CHAPTER 7 - SKELTON FILL-IN NOTES

2 ______________ skull, vertebral column, thoracic cage

3 Fig. 7.1 pg. 199

4 I. Skull: ________
A. __________: Encloses and __________ the brain - 8 bones
B. __________: 14 bones

Cranium
A. __________ – Forehead (brain) Anterior part of cranium forming the superior eye ________ then horizontal to form ________ of eye ________ of anterior cranial cavity

5 Figs. 7.4 A, Pg. 202

6 Figs. 7.4 b. 5, Pg. 202

7 Fig. 7.5a, Pgs. 203

8 Fig. 7.5b, Pg. 203

9 B. __________ (2) bilateral posterior, lateral 2/3 of cranium (brain) fig. 7.5 a
C. __________: (brain) posterior/inferior part of the cranium .
D. __________ (2) bilateral, inferior to parietals
   1. houses: external auditory __________ (ear canal), middle & internal ________
   2. ________________: posterior part of zygomatic arch

10 Figures 7.5a, pg 203
11 fig. 7.8; pg. 207

12 __________: major, “___________ serrated joints between previous cranial bones (we’ll get back to remaining 2 skull bones latter)

_____________: lies in the mid-sagittal plane & separates the left & right __________

13 Fig. 7.4b; pg. 202

14 B. ___________: lies in coronal plane articulating both anterior __________ with the ___________ bone
C. ___________ suture: posterior skull articulating both posterior __________ with the ___________ bone .
D. ___________ suture: articulates inferior border of __________ w/ superior border of the ___________ bones .

Cranial bones & sutures: prenatal & newborns Cranial bones
_____________ [_____________] & sutures ___________ - child birth

15 fig. 7.5 a pg. 203

16 Last two cranial bones – ________________
E. __________ – middle part of cranial floor
1.Weird, __________ bone that __________ w/ all the other _____ cranial bones
2. Superior surface contains_____________ (turk’s saddle) hold the __________ gland (hypophysis)
3. Forms part of______________
4. Part of __________ skull, anterior to temporal bone (_________ ________ )
19 F. ______________: another bizarre shaped bone.
   1. Location: midline in anterior part of cranial floor medial to orbits
   2. Includes the ______________
      a. part of the roof of the ______________ cavity
      b. __________ (holes) that carry ______________ (smell) to brain

20 Figure 7.4a; page 202

21 _______ Bones
   A. __________ – lower jaw bone
      1. __________ (l) (crown shaped) “process”
         a. __________ of temporalis muscle – __________ jaw
      2. ______________: articulates with mandibular fossa of temporal bone – forms ________________ - ________.
         a. TMJ syndrome – symptoms from joint __________

22 fig. 7.11 a pg. 210

23 fig. 7.5a pg. 203

24 B. ______________: ________ jaw – 2, ________ medially
   1. “________ articulate w/ ________________ facial bones
   2. part of floor of ________ (eye)
   3. most of ________________ (_______ of mouth)
   4. ________ of ________ cavity

C. ________________: “Cheek bone” zygoma (L) – lateral wall & f___________________ (eye socket)
   1. Forms __________ w/ zygomatic process of temporal bone
28. D. __________: Thin bones fused medially forming the _______ of the nose.
a. Everything __________ to bridge is __________ cartilage.

E. ____________:
1. Hollow, _________ lined with _________ membranes – can become _________ - _________
2. Connect with _________ cavities
3. found in – ________________________________ bones

29. Figures 7.15 a page 216

30. Figure: 7.15 b page 216

31. H______________:
A. Anchor for the _________
B. ___________ shaped
C. Anchored to __________________ by thin ligaments

32. Figure 7.12 pg 211

33. ___________/Spinal Column
Spine____ Vertebrae, ________________
Three regions
1. __________: __ vertebrae ;      C1-C7
2. __________: __ vertebrae;    T1-T12
3. __________: __ Vertebrae;        L1- L5
4. __________: ________ segments
5. __________: ________ segments

3 ________________:     ___degrees
1. __________: _________ curve & called a __________
2. __________ curve: __________ curve - __________
3. __________ curve: __________ curve – __________

34 Fig. 7.16; page 217

35 Fetus and newborns have ______, ________ (kyphotic) curve – 2 other curves develop as child develops and becomes active

                                      Perfect Posture (biomechanical)
                                      Digress

Vertebrae Structure __________
I. ________ - large round thick bone disc
   a. Weight is transmitted from ________ to ________
   c. Separated by ________________

36 Fig. 7.17 a; pg 218
37 Fig. 7.17 b; pg 218
38 Fig. 7.18;  page 219
39 II. Posterior (neural) arch – posterior to body
A. _________: project posteriorly from the body forming the _________ which meet medially forming the ______________

B. ________________ : extend laterally for _________ attachment w/ ________

C. ________________ : extends __________ formuscle
attachment w/ leverage
1. _________ down ones back

40

41 D. ________________ : notch for spinal nerve forming the intervertebral foramen

E. _________ processes:
1. Have a smooth articular _________ called _________
2. Each vertebra has a __________ articular process and an inferior ______________
3. The inferior facet of a vertebrae will articulate (meet) with the superior facet of the vertebra just inferior to it.
4. Facet joint: Where the facets _________ (meet)

42 Fig. 7.20b; pg. 221

43 III. Vertebral Regions
A. Cervical vertebrae
1. C1 – _________ – holds up the _________ – Superior facets articulate w/ occipital condyles of skull
   a. _________ body or spinous process anterior/posterior processes
2. C2 – _________
a. Has __________ post that acts as an ______ for atlas to ______ on
b. Majority of cervical ______ between C1 &C2

Fig. 7.19 a; pg. 220
Fig. 7.19 a&b; pg. 220
Fig. 7.19c; pg 220

Fig. 7.19 a; pg. 220
Fig. 7.19 a&b; pg. 220
Fig. 7.19c; pg 220

3. All cervical vertebrae, C1-C7, have ________________ for vertebral _______

4. Cervical vertebral bodies are _______

B. __________ Vertebrae ___________

1. Start out looking like cervicals T1 and become more like lumbers at T12
2. Facets lie in _________ plane – ________________ only
3. Have extra superior demifacets & inferior costal (rib) facets that articulate ___________

Table 7.2; pg. 222
Table 2a; pg. 222

C. Lumbar Vertebrae L1- L5
1. ________________ vertebrae
2. Facets lie in _________ plane forwards & backwards movement only

D. ________ S1 – S5  Solid ________ mass
1. Functional joint between __________
E. ________ - tail bone  
1. ________ segments  
2. Attached to sacrum by ________ and Can be sprained – ________  
3. Vestigial tail – 1 of 100,000

51 ________ disc – cushion like pad allowing ________ between adjacent ________ 
A. ________________: Fibrocartilage - ___ layers, . each w/ fibers running __________ ways. 
B. ________________: _________ ball in _________ of disc. 
    1. ball acts as cushion and vertebrae can _________ in all directions  
    2. If Anulus _________ gel starts oozing into _________ and can form a _________.
    a. bulge can press against _____________ – pain, numbness, paralysis  
    b. ________________________________ – diagram -?

52 Fig 7.17 c; pg 218

53 Thoracic Cage; ________________ 
A. Sternum – ________________ – ___ parts  
1. _________ - Badge (l) 
   a. medial articulation w/ _________  
2. _________: main section of sternum – _________ attach to this  
3. _________ process: _________ part of sternum . 
   a. Hymlic maneuver

54 Figure 7.22a; pg. 224

55 Ribs  12 pair
A. True ribs: 1-7, have hyaline cartilage going ________ to ________
B. ___________: 8-12, Attach ________ to the sternum or not at all
C. Floating ribs: ________, ________ attach to sternum

56 Figure 7.22a; pg. 224

57 Rib structure
A. ________, main part called “__________”.
1. ________: posterior part, articulates with _________ vertebrae at ___ points
   a. rib’s ________ costal facet articulates with ________ of same number
   b. Ribs ________ costal facet articulates with vertebra just inferior

58 Fig. 7.23a; pg. 225

59 ___________ Skeleton
I. _________ Girdle (__________) - ________ anteriorly & ________ posteriorly
A. _________: (l) ________ - _____ – shaped
1. Articulates medially w/ _________ of sternum and laterally w/ _________ process of scapula
   a. Acromio-clavicular joint–__________ joint
   b. Shoulder ___________

60 Fig. 7.24a ; pg. 226

61 Fig. 7.24c; pg. 226
62 2. __________or __________ holding shoulder in place.
3. Easily broken
B. Scapula – shoulder blade
1. _______: posterior & “horizontal”
   a. lateral end is ________________
   b. superior to spine is ________________
   c. inferior to spine is ________________
2. ________________ – crows beak (l)
   a. origin (attachment) __________ muscle
3. ________________/cavity – articulates w/ head of ________ to form __________ joint

63 Fig. 7.25b; pg 227

64 C. Upper extremity – ________
1. __________ – upper arm bone
   a. ________: proximal “round” ball, articulates w/ ___________
2. Lesser & greater __________ – anterior & lateral w/ ________________ groove (sulcus) ____________ - for bicep ____________ - transverse ligament
3. ________________ – Deltoid insertion
4. ________________ – lateral & ball like articulates w/__________

65 Upper extremity – arm  Fig. 7.26 a pg. 229

66 5. __________ (l) pulley – hour glass shape – like _______ in a hinge
6. ________________ – anterior, distal fossa accepts __________ process of _________ in flexion
7. ________________ – posterior, distal fossa accepts ________________ process of _________ in ____________.
8. Lateral & medial ___________ – rough processes on distal ends where _________ attach

67 Upper extremity – arm  Fig. 7.26b pg. 229

68  II. Upper extremity - Lower arm – ________________
A. _______ – Medial (remember anatomical ___________)
   1. proximal end: ________________ and __________ process form __________ notch
   2. __________ notch fits around __________ of ____________
      Distal __________
   3. ________________ fits into ________________ of distal humerus on __________
   4. ________________ fits into ________________ on __________
   5. Distally - head w/ ________________ medial where ulna articulates with ____________

69 Figure 7.27 c; page  230

70 Figure 7.27a; page  230

71 B. _________ – lateral (thumb side)
1. _________ – slightly concaved disc that rotates on __________ of __________
   2. ________________ : distal, medial radius for _________ attachment
   3. ________________ : wrist ligament attachment
   4. ________________ articulation w/ ulna

72 figure 7.26 d  pg. 229
73 figure 7.26 c  pg. 229

74 C. Hand

1. Wrist - see diagrams
2. ________ – ________ numbered - lateral to medial - 1 through 5 – start with thumb
   a. ________ ends articulate w/ ________
   b. ________l ends articulate w/ ________
3. ________ – finger bones (long bones)
   a. 3 rows proximal, middle & distal, except thumb w/o middle ________

75 C. Hand Figure 7.28 a & b; pg. 231

76 Hand diagram

77 III. Lower Extremity - bone
A. Collectively known as: ________ or inominates, left & right
B. Fused very early, ________
C. Articulate anteriorly at pubic bones as ________
   . ________ disc
D. Articulate ________ at the ________

78 Figure 7.29; pg. 233

79 E. ________: Superior, coxa bone
1. Iliac crest – ________ – muscle attachment
   Figure: 7.30 a,b,c,d pg. 234
2. ________ – ________ articulation - slight ________
F. __________: posterior, inferior coxa
1. _______________: inferior aspect – sit on it - for muscle attachments
G. ________: anterior, inferior coxa – left & right, form symphysis pubes.
H. __________: junction of ischium, Pubis & Ilium – ________ of ________, ball & socket joint

81 Figure: 7.30 a pg. 234
82 Figure: 7.30b pg. 234
83 Male/female pelvis - Table: 7.4; page - 236
84 Lower Limb
A. __________ - thigh/upper leg, __________ bone in body.
   1. Proximally, head articulates w/ __________ of coxa
   2. ________: laterally connects head & shaft
      a. weak (osteoporosis)
   3. __________: lateral & medial – articulate w/ proximal ________ (on top of condyles)
   4. __________: greater/lesser, superior, lateral & medial for ________ attachment
5. ________ (knee cap) embedded in ________________, which rides on the patellar surface, between the condyles.
86 Fig. 7.31; pg. 238
87 B. ________ – shin bone (lower leg) – carries body ________ from femur.
1. _________: lateral & medial articulate w/ _________ of __________, _________ between
2. ________________: Superior/ anterior diaphysis – ________
   attachment – ____________________ disease

88 Fig. 7.32; pg. 239

89 C. _________: __________, __________ lower leg bone,
   superiorly articulates w/ tibia
1. Inferiorly articulates w/ _________ of ankle & has a lateral
   _________ hanging over lateral articulation
2. ________________: Holds lower leg bones _________ – no
   movement

90 Fig. 7.32; pg. 239

91 D. Foot: __________ (ankle), __________ (foot)
   & __________ (toe)
   Figure 7.33; page 240
   See Handout
1. _________
   a. _________: heel bone – attaches to _________ tendon/
      calf muscle (gastrocnemius)
   b. _________ - articulates with inferior ________________
   c. _________, cuboid & 3 cuneiforms

92 Figure 7.33; page 240

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