Name: _______________________________

Articulations pre-lab exercise – due at beginning of your lab session

**Matching**

a. fibrous joints  
b. cartilaginous joints  
c. synovial joints

_____ 1. exhibit a joint cavity  
_____ 2. types are sutures and syndesmoses  
_____ 3. bones connected by collagen fibers  
_____ 4. types include synchondroses and symphyses  
_____ 5. are all diarthrotic  
_____ 6. many are amphiarthrotic  
_____ 7. bones connected by disc of hyaline cartilage or fibrocartilage  
_____ 8. shoulder, hip, jaw, and elbow joints  
_____ 9. nearly all are synarthrotic

**Multiple choice**

1. The cruciate ligaments of the knee:  
a. tend to run parallel to one another  
b. are also called collateral ligaments  
c. prevent hyperextension of the knee  
d. assist in defining the range of motion of the leg

2. The ligaments that protect the alignment of the femoral and tibial condyles and limit the movement of the femur anteriorly and posteriorly are called:  
a. cruciate ligaments  
b. patellar ligaments  
c. anterior ligaments  
d. tibial collateral ligaments

3. The shoulder joint is a good example of a __________ synovial joint.  
a. nonaxial  
b. uniaxial  
c. biaxial  
d. multiaxial

4. Compared to the shoulder, displacement of the hip joints are  
a. common due to the weight-bearing the hip endures  
b. rare because of ligament reinforcement  
c. common in overweight individuals  
d. rare because the rotator cuff stabilizes the hip joint.
5. Tendon sheaths
   a. act as friction-reducing structures
   b. are lined with dense irregular connective tissue
   c. form channels for tendons
   d. help anchor the tendon to the muscle

6. The elbow joint is a
   a. plane joint
   b. picot joint
   c. condyloid joint
   d. hinge joint

7. When a ballerina points the toes, it is known as
   a. circumduction
   b. plantar flexion
   c. dorsiflexion
   d. extension

8. A joint that does not permit movement is called:
   a. a synarthrosis
   b. a hinge joint
   c. a synovial joint
   d. a diarthrosis
   e. an amphiarthrosis

9. Which of the following permits slight movement?
   a. gomphosis
   b. suture
   c. syndesmosis
   d. synchondrosis
   e. synostosis

10. A joint that permits free movement in only one direction is a:
    a. monoaxial joint
    b. biaxial joint
    c. triaxial joint
    d. syndesmosis
    e. suture

11. A cartilaginous joint that does not permit movement is a
    a. syndesmosis.
    b. synovial joint.
    c. synostosis.
    d. synchondrosis.
    e. none of the above
12. A joint that permits free movement in only one direction is a
   a. monaxial joint.
   b. biaxial joint.
   c. triaxial joint.
   d. syndesmosis.
   e. suture.

13. Synovial fluid in a joint cavity serves which of the following functions?
   a. shock absorption
   b. chondrocyte nourishment
   c. lubrication
   d. all of the above
   e. none of the above

14. The function of a bursa is to
   a. reduce friction between a bone and a tendon.
   b. absorb shock.
   c. smooth the surface outline of a joint.
   d. replace synovial fluid lost in an injured joint.
   e. A and B from above

15. All of the following are true of the movement capabilities of joints except
   a. great stability decreases mobility.
   b. they may be directed or restricted to certain directions by the shapes of articulating surfaces.
   c. they may be modified by the presence of accessory ligaments and collagen fibers of the joint capsule.
   d. the strength of the joint is determined by the strength of the muscles which attach to it and its joint capsule.
   e. no exceptions; all of the above are true

16. A joint in which the articular surfaces can slide in any direction is called
   a. uniaxial.
   b. biaxial.
   c. multiaxial.
   d. monaxial.
   e. none of the above

17. Examples of angular motion include all of the following except
   a. flexion.
   b. adduction.
   c. extension.
   d. rotation.
   e. no exceptions; all of the above are included
18. A type of movement in the sagittal plane, which reduces the angle between the articulating elements, is
a. extension.
b. rotation.
c. gliding.
d. flexion.
e. adduction.

19. A special type of angular motion is
a. flexion.
b. circumduction.
c. abduction.
d. elevation.
e. adduction.

20. Between the articular facets of adjacent vertebrae,
a. relatively flat articular surfaces slide across one another.
b. the gliding joints are either nonaxial or multiaxial.
c. hinge diarthroses allow both flexion and extension.
d. Both A and B

e. none of the above

21. Joints between the vertebrae include
a. pivot joints.
b. gliding joints.
c. ellipsoidal joints.
d. hinge joints.
e. both A and C

22. Which action does not occur along the vertebral column?
a. anterior flexion
b. extension
c. protraction
d. lateral flexion
e. rotation

23. Which of the following is true regarding the shoulder joint?
a. It permits the greatest range of movement of any joint in the body.
b. It is one of the least frequently dislocated joints of the body.
c. It is primarily a hinge joint.
d. It has the greatest stability of any joint in the body.
e. none of the above

24. All of the following factors contribute to the integrity and normal functioning of the shoulder joint except
a. the glenoid labrum.
b. tendons.
c. ligaments.
d. the coronoid process.
e. no exceptions; all of the above contribute
25. Actions permitted by the distal radioulnar articulation include
   a. elevation and flexion.
   b. pronation and supination.
   c. depression and protrusion.
   d. rotation.
   e. all of the above

26. The carpometacarpal joint of the thumb is a
   a. gliding joint.
   b. hinge joint.
   c. saddle joint.
   d. symphyseal joint.
   e. none of the above

27. Interphalangeal joints are
   a. ellipsoidal joints.
   b. hinge joints.
   c. gliding joints.
   d. ball and socket joints.
   e. none of the above

28. All of the joints of the hand are
   a. gliding joints.
   b. synchondroses.
   c. diarthroses.
   d. ellipsoidal joints.
   e. none of the above

29. All of the following are ligaments that stabilize the hip joint and reinforce the articular capsule except
   a. the iliofemoral ligament.
   b. the pubofemoral ligament.
   c. the ischiofemoral ligament.
   d. the transverse acetabular ligament.
   e. the ligamentum teres.

30. Which of the ligaments of the knee is responsible for limiting the anterior-posterior movement of the femur and maintaining the alignment of the femoral and tibial condyles?
   a. anterior and posterior cruciate ligaments
   b. patellar ligament
   c. popliteal ligaments
   d. tibial and fibular collateral ligaments
   e. none of the above
31. Which of the knee ligaments function to reinforce the medial and lateral surfaces of the joint, tighten only at full extension of the joint, and in this position, act to stabilize the joint?
   a. patellar ligament
   b. tibial and fibular collateral ligaments
   c. popliteal ligaments
   d. anterior and posterior cruciate ligaments
   e. all of the above

32. Structures that compose the ankle joint include
   a. the distal articular surface of the tibia.
   b. the medial malleolus.
   C. the lateral malleolus of the fibula.
   d. the trochlea and lateral articular facets of the talus.
   e. all of the above

33. All of the joints of the foot are
   a. amphiarthroses.
   b. sutures.
   c. diarthroses.
   d. uniaxial.
   e. biaxial.

34. When an exerciser bends down to touch the toes, what action is occurring at the vertebral column?
   a. rotation
   b. flexion
   c. extension
   d. hyperextension
   e. none of the above

35. In order for equestrians to ensure that their heels do not push forward through the front of the stirrups, the feet must be maintained in a position of
   a. inversion.
   b. dorsiflexion.
   c. hyperextension.
   d. plantar flexion.
   e. eversion.

36. In order for a ballerina to stand "on point," her feet must be
   a. dorsiflexed.
   b. inverted.
   c. supinated.
   d. plantar flexed.
   e. A and B from above