CHAPTER 26 Quiz

Write the letter of the best answer in the space provided.

1. A situation in which a person exhibits actions that are unacceptable to the patient, family, or community is known as
   A. a panic attack.       C. a behavioral emergency.
   B. depression.          D. psychosis.

2. Which one of the following is not a factor in determining whether the use of force with an emotionally disturbed patient is reasonable or not?
   A. size and strength of patient       C. mental state of patient
   B. dispatch information              D. method of restraint

3. The medical condition most likely to cause restlessness and confusion, cyanosis, and altered mental status is
   A. excessive heat.       C. excessive cold.
   B. inadequate blood to the brain.   D. lack of oxygen.

4. One method of protecting against false accusations by a behavioral emergency patient is
   A. using medical responders of a different gender than the patient.
   B. involving third-party witnesses.
   C. limiting the involvement of other medical responders.
   D. sharply limiting documentation.

5. The first step that an EMT takes in a behavioral emergency is to
   A. gather a thorough patient history.       C. identify him- or herself.
   B. complete an initial assessment.          D. perform a careful scene size-up.

6. A state of painful uneasiness about impending problems is called
   A. anxiety.       C. psychosis.
   B. depression.    D. mania.

7. In talking with a behavioral patient, an EMT should take all of the following actions except
   A. identifying him- or herself.
   B. avoiding direct eye contact.
   C. being as honest as possible.
   D. standing at least 3 feet from the patient.

8. Of the groups listed, the highest suicide rates have been found in which age group?
   A. women under age 25       C. men ages 15 to 25
   B. men over age 40          D. women over age 50

9. A patient who has attempted suicide in the past is
   A. looking for attention.
   B. less likely to commit suicide than one who has not.
   C. a candidate for forceful restraint.
   D. more likely to commit suicide than one who has not.

10. In most localities, an EMT cannot legally restrain a patient without orders from
    A. dispatch.       C. the police.
    B. the patient’s physician.   D. the patient’s family.
Review the following real-life situation. Then answer the questions that follow.

The emergency medical dispatcher reports a 14-year-old girl who is “acting in a bizarre manner.” Her father is currently trying to keep her from leaving the house.

Upon the EMS unit’s arrival at the scene, the father guides the team into the house. He states that his daughter has been depressed for the past few weeks. Today the daughter’s behavior changed dramatically. Instead of appearing to be lethargic, the daughter has become hyperactive. The father indicates that the family has a history of manic depression. “The doctor has a new word for it,” laughs the father nervously. “They call it bipolar disorder.” The father indicates that his daughter is on medication for the condition, but feels that she has stopped using it. The girl’s psychiatrist recommended that the father call 911.

The father takes you to meet his daughter, Stephanie. You see a clean, well-dressed young woman who appears to be happy. She speaks very fast and occasionally exhibits muscle twitches of the face and hands. Although Stephanie indicates no physical complaints, her vital signs are on the high side of normal. She doesn’t want to talk about her medical condition. She also doesn’t want to be transported to the hospital. With her eyes averted, Stephanie says a little too lightly, “My father worries much too much. I’m just fine.”

1. How should you proceed with patient care?

2. What information might you use to persuade the patient to accompany you to the hospital?
Write the word or words that best complete each sentence in the space provided.

1. __________________________ is defined as the manner in which a person acts or performs.

2. A(n) __________________________ __________________________ exists when a person exhibits abnormal behavior.

3. There are many __________________________ conditions as well as psychological conditions that are likely to alter a patient’s behavior.

4. __________________________ is a condition characterized by deep feelings of sadness, worthlessness, and discouragement—feelings that often do not seem connected to the actual circumstances of the patient’s life.

5. In providing patient care during a behavioral emergency, an EMT should treat any life-threatening conditions during the __________________________ __________________________.

6. In talking with a patient experiencing a behavioral emergency, maintain good __________________________ __________________________ and avoid any quick __________________________.

7. Whenever you are called to care for a patient who has attempted suicide, your first concern must be for __________________________ __________________________ __________________________.

8. Suicide is more common among people with a history of __________________________ or __________________________ __________________________.

9. Before you restrain any patient for any reason, contact __________________________ __________________________.

10. The best way to protect yourself against false accusations by a patient is to carefully and completely __________________________ everything that happens during the encounter, including detailed aspects of the patient’s abnormal behavior.
1. List seven physical conditions that are likely to alter a person’s behavior.

2. List seven basic principles to keep in mind whenever you encounter a behavioral emergency.
**BEHAVIORAL EMERGENCIES: TRUE OR FALSE**

Indicate if the following statements are true or false by writing T or F in the space provided.

1. During a behavioral emergency, an EMT should only call the police as a last resort.  
   ________

2. When dealing with a patient with a behavior problem, always consider that the problem may be caused by a physical condition.  
   ________

3. Whenever an EMT is called to the scene of a suicide attempt, his or her first concern should be for the patient’s safety.  
   ________

4. Every suicidal act or gesture should be taken seriously, and the patient should be transported for evaluation.  
   ________

5. If a patient’s fear or aggression increases, an EMT should not push the issue of transport.  
   ________

6. In treating a behavioral emergency, an EMT should not leave the patient alone.  
   ________

7. Once a patient is acting rationally, an EMT may remove soft restraints.  
   ________

8. Under most state laws, any adult of sound mind has the right to determine whether he or she will be treated or, more specifically, touched by another person in the course of treatment.  
   ________

9. The patient who has become calm following a period of combativeness will most likely not revert to the earlier behavior.  
   ________

10. Depending on state and local law, a patient who is disoriented, in shock, mentally ill, or under the influence of drugs or alcohol may not be considered competent to refuse care.  
    ________
CHAPTER 27 QUIZ

Write the letter of the best answer in the space provided.

_______ 1. Newton’s first law of motion states that a body at rest will remain at rest and a body in motion will remain in motion unless acted upon by
   A. inertia.
   B. condensation.
   C. an outside force.
   D. convection.

_______ 2. The term for the energy that is contained in a moving body is
   A. kinetic.
   B. thermal.
   C. potential.
   D. chemical.

_______ 3. An increase in which one of the following causes the greatest increase in kinetic energy?
   A. mass
   B. velocity
   C. size
   D. width

_______ 4. Shearing or tearing forces are placed on the organs and their supportive tissues in the mechanism of injury called
   A. acceleration/deceleration.
   B. machine/body collision.
   C. rollover collisions.
   D. penetrating injuries.

_______ 5. A bullet traveling through a body part produces a temporary indentation around the bullet’s actual path. This process is known as
   A. penetration.
   B. compression.
   C. cavitation.
   D. levitation.

_______ 6. The chance of sustaining a fatal injury in a vehicle collision is increased by 300 percent when the occupant is
   A. unrestrained.
   B. ejected.
   C. an infant or a child.
   D. improperly restrained.

_______ 7. In every motor vehicle collision there are at least how many impacts?
   A. two
   B. three
   C. four
   D. five

_______ 8. A fall should be considered severe any time an adult patient has fallen _____ feet.
   A. 2
   B. 5
   C. 10
   D. 15

_______ 9. On what does the extent of injury depend when a vehicle hits a pedestrian?
   A. how fast the vehicle was going
   B. what part of the pedestrian’s body was hit
   C. how far the pedestrian was thrown
   D. all of the above

_______10. Which one of the following may be useful in determining the nature of illness/mechanism of injury?
   A. the patient
   B. bystanders
   C. family members
   D. all of the above
IN THE FIELD

Review the following real-life situation. Then answer the questions that follow.

Your EMS unit is dispatched to a one-vehicle automobile collision. You arrive and find a 22-year-old female who reportedly dodged an animal that was in the roadway. She ran off the road and hit a large cedar tree. After repeated questioning, she admits that she had just taken her seat belt off. You assess the car to find that the steering column is bent and that there is a starburst pattern on the windshield in front of the driver’s seat. The driver, meanwhile, is very anxious and restless. You note a large bruise over her sternum.

1. What injuries would you expect to find, considering the mechanism of injury?

2. How would you expect the injuries to be different if the patient had been wearing a seat belt? If the air bag had deployed?
Write the word or words that best complete each sentence in the space provided.

1. Since the early 1970s, ______________________________ has been recognized as the leading cause of death for those between the ages of 1 and 40.

2. The science of analyzing the mechanism of injury is sometimes called the ____________________________________________________________________________

3. The factors and forces that may have caused injury to a patient are the ____________________________________________________________________________

4. The amount of kinetic energy an object contains depends on two factors: the body’s ______________________________ and the body’s ______________________________.

5. During the assessment of a patient who was involved in an MVC, the EMT must maintain a high ______________________________ ____________________________________________________________________________ based on the mechanism of injury.

6. Understanding the factor of ______________________________ is important in evaluating the mechanism of injury in vehicle collisions.

7. ______________________________ travels in a straight line unless it meets and is deflected by some type of interference.

8. The rate at which a body in motion increases its speed is known as ______________________________.

9. Over one-third of all deaths due to trauma occur from ______________________________ ________________________________

10. The up-and-over pathway causes impact to the ______________________________, ______________________________, ______________________________, and ______________________________.
Trauma Overview: The Trauma Patient and the Trauma System: Listing

1. List four major factors in determining the force of an impact.

2. In the typical vehicular collision, there are actually three impacts. List these.

3. List five common mechanisms of injury.

4. List five types of motor vehicle collisions.
RECOGNIZING INJURY PATTERNS

For each of the three types of collisions pictured on the next page, identify the type of collision and the type of injuries commonly associated with it.

1. ______________________ collision
   Type of injuries:

2. ______________________ collision
   Type of injuries:

3. ______________________ collision
   Type of injuries:
1. ____________________ collision
   Type of injuries:

2. ____________________ collision
   Type of injuries:

3. ____________________ collision
   Type of injuries:
TRAUMA OVERVIEW: THE TRAUMA PATIENT AND THE TRAUMA SYSTEM: TRUE OR FALSE

Indicate if the following statements are true or false by writing T or F in the space provided.

1. Children are initially struck higher in the body in pedestrian collisions than adults.
2. Air bags are extremely effective in multiple collision incidents but are not effective in initial impact head-on collisions.
3. Spinal fractures are more common with rear collisions than with lateral collisions.
4. The EMT must not only recognize obvious injuries but must also maintain a high index of suspicion for hidden injuries.
5. The concept of cavitation deals primarily with blunt trauma injuries.
6. Trauma is nearly always the result of two or more bodies colliding with each other.
7. A knife wound is potentially more traumatic than a bullet wound.
8. The fall is actually the most common mechanism of injury.
9. The “paper bag syndrome” results from compression of the chest against the steering column.
10. Injuries from rotational crashes or rollover crashes are not as easy to predict as injuries from other crashes.
CHAPTER 28 QUIZ

Write the letter of the best answer in the space provided.

1. The first step an EMT should take when encountering a patient with severe bleeding is to
   A. apply pressure to the wound.  
   B. utilize appropriate BSI.  
   C. check the patient’s blood pressure.  
   D. apply a tourniquet.

2. Open wounds in which flaps of skin and tissue are torn loose or pulled off completely are called
   A. avulsions.  
   B. lacerations.  
   C. amputations.  
   D. punctures.

3. An average adult weighing 154 pounds will have _____ liters of total blood volume.
   A. 8–10  
   B. 4.9  
   C. 6.8  
   D. 12–14

4. The type of shock most commonly caused by profound blood or fluid loss is _____ shock.
   A. hypovolemic  
   B. cardiogenic  
   C. vasogenic  
   D. irreversible

5. In the average adult patient who weighs 154 pounds, a blood volume loss of _____ percent or more is considered significant and can lead to shock.
   A. 5  
   B. 15  
   C. 1  
   D. 7.5

6. The next step in bleeding control after direct pressure is
   A. tourniquet.  
   B. elevation.  
   C. splinting.  
   D. rapid transport.

7. Epistaxis is another way of saying the patient has
   A. high blood pressure.  
   B. increased plaque in his arteries.  
   C. nose bleed.  
   D. abdominal bleeding.

8. All of the following medications will affect clotting except
   A. Coumadin.  
   B. aspirin.  
   C. Lasix.  
   D. ibuprofen.

9. Of the following, which is a contraindication to the use of PASG?
   A. suspected pelvic fracture with systolic BP less than 90 mmHg  
   B. profound hypotension with systolic blood pressure less than 50 mmHg  
   C. penetrating trauma to the chest with systolic blood pressure less than 80 mmHg  
   D. none of the above

10. An injury caused by scraping, rubbing, or shearing away is an
    A. abrasion.  
    B. contusion.  
    C. laceration.  
    D. avulsion.
11. The skin is composed of ____ layers.
   A. two  
   B. one  
   C. four  
   D. three

12. An injury to the blood vessels and tissue contained within the dermis is called a(n)
   A. contusion.  
   B. abrasion.  
   C. laceration.  
   D. avulsion.

13. The type of laceration caused by a knife or razor is
   A. stellar.  
   B. stellate.  
   C. linear.  
   D. clean.

14. When applying an occlusive dressing to a chest wound, the dressing should be secured on how many sides?
   A. two  
   B. one  
   C. four  
   D. three

15. Treatment for exposed internal abdominal organs include all of the following except
   A. application of PASG.  
   B. cover with a sterile moist dressing.  
   C. flex patient’s hips and knees in the absence of suspected spinal injury.  
   D. apply high-flow, high-concentration oxygen.
CHAPTER 28 REVIEW

Write the word or words that best complete each sentence in the space provided.

1. The layers of the skin are the ______________________________ , ______________________________ , and ______________________________ .

2. A wound in which there is no open pathway from the outside to the injured site is called a ______________________________ ______________________________ .

3. Simple scrapes or scratches in the outer layer of the skin are known as ______________________________ .

4. A(n) ______________________________ ______________________________ should never be removed in the field, unless it is in the cheek or neck and obstructing airflow through the trachea.

5. The three major types of blood vessels are ______________________________ , ______________________________ , and ______________________________ .

6. Whenever bleeding is suspected or discovered, the use of ______________________________ ______________________________ precautions is essential for the EMT to avoid exposure of the skin and mucous membranes.

7. The final stage of shock, or ______________________________ shock, exists when the body has lost the battle to maintain perfusion to the organ systems.

8. The second step in bleeding control when direct pressure has failed is the use of a ______________________________ .

9. A ______________________________ temperature may make the clotting process slower and less effective.

10. A blood loss of ______________________________ percent will affect the patient’s vital signs.
1. List five of the contraindications to the use of PASG.

2. List four of the factors that may increase bleeding.

3. List the six emergency care treatments for open neck wounds.

4. List the four types of bandages.
Bleeding and Soft Tissue Trauma: True or False

Indicate if the following statements are true or false by writing T or F in the space provided.

1. A wound that is beneath unbroken skin is called a closed injury.  
2. Signs and symptoms of a closed soft tissue injury include swelling, pain, and discoloration at the injury site.  
3. An open injury may be the indicator of a deeper, more serious injury.  
4. With gunshot wounds, the entry wound usually appears larger than the exit wound.  
5. A common complication associated with bites is cellulitis.  
6. Arterial blood is dark red.  
7. Direct pressure is the first step in bleeding control.  
8. Shock from fluid loss is called fluid shock.  
9. Dilated pupils are a sign of shock.  
10. The use of a tourniquet is the last resort for bleeding control.
CHAPTER 29 QUIZ

Write the letter of the best answer in the space provided.

1. In estimating BSA of a burn, each upper extremity in an adult represents what percentage of the total body area?
   A. 7 percent
   B. 27 percent
   C. 18 percent
   D. 9 percent

2. The three layers of the skin are the
   A. outer dermis, dermis, and subcutaneous tissue.
   B. endodermis, dermis, and muscle tissue.
   C. mid-dermis, dermis, and subcutaneous tissue.
   D. epidermis, dermis, and subcutaneous tissue.

3. The innermost layer of the skin is the
   A. endodermis.
   B. subcutaneous layer.
   C. epidermis.
   D. dermis.

4. An example of a superficial burn would be a(n)
   A. severe scalding.
   B. eschar.
   C. thermal flame burn.
   D. sunburn.

5. One method that the EMT can use to estimate the body surface area damaged by a burn is the
   A. rule of nines.
   B. BSC rule.
   C. rule of sixes.
   D. plantar system.

6. In a child under age 5, any partial-thickness burn involving between 10 and 20 percent of BSA should be considered
   A. minor.
   B. moderate.
   C. critical.
   D. superficial.

7. All of the following are important factors to consider in determining burn severity except
   A. percentage of body surface area involved.
   B. location of the burn.
   C. patient age and preexisting medical conditions.
   D. ambient environmental temperature.

8. A burn that encircles a body area such as the chest, an arm, or a leg is called
   A. full thickness.
   B. circumferential.
   C. immersional.
   D. severe.

9. When determining the BSA involved in a burn, the EMT should remember that the palm of the patient’s hand is equal to about what percentage of total body area?
   A. 2 percent
   B. 3 percent
   C. 1 percent
   D. ½ percent

10. Burns are classified according to
    A. location of the injury.
    B. depth of the injury.
    C. type of heat involved.
    D. amount of heat involved.

(continued)
11. The most important treatment for a patient who has sustained a chemical burn to the eyes is
   A. rapid application of dry, sterile dressings to both eyes.
   B. application of gauze pads soaked with saline.
   C. copious irrigation with water.
   D. provision of oxygen via nonrebreather mask.

12. A burn in which the epidermis is burned through and the dermis is damaged is known as a _____ burn.
   A. superficial
   B. partial-thickness
   C. full-thickness
   D. third-degree

13. Absence of pain in a patient with a severe burn is most commonly associated with a _____ burn.
   A. first-degree
   B. second-degree
   C. third-degree
   D. superficial

14. In managing a burn correctly, an EMT may take all of the following steps except
   A. apply dry, sterile dressings.
   B. apply ointments or sprays.
   C. keep the patient warm.
   D. keep the burn site clean.

15. A partial-thickness (second-degree) burn will appear
   A. white to cherry red.
   B. dark brown or black.
   C. charred.
   D. pink.

16. When the EMT is dealing with the victim of an electrical burn, the primary concern should be
   A. patient care.
   B. personal safety.
   C. rapid AED use.
   D. bystander history.

17. When administering emergency medical care to a burn patient, clothing that has adhered to a burned area should be
   A. covered with an antiseptic ointment.
   B. covered with a dry, sterile dressing.
   C. carefully removed from the burned skin.
   D. left in place after cutting around the adhered area.

18. When dealing with chemical burns, the EMT should remember that dry chemicals should be
   A. brushed away before irrigating.
   B. irrigated without delay.
   C. removed with a damp sterile gauze pad.
   D. irrigated with neutralizing vinegar.

19. In cases of chemical burns to the eyes, the EMT should flood the eyes with
   A. vinegar.
   B. baking soda and water.
   C. water.
   D. hydrogen peroxide solution.

20. The most serious problem usually associated with electrical shocks is
   A. internal bleeding.
   B. hypertension.
   C. hypothermia.
   D. respiratory and/or cardiac arrest.
IN THE FIELD

Review the following real-life situation. Then answer the questions that follow.

You receive a call to the side of a county highway where it is reported that a utility worker is “on fire and still up in his bucket.” While responding, you ask your dispatcher to arrange for aerial rescue apparatus to assist you.

Upon arrival at the scene, you notice a charred utility bucket still in the air near several electrical lines. The utility worker, while still on fire, has jumped from the bucket and landed on the roadside.

1. What are your immediate considerations at this scene?

2. Utility officials are on the scene and assure you that the power is off. The fire has been extinguished, and you approach the patient. He is a male in his early 30s, conscious, and oriented to person, place, and time. He is complaining of severe pain all over his body. His facial hair has been singed off and his face is cherry red. He is able to control his own airway. You apply high-flow, high-concentration oxygen via nonrebreather mask. What types of injuries do you suspect that the patient has suffered? What was the mechanism of injury?

3. What other emergency care steps would you provide for this patient?
**CHAPTER 29 REVIEW**

*Write the word or words that best complete each sentence in the space provided.*

1. Burns are classified according to the ______________________________ of the injury.

2. The three layers of the skin are the ______________________________ , ______________________________ , and ______________________________ ______________________________ .

3. Most burn patients who die in the prehospital setting will die from a(n) ______________________________ ________________ , ______________________________ ______________________________ , or other ______________________________ .

4. Examples of superficial burns include ______________________________ or a minor ______________________________ injury.

5. The tough and leathery dead soft tissue formed in a full-thickness burn injury is called ______________________________ .

6. A superficial burn is an injury that involves only the ______________________________ .

7. A partial-thickness burn is also called a(n) ______________________________ -degree burn.

8. When calculating BSA, the EMT should remember that the genital region represents ______________________________ percent of the total BSA.

9. Burn injuries need to be ______________________________ ______________________________ within approximately the first 10 minutes of injury.

10. Once the EMT has determined that the scene of a burn emergency is safe to enter, he should immediately take ______________________________ ______________________________ .

11. ______________________________ burns can cause severe damage not only to soft tissues, but to the body as a whole.

12. A(n) ______________________________ -______________________________ burn, or third-degree burn, is a burn in which all layers of the skin are damaged.

13. An alternative to the rule of nines for estimating the BSA of a burn involves using a comparison of the burned area to the patient’s ______________________________ .

14. All burns normally classified as moderate should be reclassified as ______________________________ in a person younger than 5 or older than 55 years of age.

15. If dry lime is the burn agent, do not irrigate the burn with ______________________________ until it has been ______________________________ ______________________________ the patient.
1. List the signs and symptoms of partial-thickness burns.

2. List the signs and symptoms of full-thickness burns.

3. List the four most important factors in determining burn severity.

4. List three considerations when treating burns of the eye.
The rule of nines is used to estimate the extent of the burn area on a patient’s body. On the figures below, write in the percentage that each body area represents on the lines provided.

- Head and neck ______ percent
- Posterior trunk ______ percent
- Anterior trunk ______ percent
- Each upper extremity ______ percent
- External genitalia ______ percent
- Each lower extremity ______ percent
- Chest and abdomen ______ percent
- Head ______ percent
- Posterior trunk ______ percent
- Each arm ______ percent
- Each lower extremity ______ percent
CHAPTER 30 Quiz

Write the letter of the best answer in the space provided.

_______ 1. All of the following are part of the musculoskeletal system except
   A. bones.  
   B. joints.  
   C. cartilage.  
   D. skin.

_______ 2. The sound or feel of broken bone fragments grinding together is referred to as
   A. crepitus.  
   B. stridor.  
   C. assonance.  
   D. dissonance.

_______ 3. There are three kinds of muscle: voluntary, involuntary, and
   A. periosteum.  
   B. flexible.  
   C. cardiac.  
   D. skeletal.

_______ 4. The bones of the upper extremities include all of the following except the
   A. radius.  
   B. humerus.  
   C. femur.  
   D. carpal.

_______ 5. Tissues or fibers that cause movement of the body parts or organs are called
   A. periosteum.  
   B. muscles.  
   C. cartilage.  
   D. tendons.

_______ 6. The mechanism that causes the crushed tissues and fractures found in a patient struck by an auto is _____ force.
   A. direct  
   B. indirect  
   C. twisting  
   D. rotational

_______ 7. An injury in which the skin over a fracture site is broken may be described as a(n)
   A. closed fracture.  
   B. open injury.  
   C. vertical injury.  
   D. compromised injury.

_______ 8. An injury to a joint in which the bone ends become separated from each other is called a(n)
   A. dislocation.  
   B. angulation.  
   C. sprain.  
   D. fracture.

_______ 9. The soft pliable splints that are easily shaped for use with deformed extremities are called _____ splints.
   A. box  
   B. long bone  
   C. vacuum  
   D. traction

_______ 10. After taking BSI precautions, exposing the area, and controlling any external bleeding, the next step in immobilizing a long bone fracture is
   A. replacing protruding bones.  
   B. assessing distal PMS.  
   C. measuring the splint.  
   D. applying the splint.

_______ 11. If a patient’s injured leg appears either internally or externally rotated, an EMT should suspect
   A. patella injury.  
   B. ankle dislocation.  
   C. fibula injury.  
   D. hip dislocation.

(continued)
12. The term for a prickling or tingling feeling that indicates some loss of sensation is
   A. paresthesia.
   B. anesthesia.

13. The splint best suited for stabilization of a dislocated shoulder or a foot/ankle injury is a(n) _____ splint.
   A. air-inflatable
   B. soft or pillow
   C. formable
   D. rigid

14. The splint best suited for easing pain of muscle spasm associated with fractures of the femur is a(n) _____ splint.
   A. air-inflatable
   B. traction
   C. vacuum
   D. PASG

15. Muscle injuries resulting from overstretching or overexertion of the muscle are called
   A. sprains.
   B. strains.
   C. dislocations.
   D. sublocations.

16. The mechanism that operates when one part of an extremity is held stationary while the rest rotates is _____ force.
   A. direct
   B. indirect
   C. twisting
   D. torsional

17. Another term for the collar bone is the
   A. clavicle.
   B. humerus.
   C. scapula.
   D. patella.

18. The displacement of a bone from its normal position in a joint is a
   A. fracture.
   B. sprain.
   C. dislocation.
   D. strain.

19. The bones of the lower extremities include all of the following except the
   A. pelvis.
   B. patella.
   C. femur.
   D. scapula.

20. Use of a traction splint is indicated for a painful, swollen, deformed
   A. ankle.
   B. hip.
   C. elbow.
   D. femur.
In the Field

Review the following real-life situation. Then answer the questions that follow.

Your unit responds to a 911 call from a mother who reports that her 7-year-old son “has fallen from his tree house.” When you arrive on the scene, the mother leads you into the backyard, where you see the boy grimacing in pain. He is holding his right leg. As you approach, he tells you that “it hurts all the way down to my toes.”

You introduce yourself and learn that the patient’s name is Roger. Roger tells you that he was climbing into the tree house and fell off of the ladder. You ask Roger if he remembers how he landed. “I think I landed on my feet first,” he says. “It hurt so much that I couldn’t stand up.”

1. Explain the mechanism of injury associated with Roger’s injuries.

2. What bones or joints do you suspect have been injured?

3. What type of splint will you use to immobilize Roger? Why?

4. What are four basic questions that should be asked of this patient?
CHAPTER 30 REVIEW

Write the word or words that best complete each sentence in the space provided.

1. The ______________________________ system is composed of all the bones, joints, and muscles of the body.
2. As components of the skeleton, bones provide the body’s ______________________________.
3. ______________________________ are the places where bones meet and are a critical element in the body’s ability to move.
4. A common type of bone injury is a break, or ______________________________.
5. With ______________________________ ______________________________, the force impacts on one end of the limb causing injury some distance away from the point of impact.
6. ______________________________ are bands of connective tissue that bind the muscles to the bones.
7. Three types of mechanisms that cause musculoskeletal injuries include ______________________________ force, ______________________________ force, and ______________________________ force.
8. The ______________________________ splint applies constant pull along the length of the femur to stabilize fractures and reduce muscle spasms.
9. The EMT should splint suspected dislocations in position unless ______________________________ ______________________________ are absent.
10. Proper ______________________________ and prehospital care of musculoskeletal injuries help prevent closed injuries from becoming ______________________________ injuries.
11. If the patient’s thigh is painful, swollen, or deformed, the EMT should treat the patient as if the ______________________________ is fractured.
12. To splint an injured extremity, an EMT must assess ______________________________, ______________________________ ______________________________, and ______________________________ before and after splinting.
13. Dramatic-looking or painful extremity injuries can sometimes distract an untrained person from looking for other ______________________________ - ______________________________ conditions.
14. For any splint to be effective, it must immobilize the extremity or joint ______________________________ and ______________________________ the injury.
15. The point of realignment of deformed extremities is to assist in restoring effective ____________________.

16. A traction splint is indicated if there is an isolated ____________________ fracture.

17. A patient with a hip fracture should be managed for ____________________.

18. Any device used to immobilize a body part is referred to as a(n) ____________________.

19. A(n) ____________________ is an injury to a joint with possible damage to or tearing of ligaments.

20. A triangular bandage used to support the shoulder and arm is called a(n) ____________________.
**MUSCULOSKELETAL TRAUMA: LISTING**

1. List the six basic components of the skeletal system.

2. List four types of musculoskeletal injuries.

3. List three types of mechanisms that cause musculoskeletal injury.

4. List the signs and symptoms of musculoskeletal injuries.
Write the name of the following bones in the correct location on the diagram below.

Carpals
Clavicle
Femur
Fibula
Humerus
Metacarpals
Metatarsals
Patella
Phalanges
Radius
Scapula
Sternum
Tarsals
Tibia
Ulna
Vertebrae
Xiphoid process
MUSCULOSKELETAL TRAUMA: TRUE OR FALSE

Indicate if the following statements are true or false by writing T or F in the space provided.

1. Proper splinting may serve to decrease the incidence of permanent injury.  
2. The three kinds of muscles are voluntary, skeletal, and cardiac.  
3. Voluntary muscles are those that are under the control of a person’s will.  
4. Pulselessness and cyanosis distal to an injured extremity are signs of a very serious condition.  
5. Both before and after applying a splint, assess pulses, movement, and sensation distal to the injury.  
6. The most appropriate splint for a shoulder dislocation is the traction splint.  
7. The EMT should align an extremity with gentle traction if there is severe deformity or absence of distal pulses.  
8. Some types of rigid splints are often pliable enough to be molded to fit any appendage.  
9. The major type of pressure splint is a rigid splint.  
10. Improvised splints can be made from a cardboard box, an ironing board, a rolled-up magazine, a broom handle, or any similar object.