Review Sheet 10

1. Fill in the blank to complete the statements below:
   a. The bones that form the pectoral girdle are the clavicle and scapula
   b. The upper limb is formed by the arm bone, the humerus, and the two bones of the forearm, the radius and ulna.
   c. The carpals are the wrist bones. List the proximal row of wrist bones from lateral to medial: scaphoid, lunate, triquetrum, pisiform. List the distal row of wrist bones from lateral to medial: trapezium, trapezoid, capitate, hamate.
   d. The metacarpals form the palm of the hand, and the heads of these bones form the knuckles. e. A single finger bone is called a phalanx. Each hand has 3 finger bones, called phalanges.

2. Match the bone markings in column B with the descriptions in column A:
   1. depression in the scapula that articulates with the humerus f. glenoid cavity
   2. surface on the radius that receives the head of the ulna k. ulnar notch
   3. lateral rounded knob on the distal humerus b. capitulum
   4. posterior depression on the distal humerus h. olecranon fossa
   5. a roughened area on the lateral humerus: deltoid attachment site e. deltoid tuberosity
6. hooklike process; biceps brachii attachment site  c. coracoid process
7. surface on the ulna that receives the head of the radius  i. radial notch
8. medial condyle of the humerus that articulates with the ulna  g. medial epicondyle
9. lateral end of the spine of the scapula; clavicle articulation site  a. acromion
10. small bump on the humerus, often called the “funny bone”  j. trochlea
11. anterior depression, superior to the trochlea, that receives part of the ulna when bending at the elbow  d. coronoid fossa

3. Labeling scapula:
Left side (top to bottom):
Superior angle
Supraspinous fossa
Spine
Infraspinous fossa
Medial border
Inferior angle

Middle:
Superior border

Right side (top to bottom):
Coracoid process
Acromion
Glenoid cavity
Lateral border

4. Labeling humerus:
Left side (top to bottom):
Greater tubercle
Deltoid tuberosity
Radial fossa
Lateral epicondyle
Capitulum

Right side (top to bottom):
Head
Lesser tubercle
Intertubercular sulcus
Surgical neck
Coronoid fossa
Medial epicondyle
Trochlea

5. Labeling radius and ulna:
Radius (top to bottom):
Head of radius
Neck of radius
Radial tuberosity
Ulnar notch of the radius
Radial styloid process

Ulna top to bottom:
Olecranon
Trochlear notch
Coronoid process
Radial notch of the ulna
Ulnar styloid process

6. Hand labeling:
Left side (top to bottom):
Lunate
Scaphoid
Trapezium
Trapezoid
Right side (top to bottom):
Capitate
Pisiform
Triquetrum
Hamate
Metacarpal

Proximal phalanx

Middle phalanx

Distal phalanx

7. Name the two bone markings that form the proximal radioulnar joint. Ulnar radial notch and annular ligament.

8. Name the two bone markings that form the distal radioulnar joint. Radius and ulnar notch.

9. Compare the pectoral and pelvic girdles by choosing appropriate descriptive terms from the key. Pectoral: b. massive, e. secure axial and limb attachments, f. weight-bearing most important. Pelvic: c. lightweight, a. flexibility most important, d. insecure axial and limb attachments.

10. Distinguish between the true pelvis and the false pelvis. The false pelvis is superior to the pelvic brim. It is lateral to the alae of the ilia and posterior to the sacral promontory and lumbar vertebrae. The false pelvis supports the abdominal viscera, but it does not restrict childbirth in any way. The true pelvis is inferior to the pelvic brim and surrounded by mostly bone. It is posterior to the sacrum.

11. Hip labeling:

Left side (top to bottom):

Posterior superior iliac spine
Posterior inferior iliac spine
Greater sciatic notch
Ischial spine
Lesser sciatic notch
Ischial tuberosity
Ischial ramus

Right side (top to bottom):
Iliac crest
Anterior superior iliac spine
Anterior inferior iliac spine
Acetabulum
Superior pubic ramus
Inferior pubic ramus
Obturator foramen

12. Match the bone names and markings in column B with the descriptions in column A. The items in column B may be used more than once.

Ilium, Ischium, Pubis 1. fuse to form the hip bone
j. ischial tuberosity 2. rough projection that supports body weight when sitting
r. pubic symphysis 3. point where the hip bones join anteriorly
h. iliac crest 4. superiormost margin of the hip bone
a. acetabulum 5. deep socket in the hip bone that receives the head of the thigh bone
t. sacroiliac joint 6. joint between axial skeleton and pelvic girdle
c. femur 7. longest, strongest bone in body
d. fibula 8. thin, lateral leg bone
g. greater sciatic notch 9. permits passage of the sciatic nerve
m. lesser sciatic notch 10. notch located inferior to the ischial spine
x. tibial tuberosity 11. point where the patellar ligament attaches
q. patella 12. kneecap
w. tibia 13. shinbone
n. medial malleolus 14. medial ankle projection
l. lateral malleolus 15. lateral ankle projection
b. calcaneus 16. largest tarsal bone
v. tarsals 17. ankle bones
o. metatarsals 18. bones forming the instep of the foot
p. obturator foramen 19. opening in hip bone formed by the pubic and ischial rami
e. gluteal tuberosity and f. greater and lesser trochanters 20. sites of muscle attachment on the proximal femur
u. talus 21. tarsal bone that “sits” on the calcaneus
w. tibia 22. weight-bearing bone of the leg
u. talus 23. tarsal bone that articulates with the tibia

13. Femur labeling:

Left side (top to bottom):

Greater trochanter
Lateral epicondyle
Lateral condyle
Patellar surface

Right side (top to bottom):
Fovea capitis
Head
Neck
Lesser trochanter
Intertrochanteric line
Adductor tubercle
Medial epicondyle
Medial condyle

14. Tibia labeling:
Left side (top to bottom):
Lateral condyle
Anterior border

Right side (top to bottom):
Medial condyle
Tibial tuberosity
Medial malleolus
15. Tibia and fibula labeling:

Fibula top to bottom:
- Articular surface of lateral condyle
- Head of fibula
- Shaft of fibula
- Lateral malleolus

Tibia top to bottom:
- Intercondylar eminence
- Superior tibiofibular joint
- Shaft of tibia
- Inferior tibiofibular joint
- Medial malleolus

16. Are the bones of the leg shown above from the left or from the right leg? The left leg. Explain how you can tell which side of the body they are from. The fibula is on the left side of the fibula and the picture is a posterior view so it must be a view of the left leg.

17. Foot labeling:

Left side (top to bottom):
- Calcaneus
- Cuboid
18. + FOOSH is an acronym that stands for Fall on Outstretched Hand. Discuss possible fractures and dislocations that might occur with an injury of this type.

Dislocation or fractures of the 8 carpal bones might occur.

19. + Describe some of the features of the female pelvis that provide for compatibility with vaginal birth. A curved sacrum, wide pubic arch, and a shallow true pelvis cavity.

20. + Your X-ray exam reveals that you have fractured your fibula. Your physician remarks, “Well, it’s better than breaking your tibia.” Explain why a fracture of the tibia would be worse than a fracture of the fibula. The tibia supports most of the weight in the lower leg and is more likely to get infected if fractured because there is less soft tissue around the tibia.