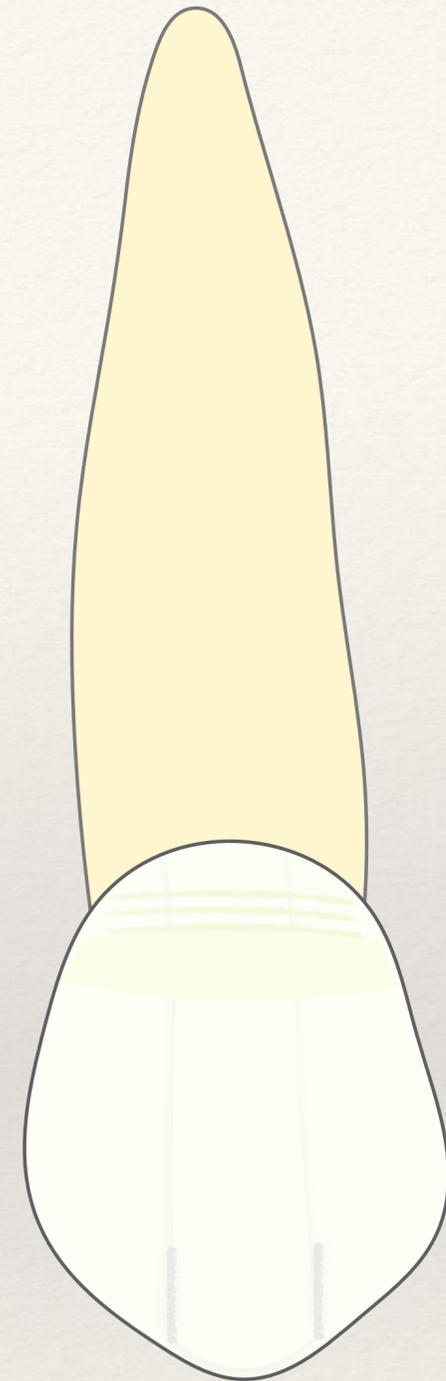


Dental Anatomy Lecture

# PERMANENT CANINE

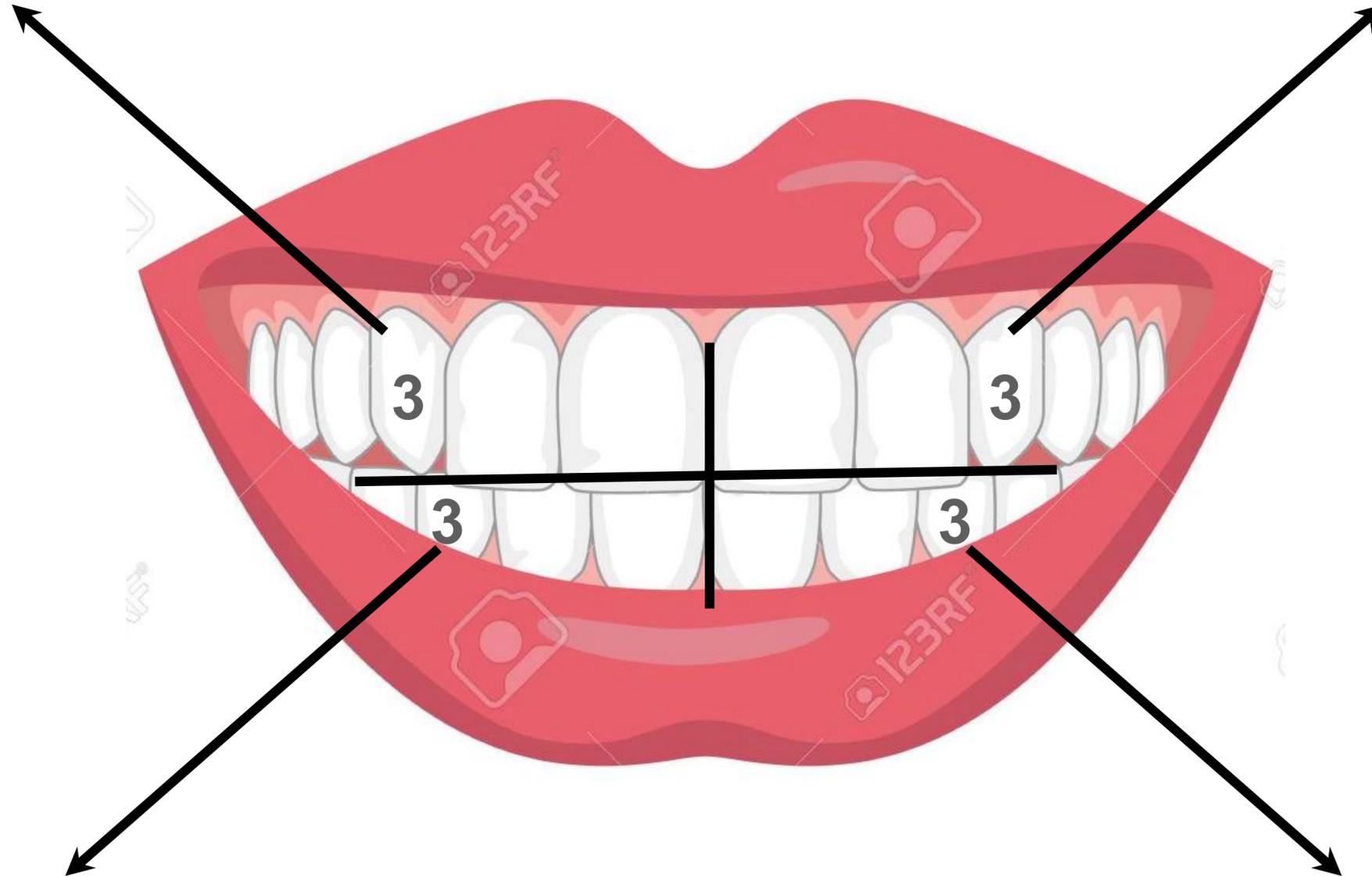
Dr. Sherif Hassan

2023



# IDENTIFICATION SYSTEM

- FDI = 13
- Universal = 6#



- FDI = 23
- Universal = 11#

- FDI = 43
- Universal = 27#

- FDI = 33
- Universal = 22#

## General properties of Canine

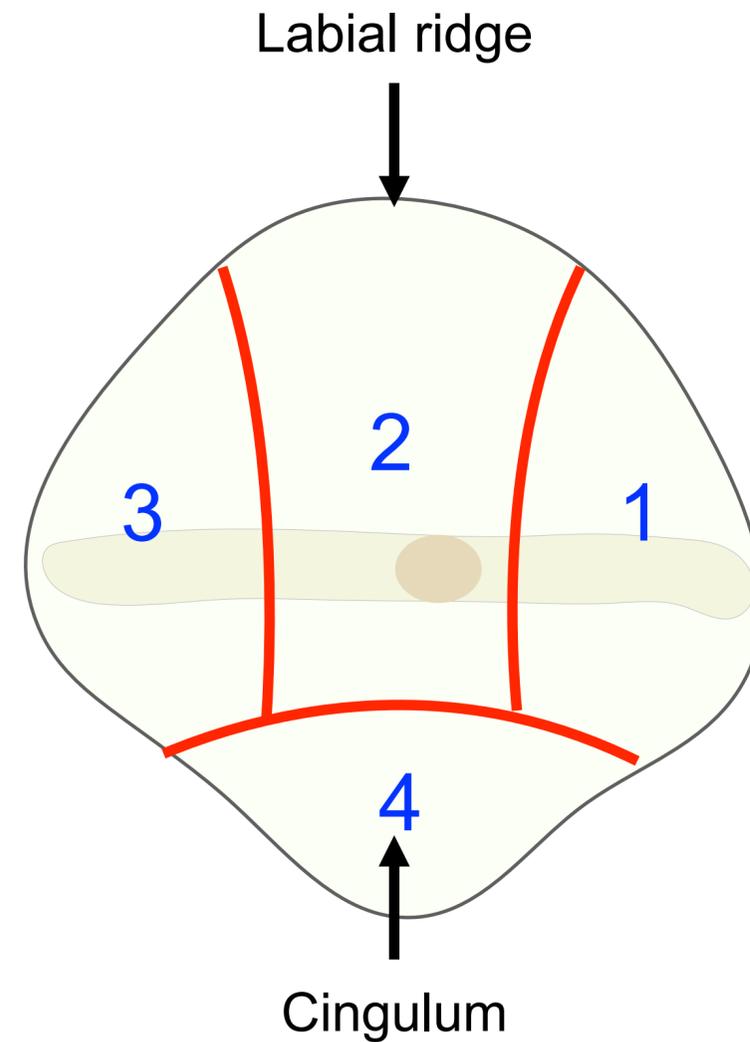
- 1. Corner stone:** Canine found at the corner of the mouth.
- 2. Cuspid tooth:** Canine has a single cusp.
- 3.** Mesial cusp slope is shorter than distal cusp slope.
- 4.** Canine is the longest tooth of the mouth.
- 5.** Canine has the longest root of the mouth.
- 6.** Geometric outline of the incisal aspect is rhomboidal shape.
- 7.** Canine has both labial ridge and lingual ridge.
- 8.** Canine has two lingual fossae mesial and distal to the lingual ridge.

# Lobe number

**Canines formed of four lobes.**

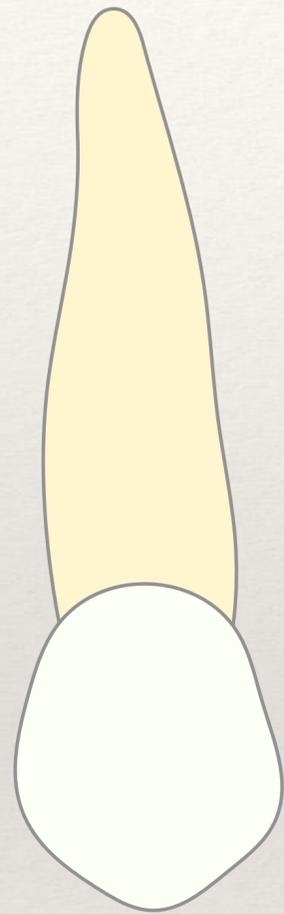
**Three labial lobes and one lingual lobe:**

1. Mesio-labial lobe.
2. Middle labial lobe form the labial ridge.
3. Disto-labial lobe.
4. Lingual lobe form the cingulum.

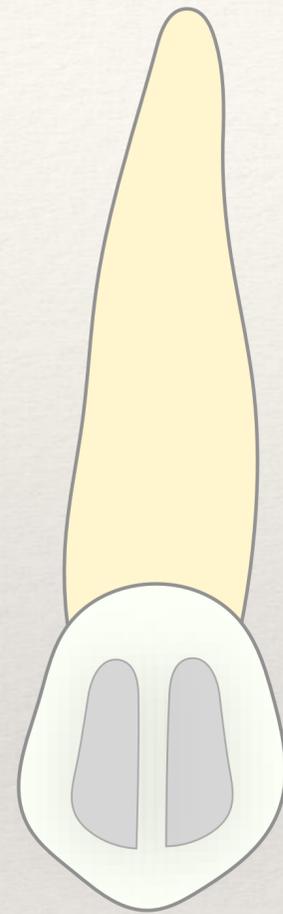


**Occlusal aspect**

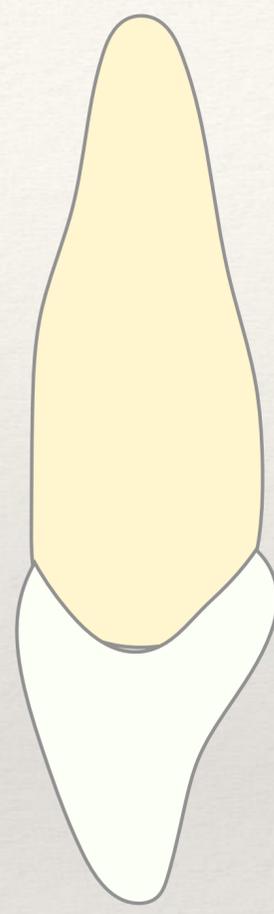
# Maxillary permanent canine



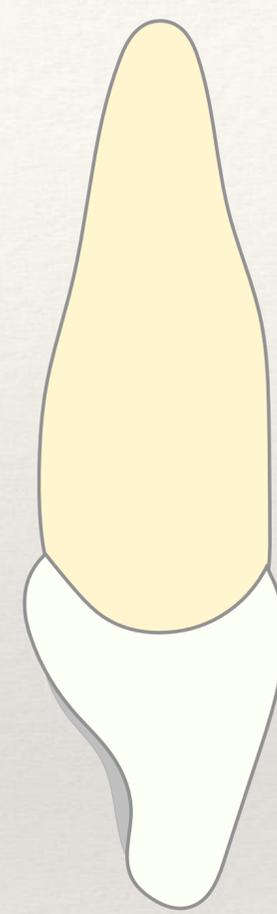
Labial  
aspect



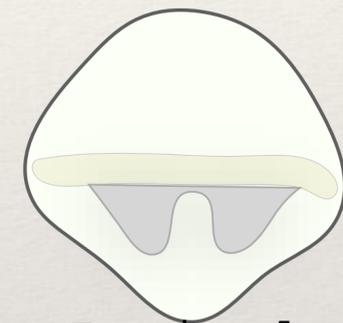
Lingual  
aspect



Mesial  
aspect



Distal  
aspect



Incisal  
aspect

# Labial Aspect

## Geometric Outline:

\*Crown is **Trapezoid** in Shaped.

## Mesial Outline:

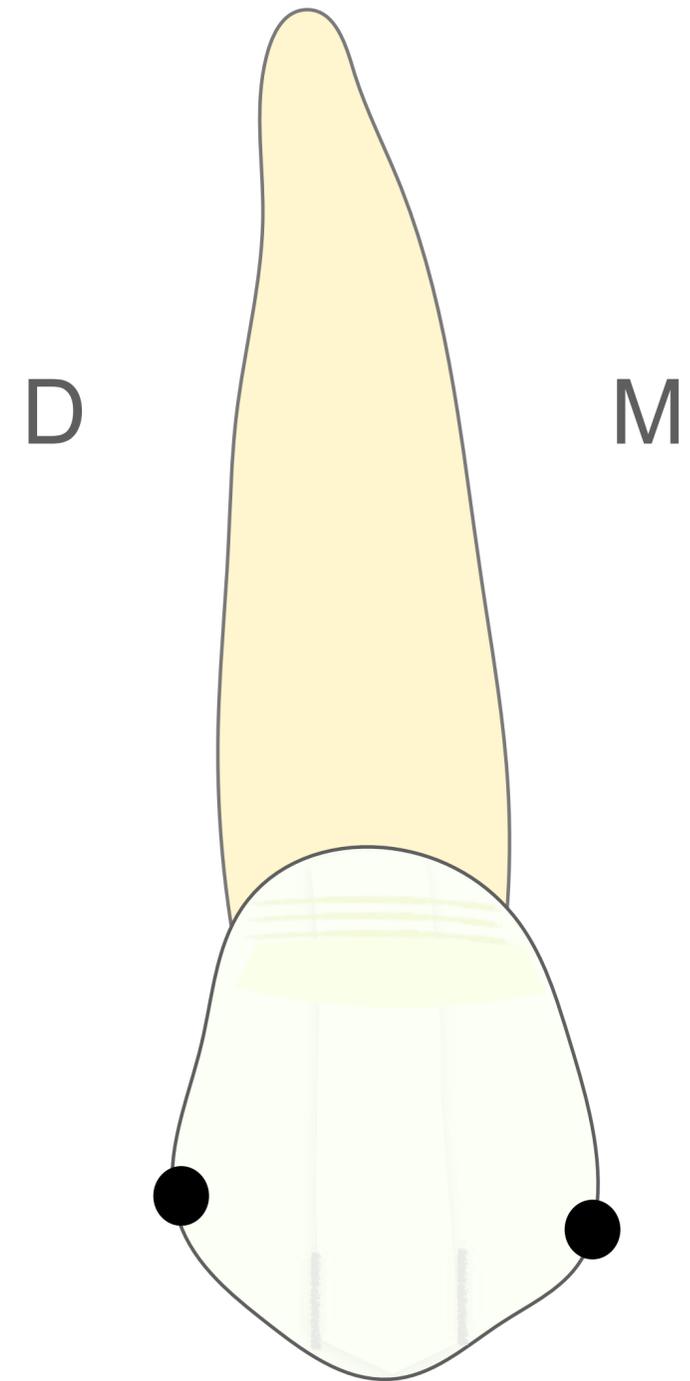
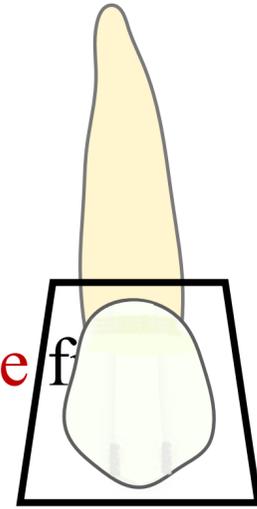
• **Convex** from cervical line to contact area, and, **concave** from contact area to cusp tip.

• Mesial contact area located at the junction of middle 1/3 and incisal 1/3.

## Distal Outline:

**Concave** from cervical line to contact area, and, **Convex** from contact area to cusp tip.

Distal contact area located within the middle 1/3.



## Incisal Outline:

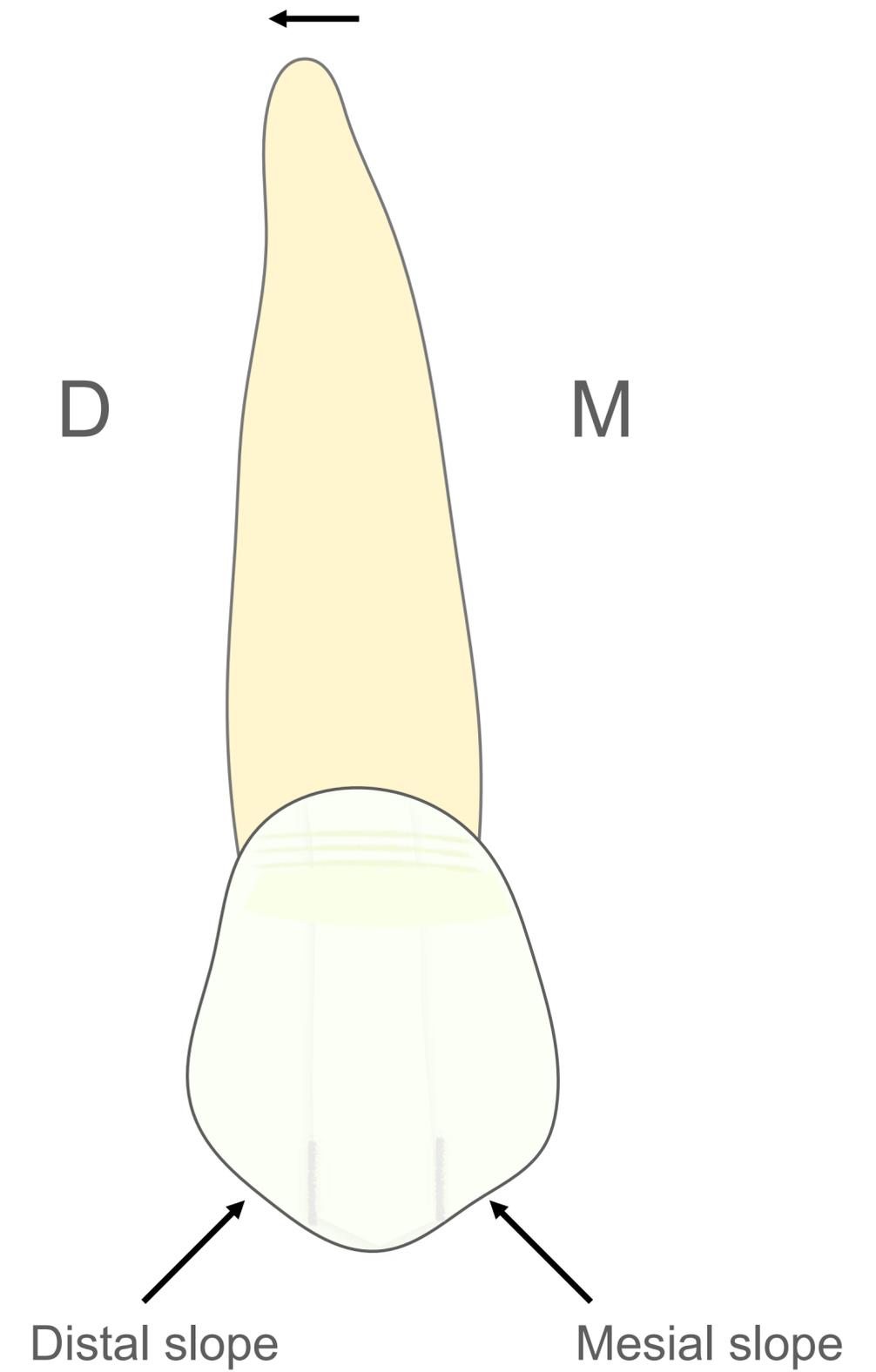
- One Cusp With Sharp Cusp Tip.
- **The Cusp Contain Two Cusp Slopes:**
  - 1- Mesial Cusp Slope.
  - 2- Distal Cusp Slope.
- \* **Mesial cusp slope is shorter than distal cusp slope.**
- \* The cusp tip is on the line with root apex.

## Labial Surface:

- \* Labial Surface is Convex, with maximum is at cervical ridge.
- \* The middle third forms the labial ridge that extended cervico-incisally.

## Root:

- The root is slender, and conical with a blunt apex.
- The root inclined distally at apical third.



# Lingual Aspect

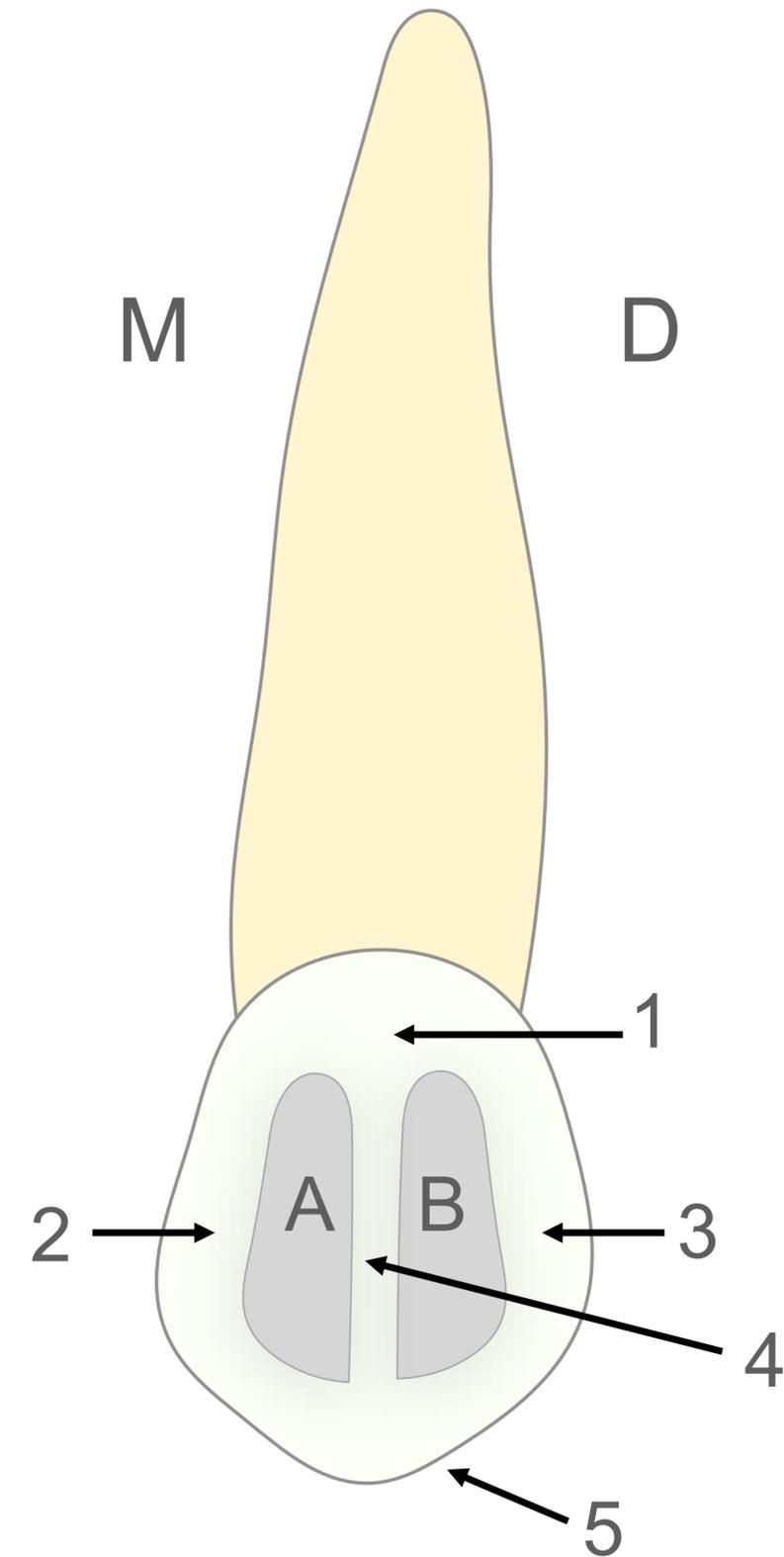
✳ Both crown and root are converged lingually.

## Crown Elevations:

1. Cingulum
2. Mesial marginal ridge.
3. Distal marginal ridge.
4. Lingual ridge.
5. Incisal ridge = cusp tip and cusp slopes.

## Crown Depressions:

- A. Mesio-lingual fossa.  
B. Disto-lingual fossa.



# Mesial Aspect

## Geometrical outline:

- \*Triangular in shape.
- \*Cusp tip is on a line with the center of the root or slightly labial.

## Labial outline:

Convex and the greatest is at cervical 1/3 (cervical ridge).

## Lingual outline:

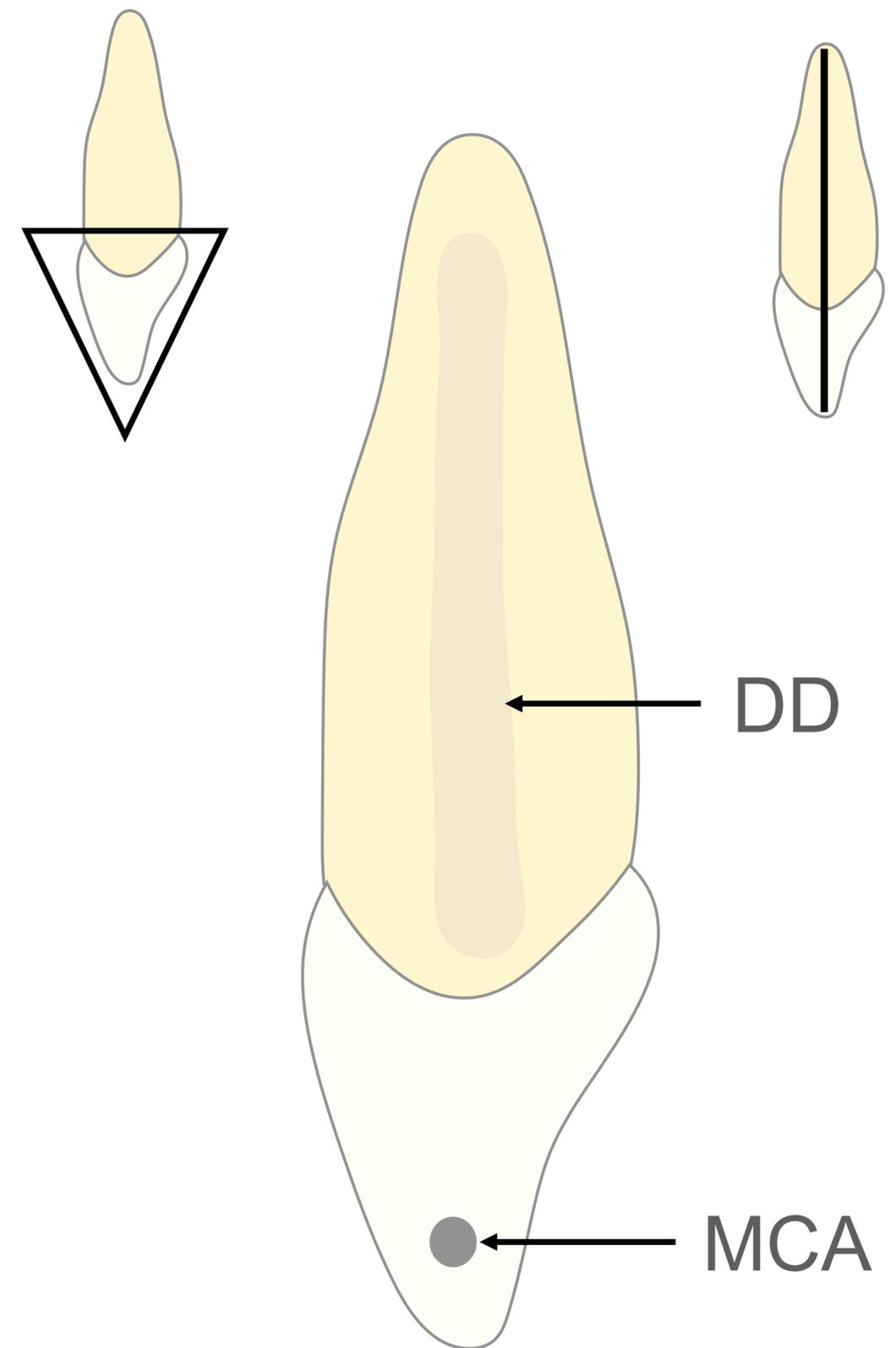
Convex at cervical 1/3 (cingulum), concave at the middle 1/3, and convex at incisal 1/3.

## Contact area:

Round in shape and located at the junction of incisal and middle third.

## Root:

Broad and taper with blunt apex and has developmental depression.



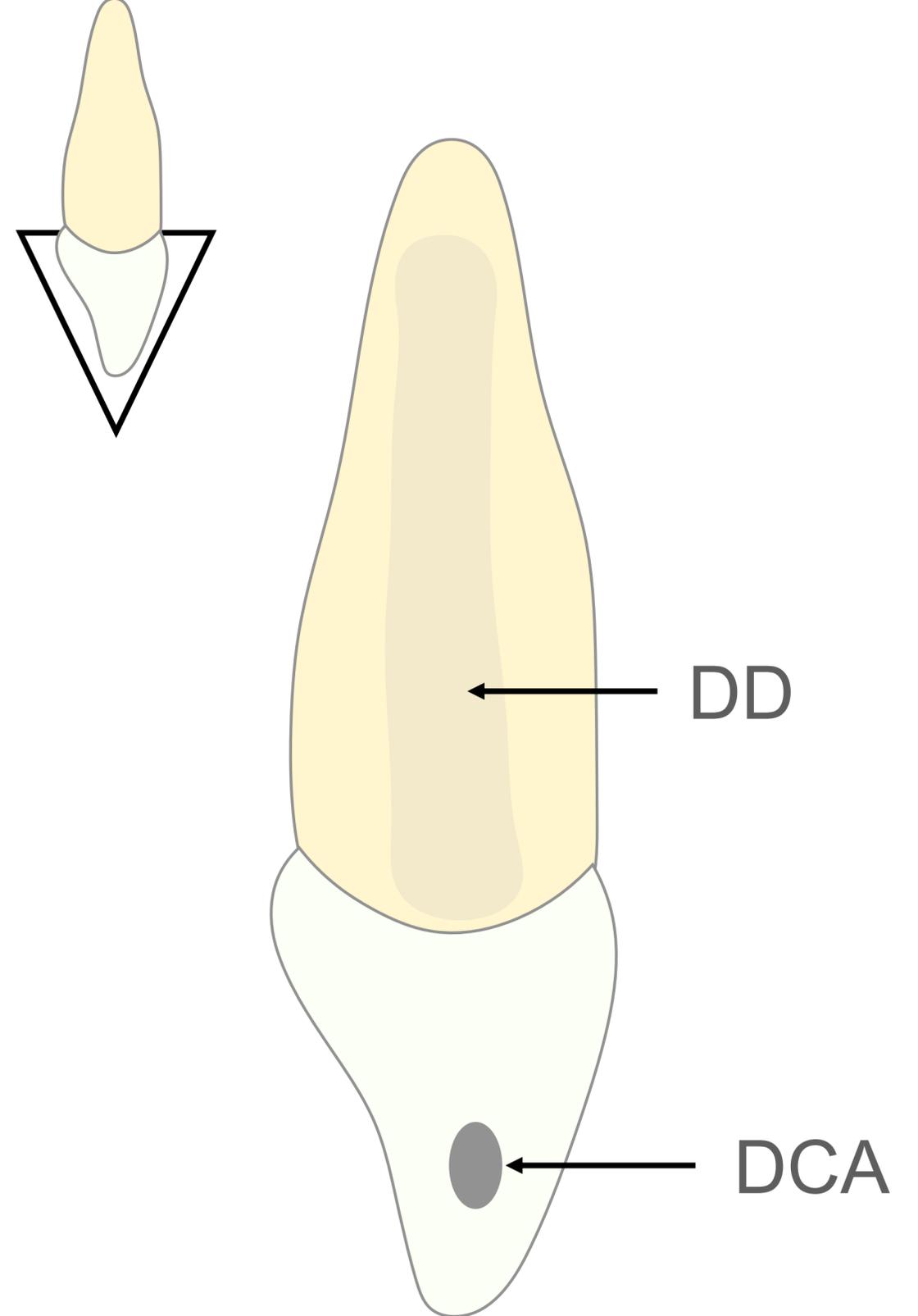
# Distal Aspect

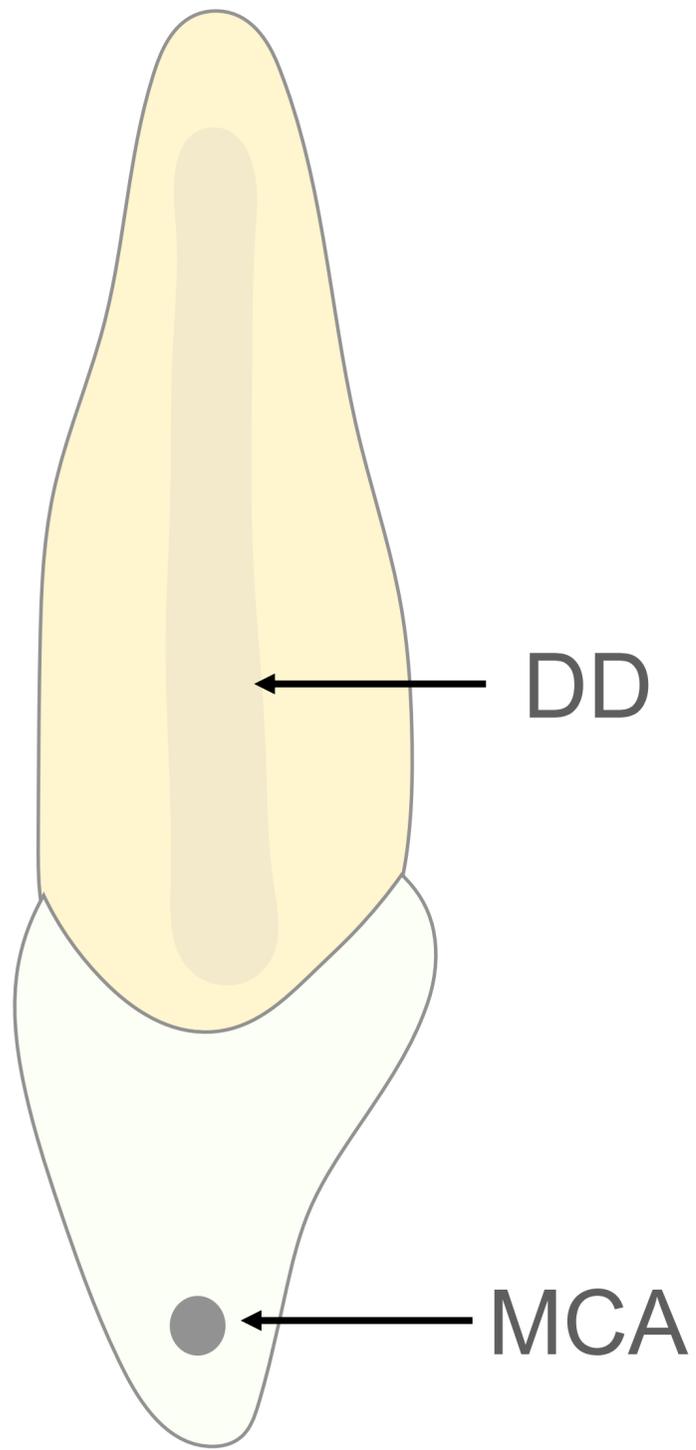
## Geometrical outline:

\*Triangular.

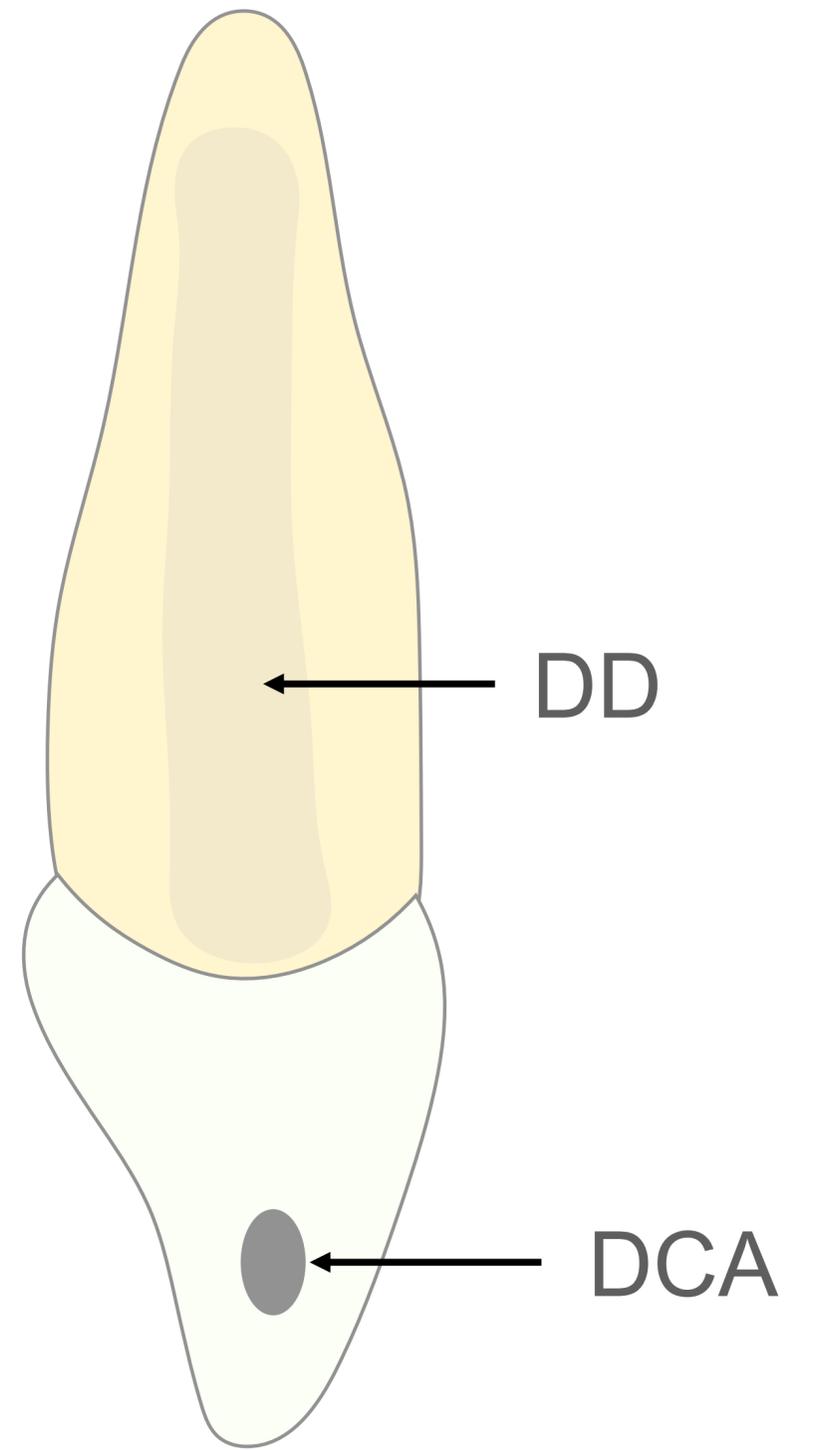
## Similar to the mesial aspect but differ in:

- \*Cervical Line Curvature is Less Than Mesial ( By 1 Mm).
- \*Contact Area Is Broader And Located At The Middle third.
- \*Developmental Depression Of The Root is More Developed.





**Mesial Aspect**

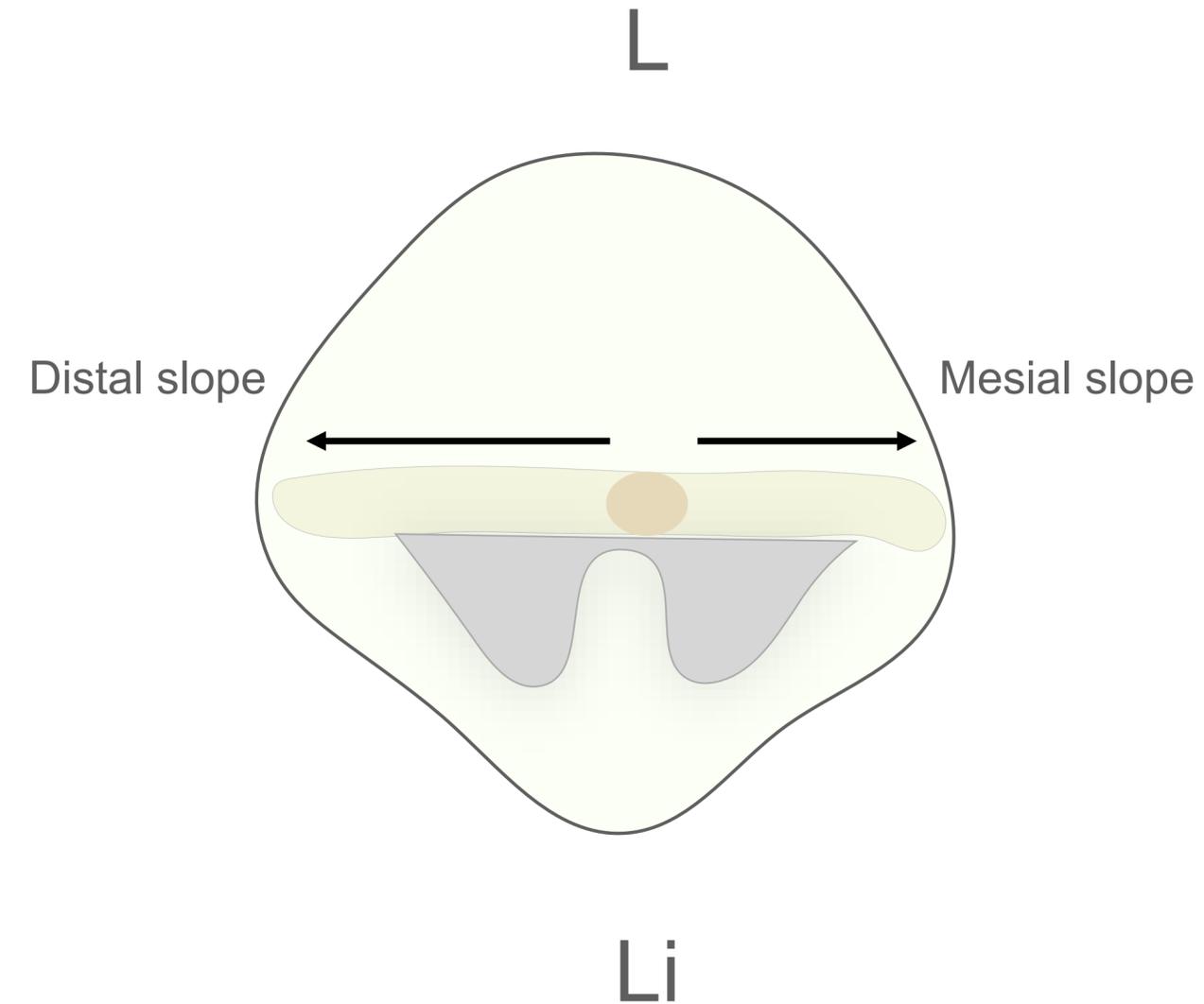
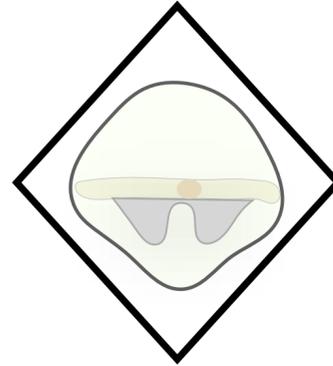


**Distal Aspect**

# Incisal Aspect

## Geometrical outline:

- \* Rhomboidal in shape.
- \* The labio-lingual diameter is greater than the mesio-distal diameter.
- \* Cusp tip is slightly labial and mesial to the center of the crown.
- \* The mesial slope is shorter than the distal slope.
- \* Both mesial and distal slopes are in line with each other.
- \* All elevations and depressions can be seen from this aspect.



# Mandibular permanent canine



Labial  
aspect



Lingual  
aspect



Mesial  
aspect



Distal  
aspect



Incisal  
aspect

# Labial Aspect

## Geometric Outline:

- Crown is Trapezoid in Shaped.

## Mesial Outline:

- Mesial outline: Straight
- Mesial Outline of Crown and root make a straight line.
- Contact Area is at the incisal third.

## Distal Outline:

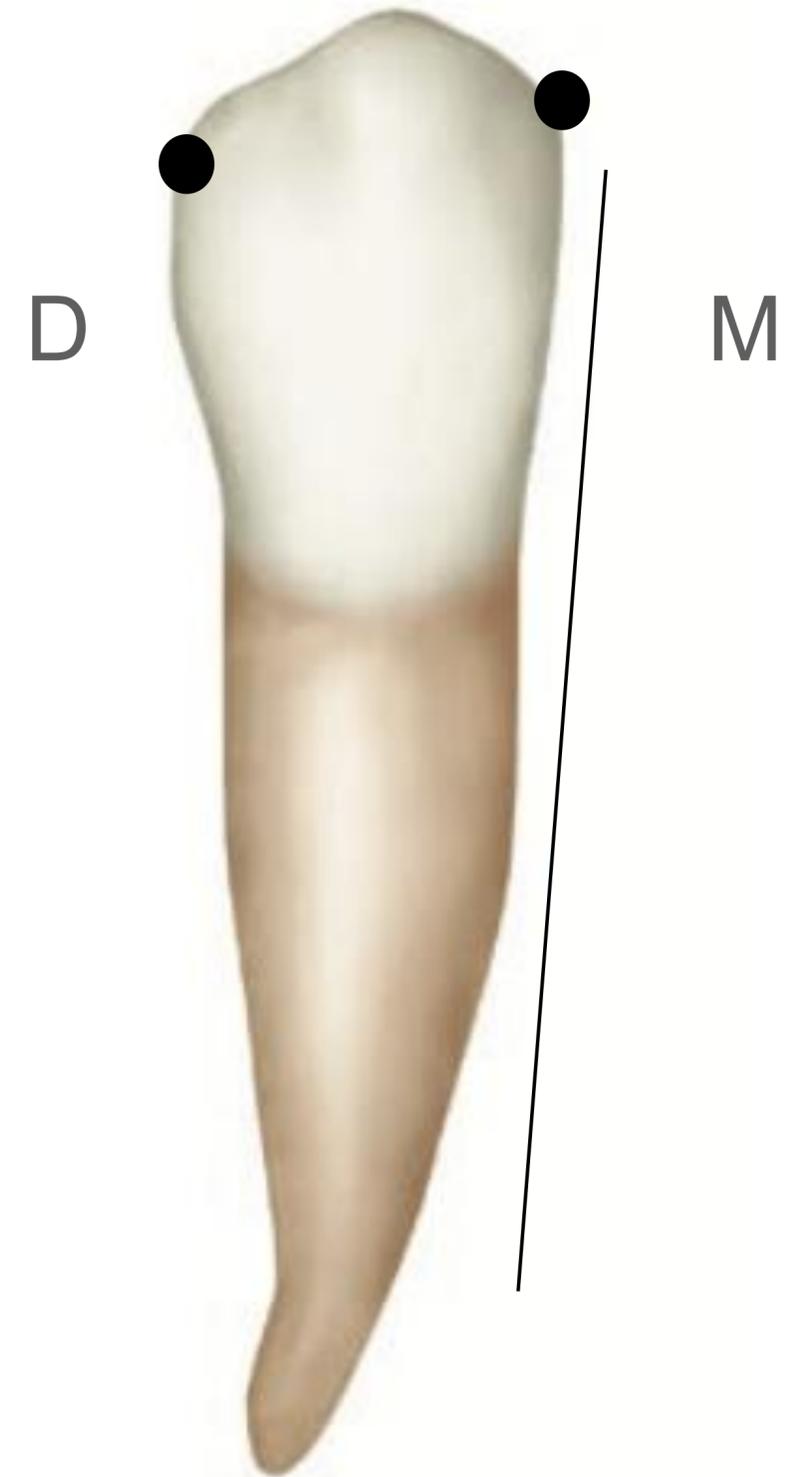
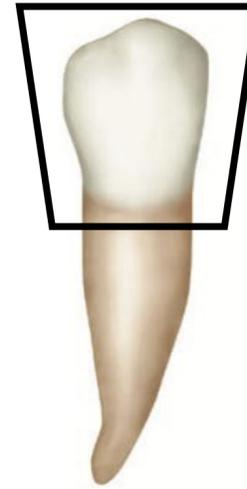
- Concave at Cervical Third and Convex at Contact Area.
- Contact Area is at the Junction of Incisal and Middle thirds.

Cervical line: Convex Toward Root.

Two developmental grooves: are found mesial and distal to labial ridge.

Incisal outline: Cusp Tip is blunt.

\*Mesial cusp slope is shorter than distal cusp slope.



# Lingual Aspect

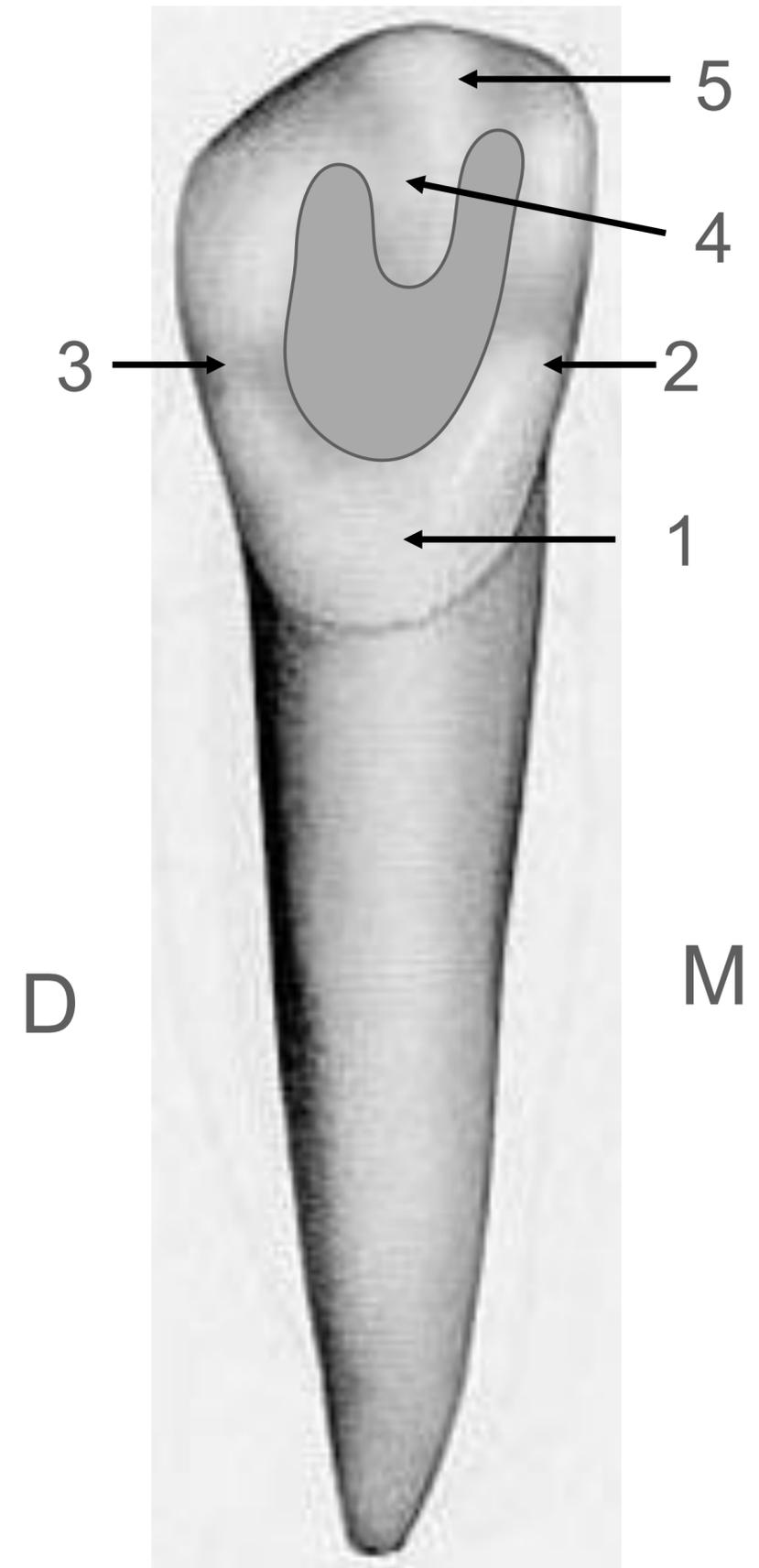
- \* Both crown and root are converge lingually.
- \* Cervical line convex toward root.

## Crown Elevations:

1. Cingulum
2. Mesial marginal ridge.
3. Distal marginal ridge.
4. Lingual ridge begin from incisal and fade out before reaching to cingulum..
5. Incisal ridge = cusp tip and cusp slopes.

## Crown Depressions:

One kidney-shape lingual fossa only \*\*



# Mesial Aspect

## Geometrical outline:

- Triangular.
- The base is cervically located and the apex is located incisally.
- Cusp tip is lingual with the center of the root. \*\*\*

## Labial outline:

Convex and the greatest is at cervical 1/3 (cervical ridge).

## Lingual outline:

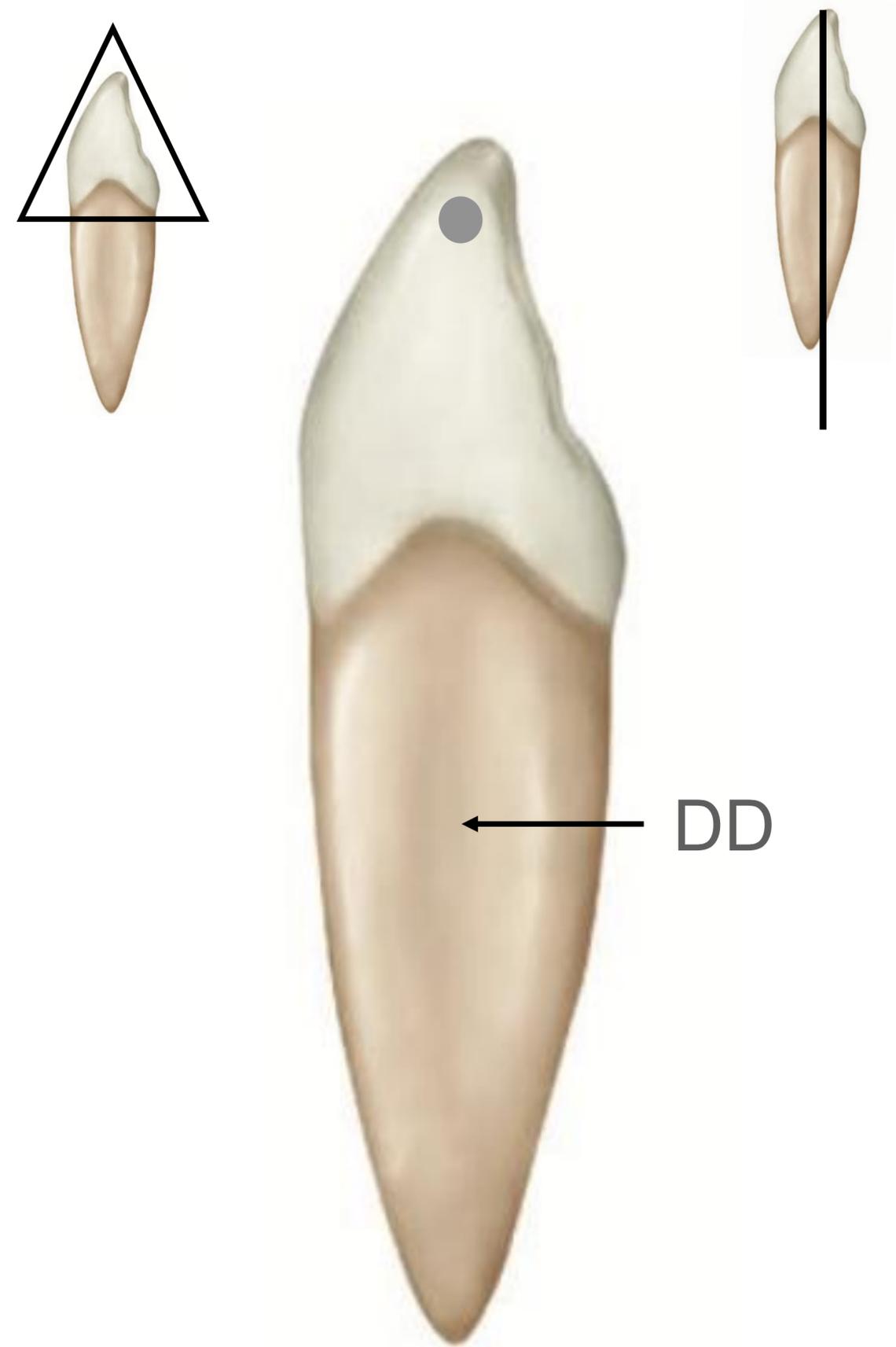
Convex at cervical 1/3 (cingulum), concave at the middle 1/3, and convex at incisal 1/3.

## Contact area:

Round and located at the incisal 1/3. \*\*\*

## Root:

Broad and taper with blunt apex and has developmental depression.



# Distal Aspect

## Geometrical outline:

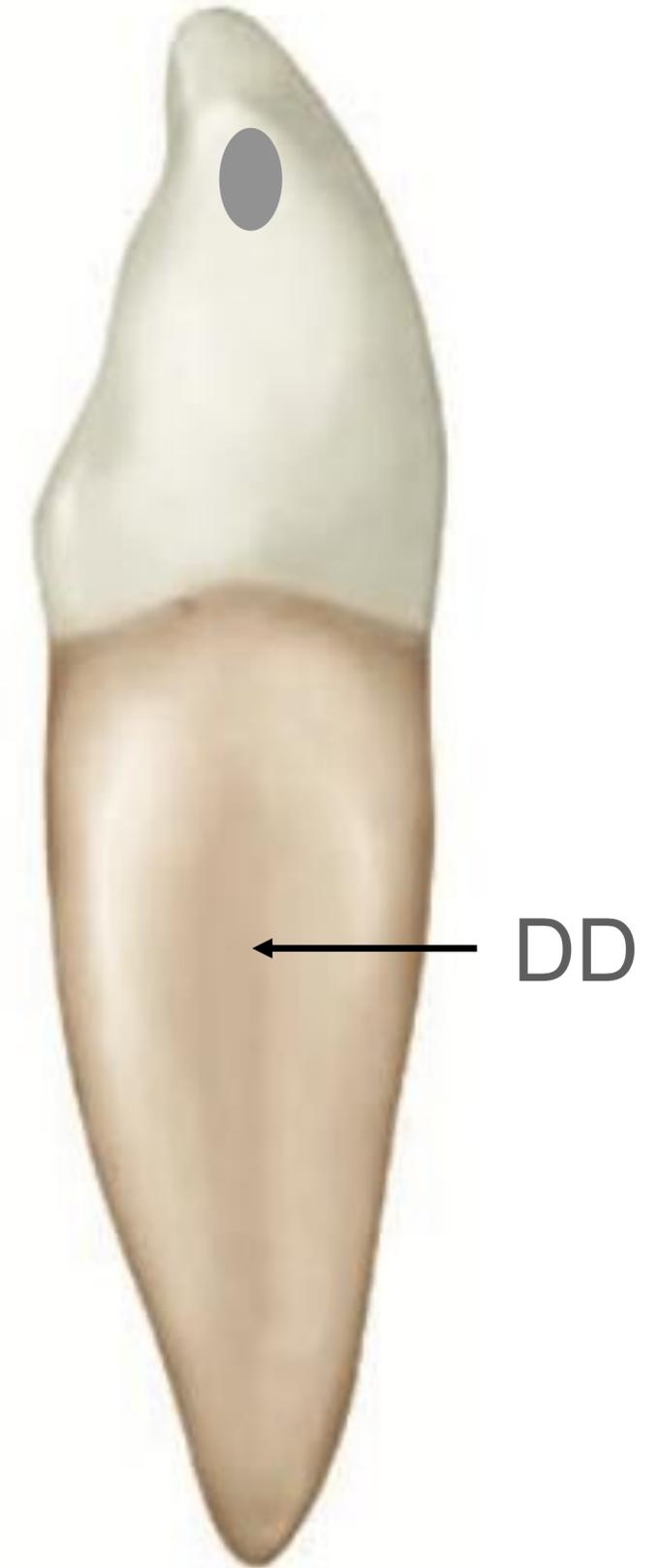
\*Triangular in shape.

## Similar to the mesial aspect but differ in:

\*Cervical Line Curvature is Less Than Mesial ( By 1 Mm).

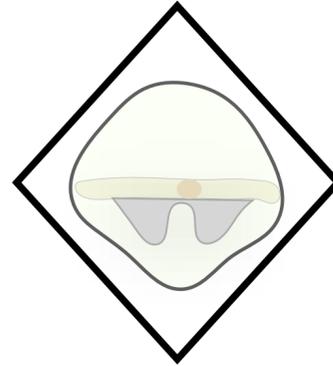
\*Contact Area Is Broader And Located At the junction of incisal and middle third.

\*Developmental Depression Of The Root is More Developed.

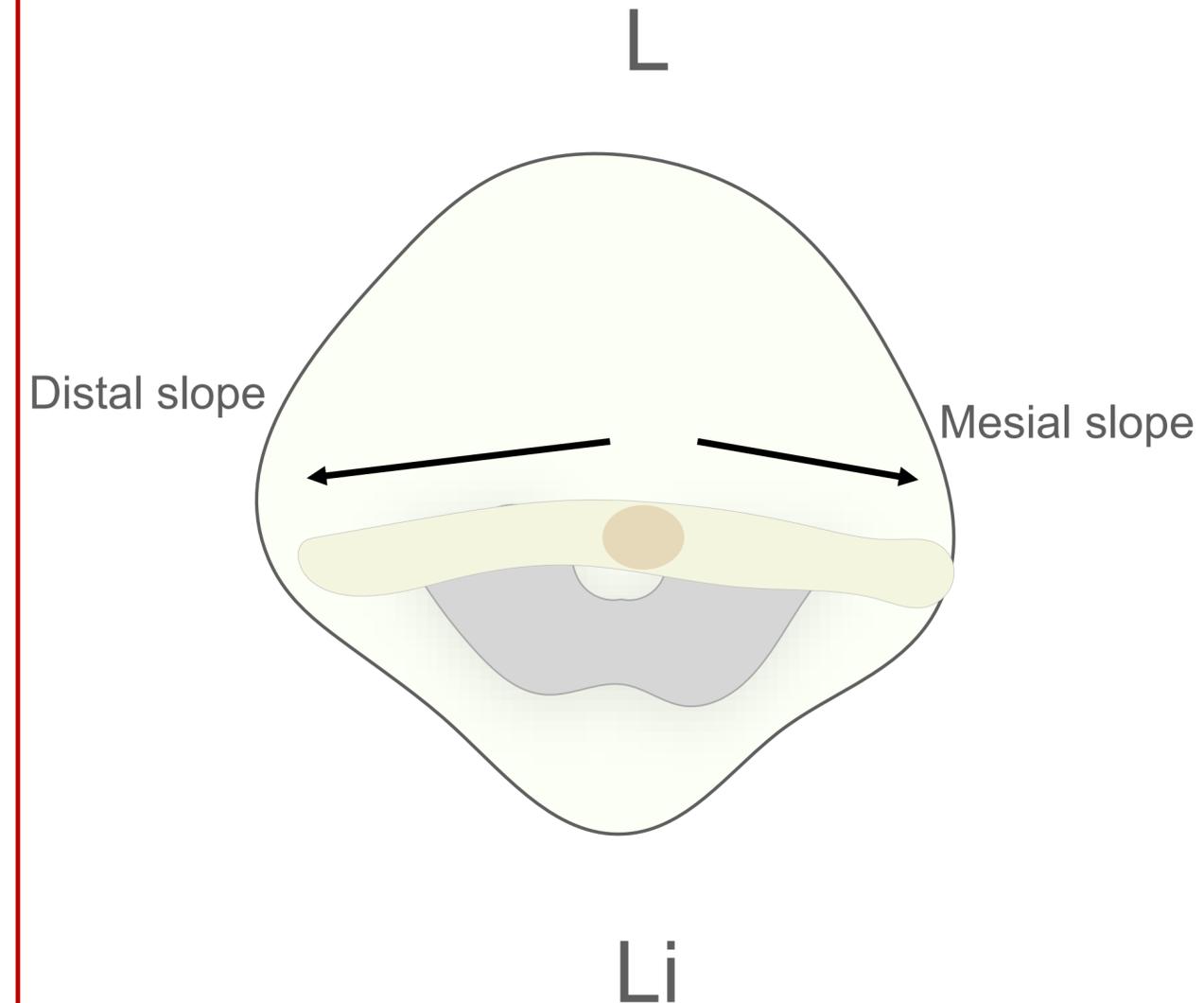


# Incisal Aspect

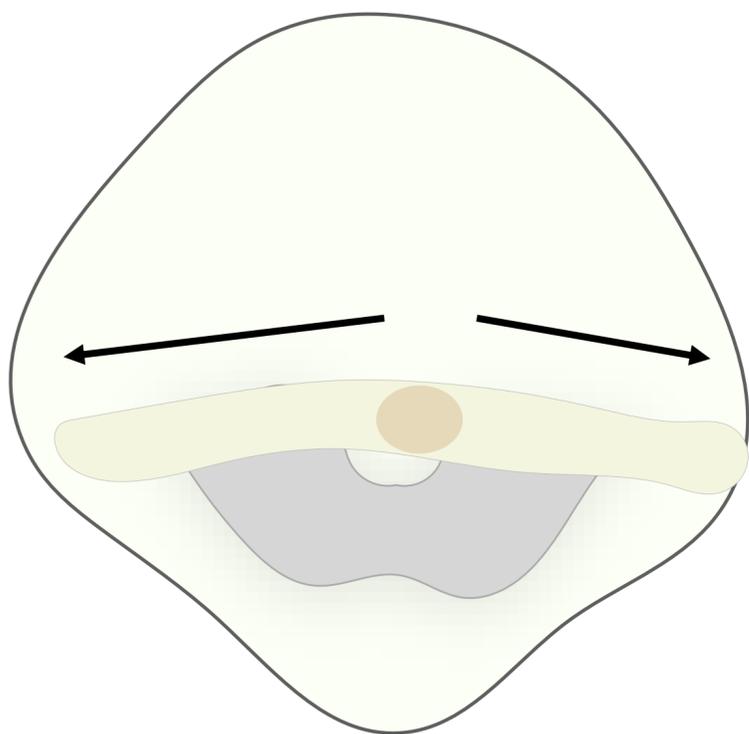
## Geometrical outline:



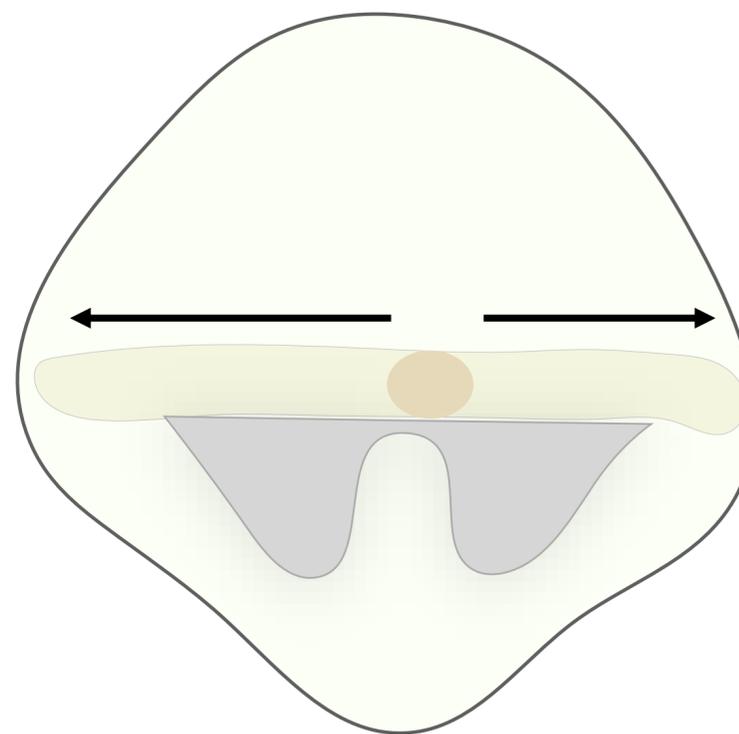
- \* Rhomboidal in shape.
- \* The labio-lingual diameter is greater than the mesio-distal diameter.
- \* Cusp tip is slightly lingual and mesial to the center of the crown.
- \* The mesial slope is shorter than the distal slope.
- \* Mesial slope make an angle with distal slopes.



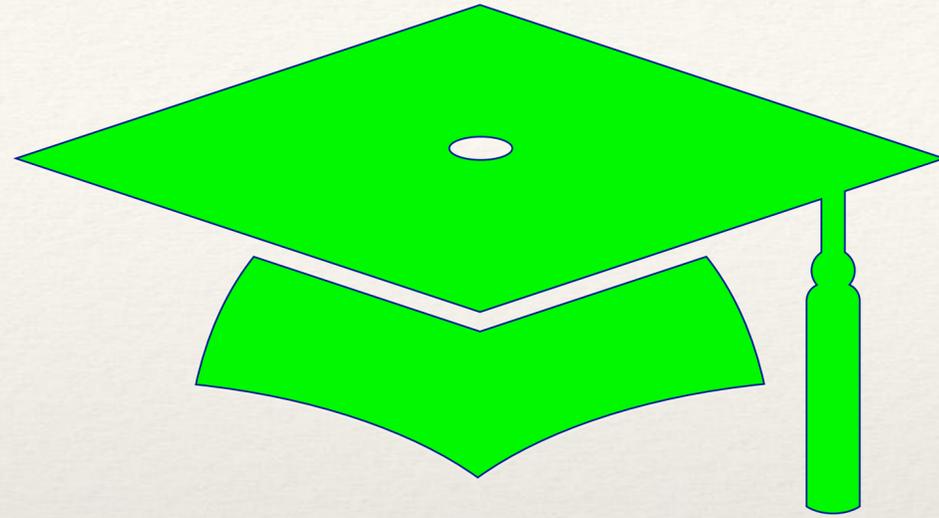
- \* All elevations and depressions can be seen from this aspect.



**Mandibular permanent canine**



**Maxillary permanent canine**



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