COMPLETION: In the space(s) provided, write the word(s) that correctly complete(s) each statement.

1. The four steps of a therapeutic procedure are ____________, ____________, ____________, and ____________.

2. Reviewing any information available at the onset of the process takes place during the ____________ stage of the therapeutic procedure.

3. Determining strategies and selecting therapeutic techniques to address specific conditions takes place during the ____________ stage of the therapeutic procedure.

4. Examining the outcome of the session in regard to the effectiveness of the selected procedure for the condition takes place during the ____________ stage of the therapeutic procedure.

5. Recording the client history, examination, and observation takes place during the ____________ stage of the therapeutic procedure.

SHORT ANSWER: In the spaces provided, write short answers to the following questions.

1. What are two methods of obtaining a client history?
   ____________
   (having the client fill out an information sheet and through a personal interview)

2. When does the observation portion of an assessment begin?
   ____________
   (when the client enters the room)
3. What are three things that a therapist can observe while observing a client?
   a. (guarded movement)
   b. (bilateral symmetry)
   c. (posture)

4. During the observation phase of an assessment, what does bilateral symmetry refer to?
   (comparing the similarity of one side of the body to the other)

5. When does the intake process begin?
   (when a client calls for an appointment)

6. What is included in the client intake process?
   a. (setting up an appointment with a new client)
   b. (the initial greeting and consultation)
   c. (the assessment)
   d. (creating a treatment plan)
   e. (obtaining informed consent)

7. What are four portions of a common assessment protocol used for therapeutic massage?
   a. (client’s medical history)
   b. (observation)
   c. (a variety of functional assessments)
   d. (palpation)

8. What is the main difference between postural assessment and gait assessment?
   (Postural assessment is done with the subject standing. Gait assessment is done while the subject is walking.)

**Completion:** In the space(s) provided, write the word(s) that correctly complete(s) each statement.

1. Structural deviations, such as a tilted head, rotated hips, or a raised shoulder, are often the result of (muscular imbalances).
2. Posture is best observed when a person is standing and is best done from (four) sides.

3. The action of a joint through the entire extent of its movement is called __________ (range of motion)  

4. Three modes used in assessing the quality of this movement are (active), (passive), and (resisted) movement.

5. The English osteopath who developed a system of testing joints and soft tissue lesions was (Dr. James Cyriax).

6. According to his definition, fibrous tissues that have tension placed on them during muscular contractions are called (contractile tissues).

7. Tissues that are not contractile, such as bone, ligament, bursa, blood vessels, nerves, nerve coverings, and cartilage, are (inert tissues).

8. The quality of the sensation that the therapist feels as she passively moves a joint to the full extent of its possible range is termed (end feel).

9. The results of testing that the therapist is able to see or feel are called (objective findings).

10. The results of tests that the client feels, such as pain or discomfort, and the way in which the client reacts to the discomfort are considered to be (subjective) findings.

11. When assessing (active) movement, the client moves through a particular range of motion totally unassisted.

12. It is termed (passive movement) when the practitioner moves the client's joint through full range of motion while the client remains relaxed.

SHORT ANSWER: In the spaces provided, write short answers to the following questions.

1. When range of motion is tested, which side should be tested first?

   (the good, unaffected side)
2. In which order should the three modes of testing range of motion be performed?
   a. (active movements)
   b. (passive movements)
   c. (resisted movements)

3. Which tissues are involved during active movement?
   (contractile and inert tissue)

4. If there is pain during active movement, what are four things that the therapist should note?
   a. (when in the movement the pain occurs)
   b. (the intensity of the pain)
   c. (the quality of the pain)
   d. (the client’s reaction to the pain)

5. If there is a limitation to the movement during active movement, what are two things that the therapist should note?
   a. (where the limitation occurs)
   b. (whether the limitation is accompanied by pain)

**COMPLETION:** In the space(s) provided, write the word(s) that correctly complete(s) each statement.

1. There are three types of end feel that are considered normal. An abrupt, painless limitation to further movement that happens at the normal end of the range of motion, such as knee or elbow extension, is called ______ (hard) ______ end feel.

2. A cushioned limitation in which soft tissue prevents further movement, such as knee or elbow flexion, is called ______ (soft) ______ end feel.

3. It is called ______ (springy) ______ end feel, when the limitation is caused by the stretch of fibrous tissue as the joint reaches the extent of its range of motion.

4. Normal end feel happens at the ______ (end) ______ of a normal range of motion and is ______ (painless) ______.

5. Sudden pain during passive movement before the end of normal range of motion was termed ______ (empty end feel) ______ by Cyriax.
6. Abnormal end feel is indicated during passive movement when there is _____(pain)_____
or _____(limitation)_____ in the movement.

7. Passive movement assessment indicates the condition of the _____(inert)_____
tissues.

8. Full, painless passive range of motion indicates that the joint and associated structures
are _____(healthy)_____.

9. Two indicators of dysfunction are _____(limitation of movement)_____ and _____(pain)_____.

10. Resisted or isometric movement is used to assess the condition of the _____(contractile)_____ tissues.

11. Indicators of lesions or dysfunction in the contractile tissue are _____(weakness)_____ and _____(pain)_____.

12. Another name for resisted or isometric movement assessment is _____(muscle testing)_____.

13. Sensing the difference in tissue quality and integrity through touch is termed _____(palpation)_____.

14. A common palpable condition found in muscle that is usually associated with a lesion is
a fibrous or _____(taut)_____
band.

15. Examining the outcome of the process in relation to the expected objectives is called _____(evaluation)_____.

16. The first sense of bind when manipulating healthy soft tissue is represented as the
_____ (resistive)____ or (physiologic) barrier.

17. The end of comfortable soft tissue movement within the range of motion is represented
by the _____(physiologic)_____ barrier.

18. Movement beyond the _____(anatomic)_____ barrier would cause tissue disruption or injury.

19. The acronym TART stands for _____(texture)_____, _____(asymmetry)_____, _____(range of motion)_____,
and _____(tenderness)_____.

20. A condition or illness that has a sudden onset and relatively short duration is considered
to be _____(acute)_____.

[Note: The text is filled with blanks that need to be completed with appropriate terms.]

[Theory & Practice of Therapeutic Massage Workbook]
TRUE OR FALSE: If the following statements are true, write true in the space provided. If they are false, replace the italicized word with one that makes the statement true.

1. Palpation is most effective when used in conjunction with and before assessing range of motion.
2. When passive movement and resisted movement both give positive results, contractile tissues are involved.
3. A strong and painful muscle test indicates a lesion in the inert tissue, possibly a torn ligament or fracture.
4. The more severe the condition, the more severe the pain.
5. Taut bands usually contain trigger points.
6. In the acute phase of soft tissue injury, histamines are released, causing vasoconstriction of the capillaries.
7. In the acute stage of soft tissue injury, gentle lengthening and cross-fiber techniques may be used.

SHORT ANSWER: In the spaces provided, write short answers to the following questions.

1. Which information is used in developing session strategies?
   - (client history, medical information, results of observation, assessment, and examination of the client)

2. What takes place during the performance phase of the therapeutic procedure?
   - (the actual massage treatment plus any of a variety of modalities that may precede or follow the massage)

3. List the rehabilitative steps for restoring traumatized, injured, or dysfunctional soft tissue to ensure a long-lasting recovery.
   a. (assessment to determine which tissues are involved and that there are no contraindications to treatment)
   b. (restore circulation and neuromuscular response to the tissues)
   c. (release any trigger points and fibrous restrictions in the muscle tissue and restore flexibility)
   d. (rebuild strength and endurance to the muscle)
   e. (identify and remove the causative factors that initiated the dysfunction)
4. Which type of muscle tends to shorten, tighten, or develop trigger points and adhesions when under stress?

(Type I, slow twitch, postural muscles)

5. During the performance portion of a therapeutic massage, which techniques are effective to identify abnormal tissues?

(layer palpation, superficial gliding, and light cross-fiber techniques)

6. During the performance portion of a therapeutic massage, which techniques are effective to reduce fascial constrictions?

(deep gliding, J-strokes, cross-fiber friction, and stretching)

7. When deep techniques are used, how much pressure is used?

(enough to achieve the optimal therapeutic response without causing an alarm response or damaging the target or surrounding tissues)

8. List four common myofascial techniques

   a. (skin rolling)
   b. (J-strokes)
   c. (cross-hand stretch)
   d. (traction)

9. When does evaluation take place during a massage session?

   (after the assessment, to determine how to proceed)

   (during the performance of the massage, to determine the effectiveness of the chosen techniques)

   (at the conclusion of the session, to determine if the goals for the session have been met and to determine the future course)

MULTIPLE CHOICE: Carefully read each statement. Choose the word or phrase that correctly completes the meaning and write the corresponding letter in the blank provided.

1. The therapeutic procedure involves all of the following EXCEPT
   a) assessment          c) performance
   b) planning            d) psychological evaluation
2. The purpose of performing a client assessment is
   a) to diagnose the cause of the client's problem
   b) to reduce the chance of being sued for improper practice
   c) to establish a baseline of the client's functional ability to track improvement
   d) all of the above

3. Muscle tissues, tendons, and muscle attachments are called
   a) contractile tissues
   b) inert tissues
   c) fascia
   d) capsular patterns

4. Bones and ligaments are examples of
   a) contractile tissues
   b) inert tissues
   c) end feel
   d) capsular patterns

5. When assessing range of motion, first test the client's
   a) painful joints
   b) pain tolerance
   c) strength
   d) good side

6. Pain and how the client reacts to it is called a/an
   a) subjective finding
   b) objective finding
   c) active movement
   d) contraindication

7. Limitation of a joint movement because of the stretching of fibrous tissues is called
   a) hard end feel
   b) springy end feel
   c) soft end feel
   d) acute inflammation

8. The source of pain can be pinpointed through
   a) palpation
   b) hard end feel
   c) inert tissues
   d) range of motion

9. Determining if goals have been met is called
   a) goal tending
   b) processing
   c) evaluation
   d) assessment

10. When performing ROM assessment, the order of the tests that provide the most accurate information is
    a) palpation, passive movement, active movement, resisted movement
    b) palpation, active movement, resisted movement, passive movement
    c) active movement, passive movement, resisted movement, palpation
    d) passive movement, active movement, resisted movement, palpation
11. Which of the following takes place during the assessment?
   a) informed consent  
   b) client and medical history  
   c) deciding which techniques to use  
   d) all of the above

12. Explaining policies and procedures, medical history, palpation examination, and informed consent are all part of the
   a) assessment  
   b) treatment plan  
   c) evaluation  
   d) client intake

13. Observing a client's ability and willingness to move a body part through a range of motion is ________.
   a) assessing active movement  
   b) assessing passive movement  
   c) collecting subjective information  
   d) collecting objective information

14. When soft tissue is manipulated, the first sense of bind represents the ________.
   a) anatomic barrier  
   b) normal range of motion  
   c) physiologic barrier  
   d) restrictive barrier

15. Using the hands and sense of touch to assess the qualities of the tissues is ________.
   a) of little use  
   b) termed palpation  
   c) represented by the acronym TART  
   d) done only with informed consent

16. An injury that begins with an event, causes some tissue disruption, and is fairly recent is considered ________.
   a) a chronic injury  
   b) an acute injury  
   c) a contraindication for therapeutic massage  
   d) a biomechanical deviation

17. When a client is asked to actively flex the shoulder, he cautiously lifts his arm approximately 30 degrees, then stops quickly, winces, and grabs his shoulder. The practitioner should ________.
   a) perform techniques to relieve a spasm in the shoulder  
   b) refer the client to a doctor for further evaluation  
   c) note the reaction and perform further tests  
   d) apologize and continue with a relaxing massage
18. When a client and practitioner have formulated a plan for six sessions, 
   a) the plan should be strictly followed 
   for the six sessions and then the results evaluated 
   b) client priorities should determine what is done at every session 
   c) slight modifications to the plan should be made according to session evaluations and individual pre-session interviews 
   d) if there are no improvements after two sessions, the strategy should be abandoned 

19. Evaluation is the part of therapeutic procedure that is done 
   a) after every session 
   b) after several sessions 
   c) during the massage 
   d) all of the above 

20. The four parts of therapeutic procedure include _______. 
   a) subjective, objective, assessment, planning 
   b) planning, assessment, evaluation, performance 
   c) history, assessment, planning, treatment 
   d) subjective, objective, history, interview 

21. The first part of the assessment involves _______. 
   a) performing an interview with the client. 
   b) palpation 
   c) range of motion tests 
   d) all of the above 

22. A muscle injury in which there is intense pain at the time of injury, a palpable defect, a severe impairment of function, and little strength in resisted movement is a _______. 
   a) first degree sprain 
   b) second degree strain 
   c) grade three strain 
   d) third degree sprain 

23. Which of the following should be done during the preliminary interview with the client? 
   a) the client fills out intake and medical history forms. 
   b) the practitioner asks questions to clarify information on the intake and medical history forms. 
   c) the practitioner performs special orthopedic tests on the client. 
   d) all of the above. 

24. A muscle will stop contracting when _______. 
   a) the nerve impulse to the muscle stops 
   b) there is a nerve impulse to stop the contraction 
   c) the opposing muscle contracts 
   d) the muscle spindle signals too much tension
25. A muscle that is holding a body part so that other muscles that attach to that body part can contract and initiate movements is called a/an _______.
   a) antagonist  c) neutralizer
   b) stabilizer     d) prime mover

26. Bilateral symmetry and posture are assessed by _______.
   a) orthopedic tests  c) observation
   b) palpation        c) body diagrams

27. Manual resistive tests are performed by _______.
   a) the client's attempting to move a body part in specific direction while the practitioner holds it in a neutral position, allowing no joint movement.
   b) having the client move through a range of motion while the practitioner provides resistance
   c) having the client lift a weight
   d) the practitioner's moving the client through a range of motion while the client resists

28. When planning session strategies, which of the following should be considered?
   a) the client's request for a relaxing massage
   b) intake and medical forms that indicate back and neck pain
   c) a doctor's report that indicates osteoporosis
   d) all of the above

**WORD REVIEW:** The student is encouraged to write down the meaning of each of the following words. The list can be used as a study guide for this unit.

**active movements**

*Active joint movements are movements in which the client actively participates by contracting the muscles involved in the movement.*

**acute**

*Acute refers to a condition with a sudden onset and relatively short duration.*

**anatomic barrier**

*Anatomic barrier refers to the anatomic limit of motion of particular tissue. To move beyond the anatomic barrier would cause injury and disruption of tissues and supportive structures.*
assessment

(Asymmetry means one side is not symmetrical with the other.)

asymmetry

(bilateral symmetry means that both sides are similar.)

bilateral symmetry

(capsular pattern refers to the proportional limitation of any joint that is controlled by muscular contractions.)

capsular pattern

(Chronic refers to a lingering or ongoing condition.)

chronic

(client intake is a process that involves an exchange of information to determine the best course of action for a therapeutic relationship; this process begins when a client first makes contact and continues until there is agreement between the client and therapist and the massage commences.)

client intake

(contractile tissues are the fibrous tissues that have tensions placed on them during muscular contractions.)

contractile tissues

(cross-fiber friction is applied in a transverse direction across the muscle, tendon, or ligament.)

cross-fiber friction
deep gliding

(Deep gliding indicates that the gliding manipulation uses enough pressure to have a mechanical effect.)

directional massage

(Directional massage uses a short, repeated massage stroke in a specific direction.)

empty end feel

(Empty end feel is an abrupt restriction to a joint movement due to pain.)

end feel

(End feel is the change in the quality of the movement as the end of a joint movement is achieved.)

evaluation

(Evaluation examines the outcomes of a procedure or session in regard to the effectiveness of a selected procedure.)

fibrosis

(Fibrosis refers to the formation of fibrous tissue.)

functional assessment

(Functional assessment is the evaluation of a physical activity.)

gait assessment

(Gait assessment is observing the manner in which a person walks to determine constrictions or related conditions.)
hard end feel

(Hard end feel is a bone-against-bone feeling.)

hypertonic muscle

(Hypertonic muscle is a muscle that is holding an abnormally high amount of tension.)

inert tissues

(Inert tissues are the tissues that are not contractile, such as bones, ligaments, and nerves.)

inflammatory response

(The inflammatory response is a natural healing process for injured soft tissue that includes several stages: the acute stage, and the subacute stage, which includes the regenerative and remodeling stage.)

ischemic compression

(Ischemic compression involves digital pressure directly into a trigger point.)

J-stroke

(J-stroke is a myofascial massage technique that involves making contact, drawing the superficial tissue back slightly, then moving deeper into the tissue with a directional glide over the deeper tissues without moving over the skin.)

layer palpation

Layer palpation is the process of sensing with the hands the relative condition of successively deeper layers of tissue beginning above the skin surface, then progressing to the skin, superficial fascia, and deeper levels of muscle and bone.)

medical history

(Medical history is information relating to a client’s current and former medical concerns used to determine the best treatment strategy.)
muscle energy technique

(Muscle energy technique (MET), or PNF stretching, uses neurophysiologic muscle reflexes to improve functional mobility of the joints.)

objective findings

(Objective findings are conditions that are observable and usually measurable.)

observation

(Observation is the act of recognizing and noting something visually.)

pain scale

A pain scale is an assessment tool that allows a client to rate his level of pain or discomfort on a scale of 1 to 10 or 1 to 5.

palpation

(Palpation is a skill and an art developed by the therapist that is a primary assessment tool, allowing the therapist to listen to the client's body through the therapist's hands.)

passive movements

(Passive joint movements stretch the fibrous tissue and move the joint through its range of motion.)

performance

(Performance is part of the therapeutic procedure that involves the actual practice of doing the massage techniques.)

physiologic barrier

(The physiologic barrier represents the extent of easy movement allowed during passive or active joint movements.)
Planning

(Planning is part of the therapeutic procedure that involves considering all of the information gained during the assessment to determine which procedures to use to address the client’s concerns.)

Position release

(Position release is a method of passively moving the body or body part toward the body’s preference and away from pain, seeking the tissue’s preferred position. Movements are toward ease and away from bind, and away from any restrictive barrier and toward comfort.)

Postural assessment

(Postural assessment is observing how a person maintains an upright posture in relation to gravitational forces.)

Postural distortion

(Postural distortion is a deviation from ideal posture.)

PRICE

(PRICE is an acronym for a first-aid procedure for soft tissue injuries that means Protect the area, Rest, Ice, Compression, and Elevation.)

Range of motion

(Range of motion is the movement of a joint from one extreme of the articulation to the other.)

Resisted or isometric movement

(Resisted or isometric movement is an evaluation tool also known as muscle testing.)

Resistive barrier

(Resistive barrier, also known as the pathologic barrier, is the first sign of resistance to a movement as tissue is moved and manipulated through its range of motion.)
soft end feel

*(Soft end feel is a cushioned limitation in which soft tissue prevents further movement, such as knee flexion.)*

soft tissue barriers

*(Soft tissue barriers are notable physiologic changes in the quality of movement in soft tissue that represent the limits within which the tissues can be effectively manipulated.)*

soft tissue intervention

*(Soft tissue intervention is a massage or other therapeutic technique that is used to remedy a condition of the soft tissue.)*

springy end feel

*(Springy end feel is the most common end feel, and limitation is due to the stretch of fibrous tissue as the joint reaches the extent of its range of motion.)*

structural deviation

*(Structural deviation is a physical attribute or condition that is abnormal.)*

subjective findings

*(Subjective findings are conditions or sensations that are felt and reported by the client.)*

superficial gliding

*(Superficial gliding is a massage technique where the practitioner’s hand conforms to client’s body contours so that equal gentle pressure is applied to the body from every part of the hand as the practitioner’s hand glides over a portion of the client’s body.)*

TART

*(TART is an acronym for an assessment protocol in which T = texture of superficial and deep tissues; A = asymmetry in body structures; R = range of motion; and T = tenderness or pain.)*
taut band

(Taut band is a palpable, stringy cord in muscle tissue often related to trigger points.)

therapeutic procedure

(Therapeutic procedure is the process of acquiring a concise medical history, using assessment procedures to determine constricted and painful conditions, developing treatment plans, performing appropriate treatment practices to more specifically address the conditions, and evaluating the results.)

trigger point

(Trigger point is a hyperirritable nodule associated with dysfunctional contractile tissue that elicits a pain response when digital pressure is applied.)

trigger-point massage

(Trigger-point massage is the use of therapeutic soft tissue manipulations that are effective in relieving trigger points.)