### Basic cephalometric analysis

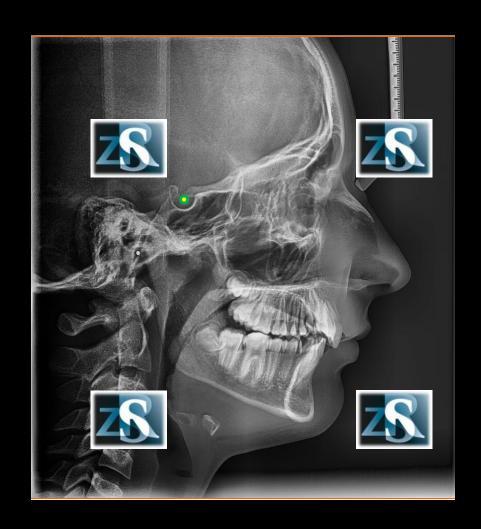
Based on Essentials of Dental Radiography by E. Whates

#### **CEPHALOMETRIC POINTS**

# Sella (S)

• The center of the sella turcica

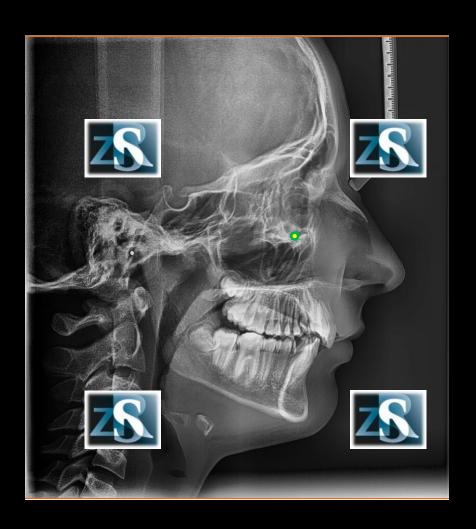




## Orbitale (Or)

The lowest point on the infraorbital margin





## Nasion (N)

 The most anterior point on the frontonasal suture





## Anterior nasal spine (ANS)

 The tip of the anterior nasal spine

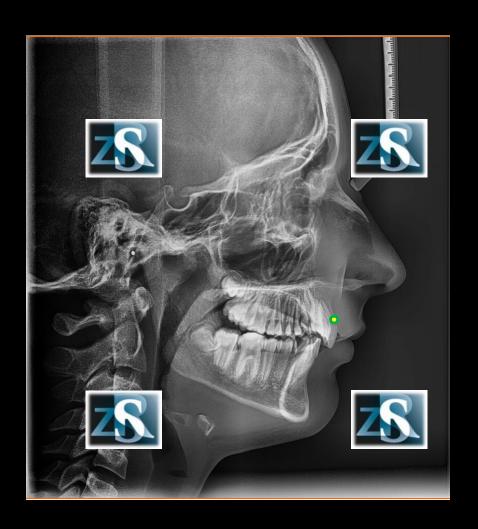




## Prosthion (Pr)

 The most anterior point of the alveolar crest in the premaxilla, usually between the upper central incisors

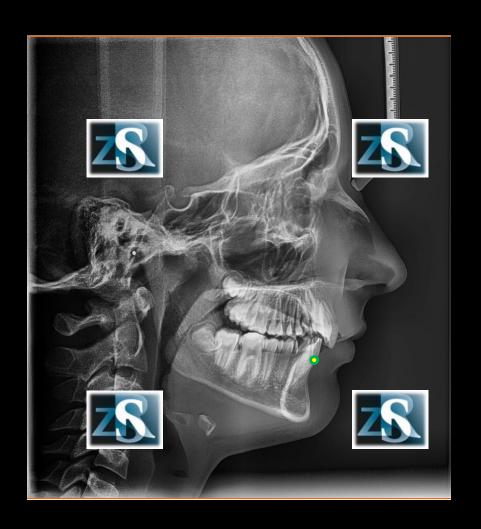




## Infradentale (Id)

 The most anterior point of the alveolar crest, situated between the lower central incisors

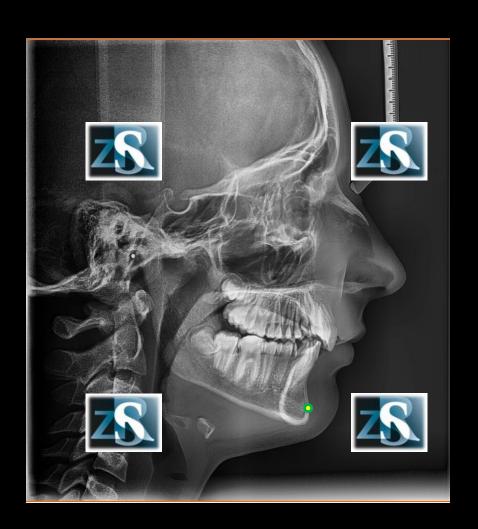




# Pogonion (Pog)

The most anterior point of the bony chin

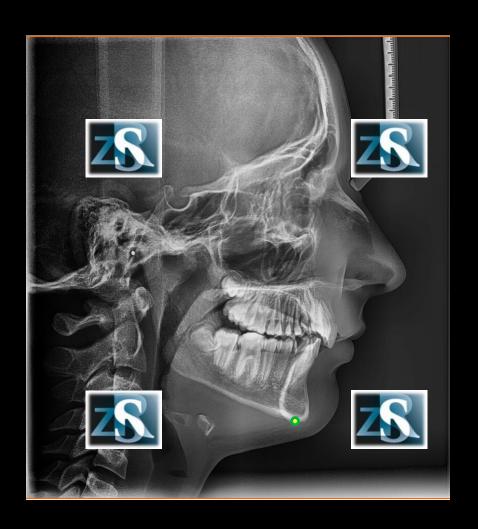




### Menton (Me)

 The lowest point on the bony outline of the mandibular symphysis

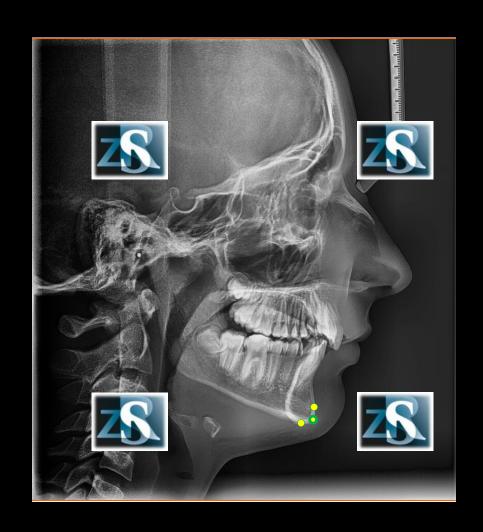




## Gnathion (Gn)

 The most anterior and inferior point of the bony outline of the chin, situated equidistant from pogonion and menton

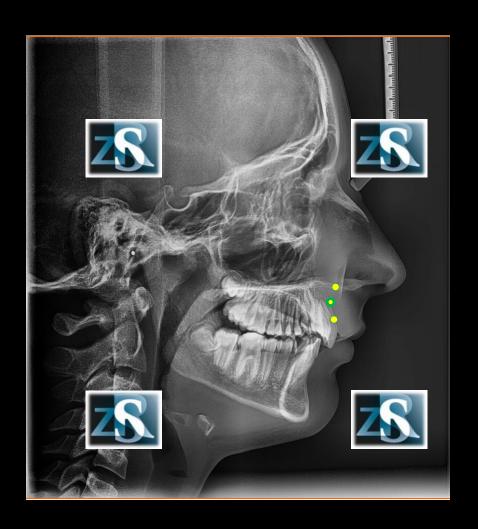




# Subspinale / point A

 The deepest midline point between the anterior nasal spine and prosthion

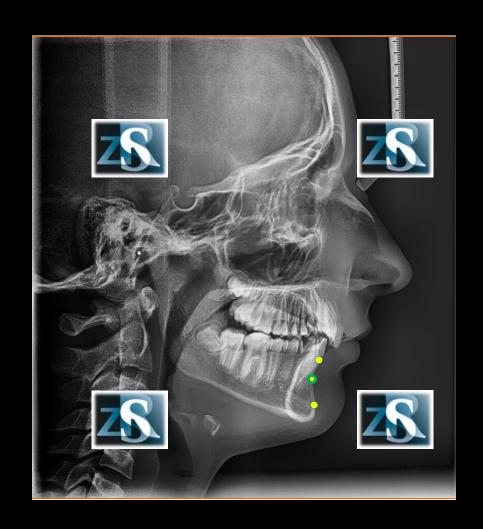




## Supramentale / point B

 The deepest point in the bony outline between the infradentale and the pogonion

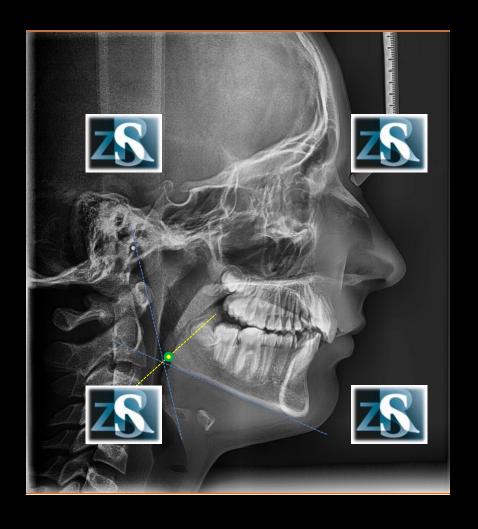






## Gonion (Go)

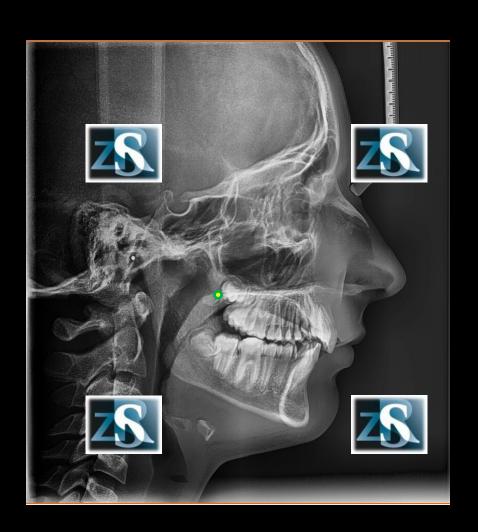
The most lateral external point at the junction of the horizontal and asceding rami of the mandible. The *gonion* is found by bisecting the angle formed by tangents to the posterior and inferior borders of the mandible.



## Posterior nasal spine (PNS)

 The tip of the posterior spine of the palatine bone in the hard palate.

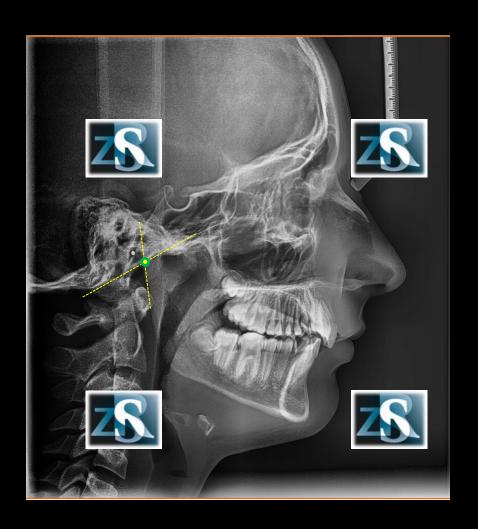




#### Articulare

 The point of intersection of the dorsal contours of the posterior border of the mandible and temporal bone.

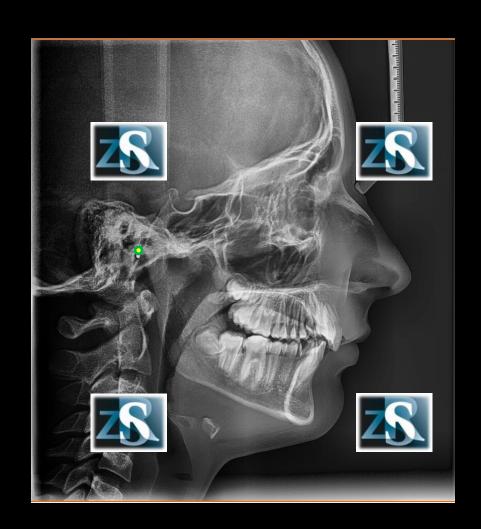




## Porion (Po)

 The uppermost point of the bony external auditory meatus.



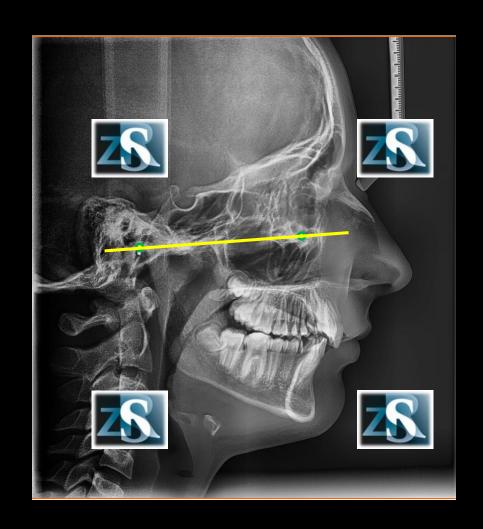


#### **PLANES**

## Frankfort plane

 A transverse plane through the skull represented by the line joining porion and orbitale

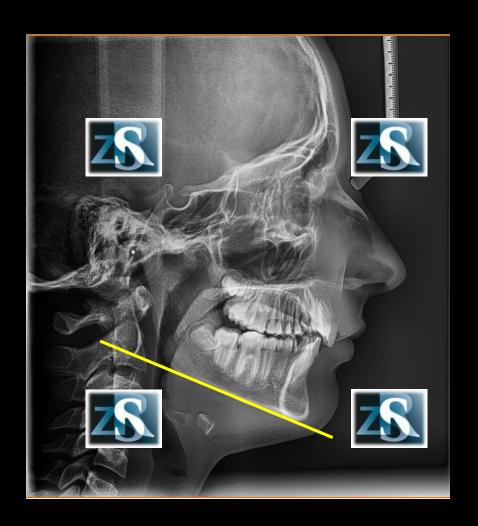




## Mandibular plane 1

- A transverse plane through the skull representing the lower border of the horizontal ramus of he mandible.
- A tangent to the lower border of the mandible

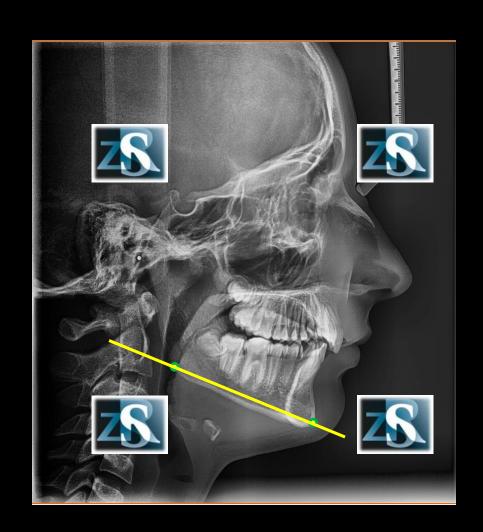




# Mandibular plane 2

- A transverse plane through the skull representing the lower border of the horizontal ramus of the mandible
- A line joining gnathion and gonion

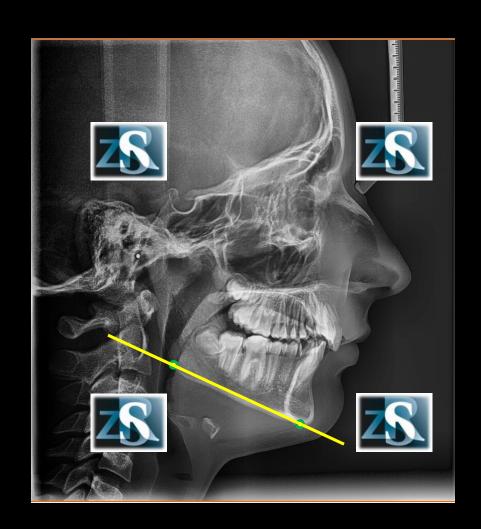




## Mandibular plane 3

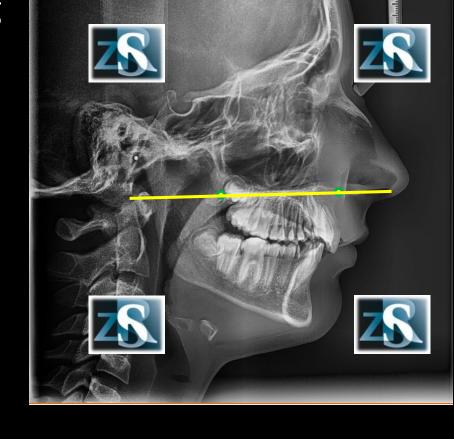
- A transverse plane through he skull representing the lower border of the horizontal ramus of the mandible
- A line joining menton and gonion





## Maxillary plane

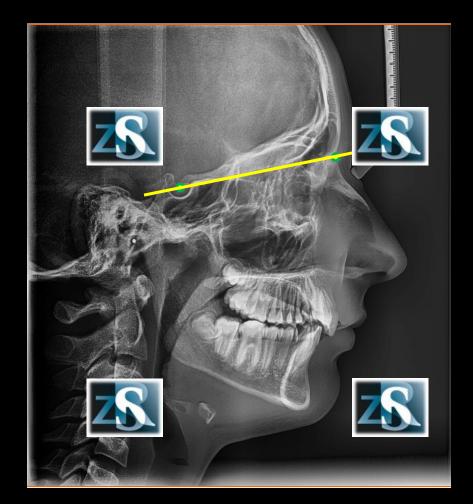
 A transverse plane through the skull joining the anterior and posterior nasal spines





# Sella-Nasion plane SN plane

 A transverse plane through the skull joining sella and nasion



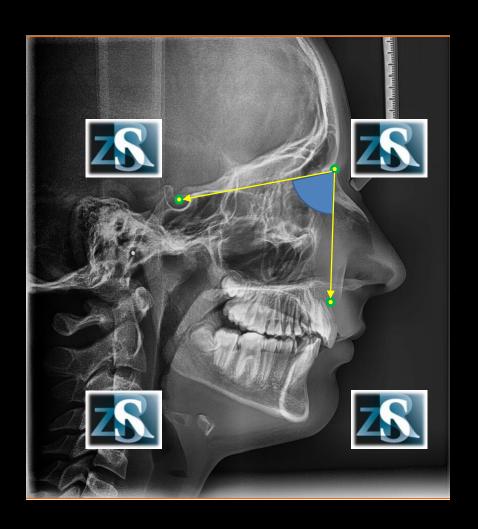


## **ANGLES**

## SNA (Sella-Nasale-A)

 Relates to the aneroposterior position of the maxilla

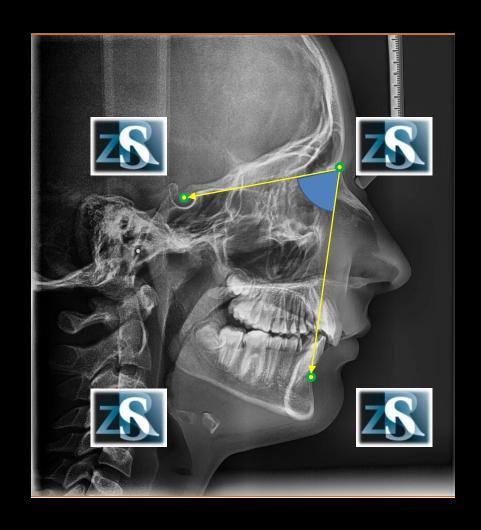




## SNB (Sella-Nasale-B)

 Relates to the anteroposterior position of the mandible

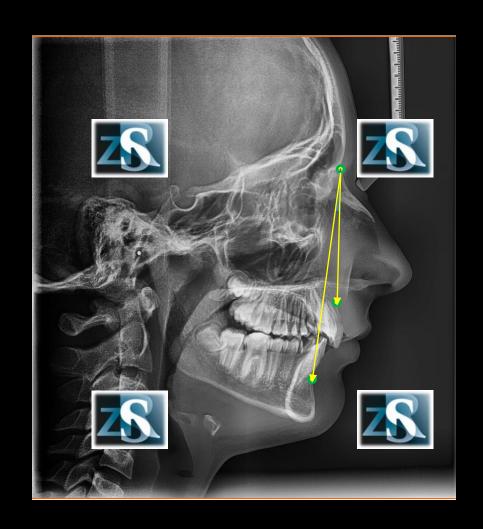




### ANB (A-Nasale-B)

 Relates to the anteroposterior position of the maxilla to the mandible – indicates the skeletal pattern

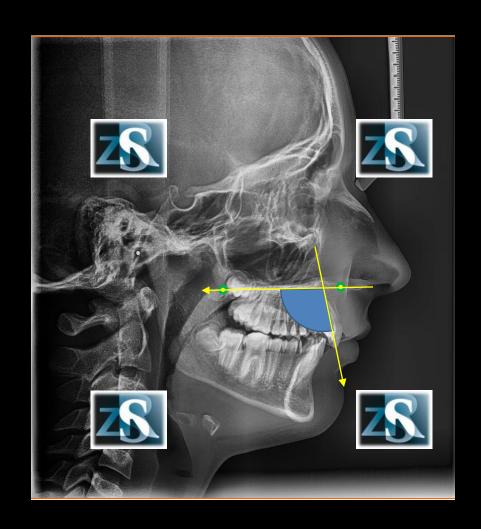




## Maxillary incisal inclination

 The angle between the long axis of the maxillary incisors and the maxillary plane





#### Mandibular incisal inclination

 The angle between the long axis of the mandibular incisors and the mandibular plane



