

Kayla Proctor

Bio 2311-OL26 Lab

Professor Haque

November 9, 2021

### 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

Lateral cuneiform

Proximal phalanx

Middle phalanx

Distal phalanx

Right side (top to bottom):

Talus

Navicular

Intermediate cuneiform

Medial cuneiform

Metatarsals

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.