These notes are meant to be a supplement to the lectures and reading the text. They are meant to be a review. To best utilize this resource I would suggest that use your Kilgore teeth, your typodont, or the pictures in your textbook while you read the notes.

Maxillary Central Incisor

Facial View:
The distal incisal angle is more rounded than the mesial incisal angle
The mesial incisal angle is 90 degrees; it is almost a right angle.
There are usually three mamelons and two developmental grooves on the facial
The Height of Contour on the facial is in the gingival 1/3
Widest anterior tooth in a mesiodistal dimension
The facial surface is fairly flat
The mesial outline is straighter than the distal outline

Lingual View:
There is very distinct lingual anatomy
The cingulum is positioned toward the distal aspect of the tooth when viewed from the incisal aspect
Because of the above statement the Mesial Marginal Ridge is slightly longer than the Distal Marginal Ridge
The marginal ridges, incisal edge and cingulum surround the lingual fossa
The lingual H of C is in the gingival 1/3
You can see more of the tooth from the lingual because teeth tend to get narrower lingually (except the Max. 1\textsuperscript{st} molar)

Proximal view:
Triangular view from the mesial or distal
CEJ on the mesial has the greatest curvature of all teeth
Mesial and Distal H of C: Incisal 1/3 and the junction of the incisal and middle 1/3, respectively
All maxillary incisors have their incisal edge centered over the long axis of the tooth. Mandibular incisors have their incisal edge lingual to the long axis of the tooth.

General Comments
The tooth is wider Mesiodistally than Facio-lingually. This is true for the pulp chamber also.
Only tooth that has a cross section shape that is triangular in shape
Root is cone shaped with a blunted apex
First evidence of calcification: 3-4 months
Eruption: 7-8 years of age
Root completion: 10 years of age
Four developmental lobes
Maxillary Lateral Incisor

Facial View:
The facial surface is more convex than the max central
The crown is shorter than the max central
Crown outline that is trapezoidal
The mesial and distal incisal line angles are rounded. In fact the DI angle is very convex
Has a root about the same length as the central incisor
2\textsuperscript{nd} most congenitally missing tooth and 2\textsuperscript{nd} most likely tooth to show crown abnormalities (i.e. peg shaped laterals). The #1 tooth that is congenitally missing and misshapen is the 3\textsuperscript{rd} molar
The tooth is wider in an m-d dimension than it is in an f-l dimension
Facial H of C is in the gingival 1/3

Lingual View:
The lingual anatomy is very distinct. Thus the tooth is likely to have a lingual pit.
Has the most defined anatomy of any anterior tooth
The only tooth that may have a groove that extends from a lingual pit onto the root. (Remember this may be asked on the NDBE part 1 as a potential problem with scaling (cleaning) this area). This groove is called the palato-radicular groove
The cingulum is centered on the tooth
Possible distal curvature to the root apex, this is called a dilaceration
Pointed root apex
Lingual H of C in the gingival 1/3

Proximal View:
The tooth is triangular in shape when viewed from the proximal
Mesial contact in junction of the incisal / middle 1/3
Distal contact in the middle 1/3
Incisal edge is centered over the labiolingual long axis of the tooth

General information:
First evidence of calcification: 1 year of age
Eruption: 8-9 years of age
Root completion: 11 years of age
Pulp is wider B-L than it is M-D (as are most anterior teeth and premolars)
At the CEJ the tooth is oval in cross section
**Mandibular Central Incisor**

**Facial View:**
- Smallest tooth in a mesio-distal dimension
- Most symmetrical tooth bilaterally
- Wider tooth in a facio-lingual fashion when compared to its mesio-distal dimension
- 1st succedaneous tooth to erupt. (the first permanent tooth to erupt is the man 1st molar)
- The mesial and distal contacts are at the same level
- Smooth facial surface

**Lingual view:**
- The lingual anatomy is not very distinct
- The root is thin mesiodistally; it is also flattened in an m-d dimension

**Proximal view:**
- Incisal edge is lingual to a line that bisects the root of the tooth
- There are concavities on both the mesial and distal radicular surfaces

**General Information**
- Occludes only with 1 tooth in maximum interception
- First evidence of calcification: 3-4 months
- First anterior tooth to erupt: 6-7 years of age
- Root completion: 9 years
- B-l dimension is a little greater than the m-d dimension
- 1 root 1 canal; 45 % can have two canals; one facial and one lingual
- Pulp is wider b-l than m-d

**Mandibular Lateral Incisor**

**Facial View:**
- Larger than the mandibular central incisor.
- Incisal edge is not horizontal; it slopes downward (gingivally) on the distal aspect
- The mesial contact is in the incisal 1/3
- The distal contact is slightly lower in the incisal 1/3
- The DI angle is more rounded then the mesial incisal angle

**Lingual View:**
- Indistinct lingual anatomy
- Cingulum distally placed

**Proximal View**
- The tooth is wider in a facio-lingually dimension than in a mesiodistally dimension
Facial and Lingual H of C in the gingival 1/3
The CEJ on the facial is more incisally located than the CEJ on the lingual

General information:
When viewed from the incisal there is a distolingual twist to the crown on the root
Distal marginal ridge is more prominent than the mesial marginal ridge
The root has mesial and distal concavities
First evidence of calcification: 3–4 months
Eruption: 7-8 years of age
Root completion: 10 years of age
1 root 1 canal—45% have 2 canals
Root is oval to elliptical in shape when viewed in cross section

Maxillary Canines

Facial View:
Longest tooth in the mouth.
The third longest crown in the mouth. The longest crown is the mandibular canine, followed by the maxillary central, and then the maxillary canine.
Very prominent central lobe on the facial. There are 3 lobes on the facial aspect
May be described, as trapezoidal outline to crown,
Has a prominent cusp tip centered over the long axis of the tooth
Mesial cusp ridge length < Distal cusp ridge length.
Mesial proximal angle is sharper than the distal cusp ridge angle
The cusp tip is sharp in comparison with the mandibular canine
Buccal Cusp Tip is centered in a mesial/ distal orientation
Mesial Contact: junction of the Incisal/Middle 1/3
Distal contact: middle third
The maxillary canine is wider m-d than the mandibular canine
Mesial aspect relatively straight; Distal aspect very convex
The mesial surface is flat and the distal aspect is very rounded. When viewed from the incisal there is a facial concavity on the distal aspect

Lingual View:
Defined lingual anatomy
Lingual aspect of tooth is more narrow then the facial aspect
Remember there are two fossae on the lingual; a mesial and distal fossae. This is due to the prominent lingual ridge
The lingual ridge goes from the cusp tip to the cingulum

Proximal View:
Cusp tip is slightly facial to the long axis of the tooth
Widest anterior tooth in a b-l dimension
Facial and Lingual H of C are in the gingival 1/3
There are depressions on the root surface on the distal aspect; there is also a less prominent depression on the mesial root surface.
Dual convexities of the coronal and radicular surfaces

General Information:
Transition tooth, mesial looks like an incisor, distal resembles a premolar
The last succedaneous tooth to erupt between 11-12 years of age
First evidence of calcification: 4-5 months
Wider b-l then it is m-d

Mandibular Canines

Facial View:
Narrower mesiodistally than the maxillary canine
The crown is longer then the maxillary canine crown (However, the maxillary canine is longer in overall length)
The mesial profile is very straight when view from the facial; the distal profile is more rounded
Distal cusp ridge is longer then the mesial cusp ridge
Mesial contact in the incisal third
Distal contact in the middle third

Lingual view:
Lingual anatomy is less distinct
Flat lingual surface
Marginal ridges are less distinct and are parallel to each other
Smaller cingulum when compared to the maxillary canine

Proximal view:
Root has mesial and distal concavities
The cusp tip is lingually displaced to a line that bisects the root
The tooth is wider faciolingually than mesiodistally
The anterior tooth that is most likely to have a bifurcated root in a faciolingual dimension
When viewed from the proximal the outline from cusp tip to root apex is one continuous arc
Facial and lingual H of C are both in the gingival 1/3
One smooth arc that goes from cusp tip to root apex
The mesial aspect of the root has a deep concavity. Remember on the maxillary canine it is the distal aspect of the root that has the deeper root depression

General Information:
Erupts between 9-10 years of age
First evidence of calcification: 4-5 months
Root completion: 13 years of age