

Name: \_\_\_\_\_

**CHAPTER 9 WORKSHEET**  
**MECHANISMS & CHARACTERISTICS OF SPORTS TRAUMA**

**MATCHING**—Match the following terms with the appropriate response.

- |                              |   |
|------------------------------|---|
| _____ 1. Avulsion fracture   | A. A fracture resulting in three or more bone fragments                   |
| _____ 2. Ball & socket joint | B. Tissue that connects muscle to bone                                    |
| _____ 3. Contusion           | C. Can result in tissue adaptation to physical demands placed on the body |
| _____ 4. Ecchymosis          | D. Resistance to a load   |
| _____ 5. Stress              | E. Inflammation of muscle tissue  |
| _____ 6. Strain              | F. A fracture resulting from repetitive forces over time                  |
| _____ 7. Comminuted fracture | G. Tissue discoloration (often black and blue)                            |
| _____ 8. Ligament            | H. A compression injury which often results in skin discoloration         |
| _____ 9. Capsulitis          | I. This is the cause of the condition osteochondrosis                     |
| _____ 10. Myositis           | J. Muscle soreness occurring 2-3 days following exercise/training         |
| _____ 11. Aseptic necrosis   | K. Tissue that connects bone to bone                                      |
| _____ 12. Hinge joint        | L. The glenohumeral joint is one example of this type of joint            |
| _____ 13. DOMS               | M. A fracture in which a ligament tears off part of a bone                |
| _____ 14. Stress fracture    | N. Inflammation of a joint capsule  |
| _____ 15. Tendon             | O. The elbow joint is one example of this type of joint                   |

**SHORT ANSWER**

16. When a ligament is stretched, what injury may result due to the tension force? \_\_\_\_\_
17. \_\_\_\_\_ is a crackling/grading/crunching feeling or sound.
18. If a muscle is overstretched by tension or forced to contract against too much resistance, separation or tearing of the muscle fibers occurs. This damage is referred to as a muscle \_\_\_\_\_.
19. Approximately 85% of all ankle injuries result from this action. \_\_\_\_\_
20. Repeated contusions to the same area can cause small calcium deposits to accumulate which results in a condition called \_\_\_\_\_.
21. The term for a separation of two articulating surfaces (joints) is \_\_\_\_\_.
22. Where are some common sites for stress fractures? \_\_\_\_\_
- \_\_\_\_\_
23. \_\_\_\_\_ allows a tissue to return to its normal shape/length after mechanical deformation.
24. If a load exceeds a tissue's yield point, what results is \_\_\_\_\_ or injury.
25. What is/are the difference(s) between acute and overuse injuries? \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**LISTING**

26. List and define the five types of tissue loading (forces).

\_\_\_\_\_ - \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_

27. What are two forces that can injure muscle tissue?

\_\_\_\_\_

\_\_\_\_\_

28. Identify the following injuries as either *acute/traumatic* and/or *overuse* injuries. Provide the type of tissue or body part involved in the injury.

	<b>Type of Injury</b>	<b>Tissue or Body Part Injured</b>
Sprain	_____	_____
Strain	_____	_____
Tendonitis	_____	_____
Abrasion	_____	_____
Bursitis	_____	_____
Fracture	_____	_____
Contusion	_____	_____
Stress Fx	_____	_____
Dislocation	_____	_____
Neuropraxia	_____	_____
Fasciitis	_____	_____
Laceration	_____	_____

**ESSAY**

29. Which is more susceptible to injury, the muscle or its tendon? Why? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

30. Describe the “stress-strain curve” and how it is applicable to tissues of the body. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_