

Somatic Patterning
Supplemental Instructor Materials
Chapter 1: Section II - PATTERNING

*Includes readings, objectives, review questions and answers, a
 10 question multiple-choice test, and suggested classroom activities.*

Chapter 1: Section II - PATTERNING

Readings

Section II: PATTERNING

Introduction	20
PATTERNING APPROACHES AND SKILLS	21
PATTERN RECOGNITION	21
FORCES THAT SHAPE MOVEMENT	23
Sensorimotor Learning	23
The Sensorimotor Loop	24
Motor Development and Experiential Learning	24
Imprinting and Family Patterns	25
Body Awareness and Self-Image	25
Defense Mechanisms and Somatic Feedback	27
Muscular Armor	27
Habituation and Holding Patterns	28
The Startle “Reflex”	28
Parallels Between Humans and Other Animals	29
Prevertebral Patterns	29
Vertebral Patterns	30
MOVEMENT AS THE BODY-MIND INTEGRATOR	32
Integrated Posture and Movement	32
Optimal Alignment	32
Postural Muscle Support	33
Postural Reflexes	34
Postural Muscle Engagement in Bodywork	34
Somatic Integration	36
SUMMARY	37

Chapter 1: Section II - PATTERNING

Objectives

1. Define the term “patterning” and describe how it is used in somatic movement therapy.
2. Compare and contrast approaches to autonomic and neuromuscular patterning.
3. Describe the process of pattern recognition.
4. Discuss the forces that shape movement during childhood development and maturation.
5. Describe sensorimotor learning and identify the three phases of the sensorimotor loop.
6. Describe the role of motor development in cognitive and emotional development.
7. Define “imprinting” and describe its role in adopting family patterns.
8. Define and contrast “body awareness” and “self-image.”
9. Explain how defense responses develop and lead to muscular armor.
10. Define “habituation” and describe its role in the formation of muscular holding patterns.
11. Describe the startle “reflex.”
12. List and describe four prevertebral and four vertebral patterns of movement.
13. Define “center of gravity” (COG), “line of gravity” (LOG), and “base of support” (BOS).
Describe how they align in an optimal posture.
14. Discuss how postural muscles and postural reflexes work.
15. Explain how postural muscle engagement can be integrated into bodywork.

Chapter 1: Section II - PATTERNING

Review Exercises

1. *Define the term “patterning.”*
2. *Describe how patterning is used in somatic movement therapy.*
3. *Compare and contrast autonomic and neuromuscular patterning.*
4. *Identify four steps in the patterning sequence.*
5. *Describe the process of pattern recognition.*
6. *Discuss the forces that shape posture and movement during childhood.*
7. *Identify and briefly describe the four stages of learning identified by Piaget.*
8. *Define “sensorimotor learning” and list the three phases of the sensorimotor loop.*
9. *Describe the role of motor development in childhood.*
10. *Define “imprinting” and describe its role in family patterns.*
11. *Define and contrast “body awareness” and “self-image.”*
12. *Contrast somatic feedback from a defense response and a relaxation response.*
13. *Define “muscular armor.”*
14. *Define “habituation.”*
15. *Describe how the startle “reflex” forms.*
16. *Identify parallels between animal and human movement patterns and provide several examples.*
17. *Define and contrast the movement patterns of prevertebral and vertebral animals and provide several examples.*
18. *Discuss the role of movement in body-mind integration.*
19. *List three components of weight support in posture and describe their relationship in an optimal upright posture.*
20. *Describe how postural muscles work.*
21. *Explain how the postural sway reflex works, why it is important, and its therapeutic value.*
22. *Identify three benefits of integrating postural muscular engagement into massage and bodywork practices.*

Answers to Review Exercises

1. *Define the term “patterning.”* Patterning is the process of consciously changing compulsive or habitual body patterns to improve posture and movement.
2. *Describe how patterning is used in somatic movement therapy.* Somatic movement therapists teach their clients patterning skills to improve body-use patterns and economy of motion. Many people use patterning skills to alleviate myofascial pain and muscular imbalances associated with faulty postures and movement patterns.
3. *Compare and contrast autonomic and neuromuscular patterning.* Autonomic and neuromuscular patterning approaches are similar in that they are both educational tools to equip clients with self-help tools for change. Autonomic patterning focuses on training and improving the relaxation response using tools such as self-awareness, breathing exercises, and mindfulness meditations. In contrast, neuromuscular (NM) patterning focuses on training and improving muscular balance and joint range using specific movement exercises to improve economy of motion.

4. *Identify four steps in the patterning sequence.* Four steps in the patterning sequence are:
1) Identify muscular holding patterns in faulty posture and movements. 2) Release muscular holding using awareness skills and relaxation exercises. 3) Contrast the old and new pattern and practice moving between them. 4) Practice patterning exercises and integrate new patterns into daily activities.
5. *Describe the process of pattern recognition.* The process of pattern recognition is an innate ability to recognize people by the overall configuration of their distinct postures and movements. A person can take in the overall body pattern of another person at a glance. The eye is drawn to breaks in the flow of movement and distortions in shape. When using patterning recognition as a therapeutic skill, it is important to develop recognition of the overall pattern before analyzing parts.
6. *Discuss the forces that shape posture and movement during childhood.* During childhood, posture and movement are shaped by internal and external forces. Internal forces include emotions, thoughts, and biological needs such as bonding, hunger, and rest. External forces include environmental influences, particularly family attitudes, beliefs, and behaviors.
7. *Identify and briefly describe the four stages of learning identified by Piaget.* The four stages of learning identified by Piaget are as follows: 1) The sensorimotor stage occurs from birth to age two, when a child's reality is constructed through a revolving process of motor explorations that leads to new sensory perceptions. 2) The preoperational stage begins at about age two, when a child develops skills for using symbolic language to describe sensations and feelings and to assign names to objects and people. 3) Concrete operations begin at about age seven, when a child learns to describe how things change. 4) Formal operations begin at about age eleven, when a child begins to grasp abstract thought.
8. *Define "sensorimotor learning" and list the three phases of the sensorimotor loop.* Sensorimotor learning is the initial stage of development in which an infant continually interacts with the environment, responding to each new sensation and perception with a movement exploration in an ongoing and circular sensorimotor loop. The three phases of the sensorimotor loop are 1) the reception of sensory input, 2) processing and integration in the brain and spinal cord, and 3) motor reaction and response.
9. *Describe the role of motor development in childhood.* Motor development lays an important foundation for learning and brain development during childhood. Each movement exploration a young child goes through establishes or strengthens a neuromuscular pathway in the central nervous system, creating a sensorimotor foundation upon which cognitive functions are built. Gaps in motor development can underlie subsequent learning disabilities and cognitive dysfunctions that show up in later phases of childhood development.
10. *Define "imprinting" and describe its role in family patterns.* Imprinting is an innate form of learning in which an infant or child recognizes characteristics of caregivers such as patterns of speech, posture, and movement. The child in turn learns to imitate these characteristics.
11. *Define and contrast "body awareness" and "self-image."* Body awareness arises from a direct experience of the physical body through sensations and proprioception, an awareness of changing positions in space from movement. In contrast, self-image is a

mental process in which a person reflects upon himself and develops a self-image based upon an idea or mental picture.

12. *Contrast somatic feedback from a defense response and a relaxation response.* Somatic feedback from a defense response comes through fight or flight symptoms such as increased heart rate and breathing, muscular tension, and anxiety. In contrast, somatic feedback from a relaxation response creates the opposite effect, causing sensation of muscular relaxation and slower breathing, as well as psychological feelings of safety and calm.
13. *Define “muscular armor.”* Muscular armor is a term coined by psychiatrist Wilhelm Reich to describe the overall patterns of protective muscular contraction that develop as psychological defense mechanisms. Reich defined a general pattern of muscular armor in each of the classic Freudian personality structures, such as the schizoid, oral, masochist, and psychopath personalities.
14. *Define “habituation” and provide an example.* Habituation is the most primitive and fastest type of unconscious learning that develops through the repetition of specific behaviors. For example, addictions are built upon habituation; each repetition requires a stronger stimulus or “drug” to achieve the same results.
15. *Describe how the startle “reflex” forms.* The startle reflex forms when a stimulus like a loud or sudden noise or a threat triggers a defensive reaction. Depending upon when a startle reaction first occurs, a startle reflex can be either a contraction in one part of the body or a full-body reaction. The earlier the onset, the greater the likelihood of a full-body reaction. For example, since an infant has immature musculoskeletal tone, he or she will respond to danger with general patterns that increase autonomic tone and muscular guarding in whole-body activation.
16. *Identify parallels between animal and human movement patterns and provide several examples.* Every stage of movement a human undergoes from birth to walking recapitulates the movements found in animals that preceded us in evolution. This concept is known as phylogeny (the history of all species) recapitulates ontogeny (the history of a single species). Human beings exhibit structural and functional features of all major species. For example, we have soft and segmented spines that can undulate like an eel or bend and twist like a snake. In another example, we have limbs that allow us to hop like frogs, crawl like lizards, and stalk like cats.
17. *Define and contrast the movement patterns of prevertebral and vertebral animals and provide several examples.* “Pre” means before vertebrae. Prevertebral animals lack bony skeletons and exhibit organic movement patterns through soft tissues. Examples include the pseudopodal flow of an amoeba’s tendrils and the jelly-like swimming of the squid. In contrast, vertebral animals have bony skeletons and exhibit more structured movements along clear skeletal pathways. Examples include the spinal bending and twisting of snakes, homologous hopping and jumping of frogs, and contralateral walking gaits of cats and humans.
18. *Discuss the role of movement in body-mind integration.* Movement can build and strengthen body-mind integration because movement generates physical sensation. When a person reflects upon physical sensations, he or she connects bodily experiences with thought, thereby making a body-mind connection. Body-mind integration occurs when thoughts and actions are coordinated and exhibit qualities of ease, economy of effort, and healthy modes of expression.

19. *List three components of weight support in posture and describe their relationship in an optimal upright posture.* The three components of weight support in upright posture are the center of gravity (COG) in each body mass, the line of gravity (LOG), and the base of support (BOS). In an optimal upright posture, the COGs of the head, thorax, and pelvis align along the LOG over the BOS in the feet or pelvis.
20. *Describe how postural muscles work.* Postural muscles generate slow, sustained contractions that pull bones in the axial joints closer together, supporting and stabilizing the body in an extended, upright position. The tonic contractions of postural muscles work both independent of body movement and during body movement to prevent joint motion beyond normal range.
21. *Explain how the postural sway reflex works, why it is important, and its therapeutic value.* Postural sway is a postural reflex maintained by oscillating stretch reflexes in opposing postural muscles, which results in a subtle swaying motion of the body around its vertical axis. Postural sway is important because it assists the return of venous blood from the legs to the heart, which explains why people pass out when standing for too long or standing in rigid postures that restrict circulation. Postural sway can be therapeutic when practiced as a somatic skill because it can only be done with the weight bearing joints in neutral, enabling the practitioner to sustain an optimal upright posture. It is also therapeutic because it cultivates an awareness of a fluid, relaxed stance.
22. *Identify three benefits of integrating postural muscular engagement into massage and bodywork practices.* Three benefits of integrating postural muscular engagement into a massage and bodywork practice are 1) personal development, specifically in self-care and body mechanics, 2) professional application in neuromuscular bodywork, and 3) client education.

Chapter 1: Section II - PATTERNING

Multiple Choice Test

*Note: Make sure to pay attention to the highlighted words or phrases because they ask you to identify the statement that **does not** refer to the topic of the question, the **ineffective** use of the mentioned skill, or the **false** answer.*

- 1) Identify which of the following definitions **does not** describe patterning.
 - a. Any method or process a person uses to change body-mind patterns
 - b. Visualizing other people's body patterns changing and improving
 - c. Movement exercises practiced to improve joint and muscle function
 - d. Movement and self-awareness exercises used to improve posture
- 2) Sensorimotor amnesia is
 - a. the process of relearning how to walk after an injury.
 - b. neurological damage from an injury that results in a movement dysfunction.
 - c. numbness in the spine and limbs after a serious closed-head injury.
 - d. undeveloped body awareness that results in faulty postures and movements.
- 3) Which of the following statements **does not** explain why patterning alleviates musculoskeletal pain associated with faulty movements?
 - a. Patterning helps us to understand the components of efficient movement.
 - b. Patterning improves joint function by normalizing range of motion.
 - c. Patterning improves muscular balance by relaxing overworking muscles and activating weak or inhibited muscles.
 - d. Patterning improves neuromuscular coordination by organizing a better recruitment sequence of muscles and joints along a kinetic chain.
- 4) Which of the following statements **does not** describe posture?
 - a. Posture is the relative position of the body and alignment of joints.
 - b. Posture is an attitude or stance that a person takes towards the world.
 - c. Posture is the movement of the body from one position to the next.
 - d. Posture is a physical state that reflects a psychological state.
- 5) Which of the following statements describes an **ineffective** use of pattern recognition skills in massage and bodywork?
 - a. You see the client's whole body pattern at a glance.
 - b. Your eye is naturally drawn to breaks in the overall pattern, which can point to areas of muscle and joint imbalance.
 - c. You work with the specifics of a pattern before addressing the general pattern.
 - d. You first recognize an overall body pattern before you attempt to change it.
- 6) At what age does sensorimotor learning dominate learning processes?
 - a. At about age seven
 - b. At about age eleven
 - c. At about age two

- d. From birth to walking
- 7) Which of these statements ***best*** describes the sensorimotor loop?
- The sensorimotor loop is the process of receiving sensory input.
 - The sensorimotor loop is an oscillating cycle of sensory input and motor response.
 - The sensorimotor loop is the process of experiencing a motor response.
 - The sensorimotor loop affects proprioception by changing body positions.
- 8) What are the three phases of a sensorimotor loop?
- Receiving motor input, becoming aware of this input, and feeling more sensitive
 - Receiving sensory input, consciously ignoring it, and having a motor response
 - Receiving sensory input, processing it in the brain, and having a motor response
 - Receiving motor input, ignoring sensory responses, and having a motor response
- 9) Which of the following statements describes the process of learning called imprinting?
- Imprinting is the process of learning body patterns by imitating caregivers.
 - Imprinting is the process of learning body patterns through repetition.
 - Imprinting is a process of learning that involves movement explorations.
 - Imprinting is a process of learning that triggers defense mechanisms.
- 10) Which of the following statements describing defense mechanisms is ***false***?
- Defense mechanisms occur when feeling threatened, which triggers a fight or flight response.
 - Holding patterns have absolutely no effect on defense mechanisms.
 - Defense mechanisms trigger muscular bracing and armoring.
 - Prolonged holding patterns from defense mechanisms underlie muscular armor.
- 11) Which of the following statements ***does not*** pertain to upright posture and bipedal gait?
- Human beings are the only animals with upright posture.
 - Upright posture has no relationship to bipedal gait.
 - Upright posture gives people the ability to freely turn the head.
 - Upright posture underlies the uniquely human bipedal gait.
- 12) How do postural muscles work?
- Postural muscles generate fast, strong contractions that pull bones in the axial joints closer together to stabilize those joints.
 - Postural muscles generate fast but weak contractions that pull the bones of the limbs and spine through space.
 - Postural muscles generate slow, sustained contractions that pull bones in the axial joints closer together to stabilize those joints.
 - Postural muscles generate slow, sustained contractions that increase joint flexibility during motion.

Chapter 1: Section II - PATTERNING

Key Terms Quiz

NAME: _____ DATE: _____

Fill in the empty boxes by matching each term below with its definition.

Patterning	Sensorimotor Loop
Autonomic Patterning	Habituation
Neuromuscular Patterning	Defense Mechanisms
Pattern Recognition	Muscular Armor
Sensorimotor Learning	Startle Reflex

Term	Definition
1.	1. Any methods used to reorganize and improve muscular control and coordination; focuses on training and improving muscular balance and joint range using specific movement exercises to improve economy of motion.
2.	2. An innate human ability to recognize people by the overall configuration of their distinct postures and movements.
3.	3. An ongoing sensorimotor process that has three phases: 1) the reception of sensory input, 2) processing and integration in the brain and spinal cord, and 3) motor reaction and response.
4.	4. Deep psychophysiological reactions to physical and emotional threats that prepare the body for fight or flight by raising autonomic tone and increasing muscular readiness action. They are vital for survival.
5.	5. Learning that results from repetition of a behavior. The process of becoming a habit.
6.	6. A term coined by Wilhelm Reich to describe patterns of chronic muscular tension that block the flow of biological energy from the core of the body to the periphery, thereby repressing unmanageable and uncomfortable emotions, particularly those that cause anxiety.
7.	7. The process of consciously changing compulsive or habitual body patterns to improve function, particularly posture and movement.
8.	8. A defensive reflex in response to a loud noise or sudden threat, graded between a small contraction and a full-body response.
9.	9. Sensorimotor learning is the initial stage of development in which an infant continually interacts with the environment, responding to each new sensation and perception with a movement exploration in an ongoing and circular sensorimotor loop.
10.	10. Any process of actively changing and improving patterns of tone in the autonomic nervous system; focuses on training and improving the relaxation response using tools such as self-awareness, breathing exercises, and mindfulness meditations.

Chapter 1: Section II- PATTERNING

Suggested Learning Activities

1. Skills Exercise: Pattern Recognition

Objectives:

- To build pattern recognition skills.
- To help students recognize that each person's holding patterns developed to serve a purpose, often as a defense pattern that helped the person survive a stressful situation.
- To help students develop compassion for their own and their clients' body problems, as well as patience for stubborn body patterns that seem resistant to change.
- To communicate about body patterns and posture in a respectful, objective, and nonjudgmental way.

Homework:

Have students bring in a photo of a distinct postural pattern, from their own collection or from the Internet. They will need hardcopy photos that can be passed around the room. To keep the people in photos anonymous, have students black out the face of the person.

Small group discussion (10 minutes):

Break students into triads and discuss the photos using the talking points below.

- 1) What is the personality or emotional tone of this person's posture?
- 2) What life experiences do you think this person might have had that shaped the development of this pattern?
- 3) Which areas of this person's body do you think have tight muscles and holding patterns?
- 4) Where do you think this person might want massage to release the tension and improve skeletal alignment and muscular balance?

Large group discussion (10 minutes):

Lead a group discussion in which a representative from each small group reports several things that the group discovered when looking at the postural patterns. After each group reports, recap the main points of the discussion.

2. Body Awareness and Self-Image

Time: 20 minutes

Objectives:

- To help students recognize the difference between body awareness and self-image.
- To help students identify their level of body awareness and their self-image.

Exercise:

- 1) Students pair off into dyads.

- 2) Have one student describe herself to her partner, as though she were talking about herself in the third person. For example, “she looks like this...she walks like this...she is strong, yet quiet...etc...”
- 3) Have the listener take notes, jotting down descriptive phrases the speaking partner uses to describe herself.
- 4) After a few minutes, instruct them to switch roles and repeat the exercise.
- 5) Have the students study their notes together. Instruct them to flag phrases that are clearly based on body awareness and phrases that seem to be based clearly on self-image.

Group discussion: In a large group discussion, ask for several examples of phrases based on body image and phrases based on self-image. Then discuss the difference between the two.

3. Autonomic Patterning Exercise #29: Sand-Bag Brain and Body (p. 120)

Time: 20 minutes

Objectives:

- To develop an awareness and felt sense of organic movement in their own bodies.
- To give student a tool for releasing tension and chronic muscular holding while moving with a slow, weighted quality.
- To release tension in the autonomic nervous system.

Exercise:

- 1) Lie on your back in a comfortable position. Imagine that your head and body are filled with sand.
- 2) Gently roll your head from side to side. Visualize sand sifting from side to side. Move very slowly, as though you could feel one grain of sand move at a time.
- 3) Next, imagine your whole body filled with sand. Then slowly roll your body to one side, then to the other, imagining the sand gradually pouring from one area to the next as you roll. Sense your body’s weight sinking into the floor in the places where you feel contact. Roll back and forth several times until you feel heavier and more relaxed.

Variations: Repeat the exercise while sitting, or have a partner slowly roll your head from side to side while you use the visualization of sand slowly pouring. Can you yield the weight of your head into your partner’s hands?

4. Somatic Assessment of Posture in Gait

Time: 30 minutes

Objectives:

- To develop pattern recognition skills.
- To recognize the psychosomatic component of posture.
- To develop empathy for diverse walking postural patterns.

Exercise:

While explaining the structure of this exercise, remind students that everyone has something unique or problematic about their posture. We develop postural patterns to help us get through whatever life circumstances we are challenged with, so encourage the students to be compassionate with the feedback that they share with each other.

Here are guidelines for giving each other feedback:

- Look at the shape of the overall pattern rather than the parts.
 - Use objective rather than judgmental language to describe body patterns.
 - Imagine what life circumstances your partner experienced to develop this pattern.
 - Identify the strengths and weaknesses you see in the pattern.
- 1) Have students break up into pairs. Instruct one student to walk and the second student to walk behind her and imitate her walking posture for several minute.
 - 2) Then have the students take a few minutes for the second to share what she discovered about the first student's pattern using these prompts.
 - a. *Was her posture more collapsed, rigid, or inflated? Did she tend to pull up or back? Did she lean forward? Did she pull in or down?*
 - b. *If she were /actress and took on this posture to play a role, what is the personality of the character she is acting?*
 - c. *What role does here postural pattern seem to serve?*
 - d. *What emotional state or attitude does her posture convey?*
 - 3) Switch roles and repeat steps 2 and 3.

Large group discussion: Ask several students to share their findings with the entire group. Stress how important it is to develop empathy and compassion for another person's body pattern and not be judgmental. Emphasize how all body patterns develop for a reason and should be respected for the roles they serve. In massage, as we help client's release these tensions, we always want to honor the role the pattern served rather than treat it like something bad or wrong. With massage, we are trying to release the energy that these patterns take and replace them with easier, less effortful or painful ways of being.

5. Patterning Exercise #5: Dynamic Postural Sway (p. 35)

Time: (10 minutes)

Objectives:

- To help the students bond.
- To contrast fluid and rigid postures.
- To help students feel the effects their postural tone has on quality of touch.
- To give the students a simple tool to gain more fluidity and ease in posture.

Exercise: Adapted for a group.

- 1) Have the group members stand in a circle. Briefly explain the objectives of this exercise, and then assign each student to be a 1 or 2 by having them count off in a sequence.
- 2) Break the group into pairs with a 1 and 2 in each pair and provide these instructions:

- a. *Stand right next to your partner. Put your arms around each other's waist so that your hips lightly touch.*
 - b. *Make sure not to lean or press into each other. You should be connected but each of you should still also be able to stand on your own.*
- 3) Instruct the students to sway together with these prompts:
- a. *Subtly sway back and forth a little bit, like people do when they are standing together with a friend or relative at a wedding. Postural is an important to help blood return from the legs to the heart.*
 - *Make sure your knees are straight but not locked. If they are locked, it will block circulation, which explains why people sometime pass out when standing for a long period.*
 - *As you sway, lightly contract your lower abdominals to stabilize your pelvis and keep your lower back from arching.*
 - *Sense your bodies move together.*
 - b. *Number 1s, hold your bodies really still. Completely, stop swaying.*
 - c. *Number 2s, notice what this feels like. What happens in your body when your partner stopped moving?*
 - d. *Number 1s, relax and start swaying with your partner again.*
- 4) Then get feedback from the 2s.
- a. *Number 2s, what did it feel like when your partner stopped swaying?*
 - b. *Students often share comments such as, "I got rigid to match my partner," or "I felt like a wave hitting a breaker wall."*
- 5) Have them sway together again, then repeat steps 4-6 but reverse the roles.
- a. *2s, hold your bodies really still. Completely, stop swaying.*
 - b. *1s, notice what this feels. What happens in your body when your partner stopped moving?*
 - c. *2s, relax and start swaying with your partner again.*

- 6) Now get feedback from 1s.

Group discussion: End the exercise with a short recap and cover these talking points:

- Most people are tuned to other people's bodies. We are able to sense fluidity or muscular holding in the other each, especially when we are near another person or touching that person.
- Suggest that students watch people in public places to notice whether they are swaying or holding.
- Suggest that the students practice feeling a subtle postural sway whenever they find themselves standing and waiting. A subtle postural sway can help them relax, especially before giving a massage.
- Suggest that as students practice massage, that they notice what happens when they massage a part of a client's body that feels rigid or unresponsive. Do they lose their fluidity? Do they meet the client's rigidity with rigidity? Or can they meet rigidity with fluidity and maintain a fluid posture?

6. Patterning Exercise #6: Training the Postural Stabilizers

Time: 10 minutes

Exercise: Lightly contract one postural muscle at a time. Keep it contracted as you work the next muscle so that by the end of this exercise, all your postural muscles will be co-contracted. Contract each muscle slowly with minimal effort, contracting with only one-third your maximum effort.

- 1) To get ready, sit or lie in a comfortable position with your spine in a straight, neutral alignment (no excessive curves or slouching).
- 2) **Transversus abdominis:** Slowly draw the lower abdominal muscles above your pubic bone straight back toward your sacrum and hold (PE Fig. 1)
- 3) **Diaphragm:** Gently breathe into your lower ribs, widening them as you inhale.
- 4) **Psoas major:** Raise one foot to engage the psoas major. Sense the light contraction along the front of the lumbar spine, keep it contracted and lower the foot. Repeat with the other foot.
- 5) **Lower trapezius:** Imagine sandbags on the bottom of your scapulae, lightly drawing them down as you lift your sternum and widen your chest. Make sure to keep the space between your scapulae wide.
- 6) **Cervical intrinsic:** Lightly lift the back of your head without lowering your chin, which should lengthen your neck. You might feel a light stretch. Only lift to the point where you feel a stretch. Hold for several seconds, then relax.

8. Survey of your knowledge of Key Terms in Patterning

<i>Read each term, then check the box that best describes your understanding of that term.</i>	I am familiar with the term and can describe how it shows up in a massage practice.	I am familiar with the term and could explain it to another person.	I am familiar with the term and would have difficulty explaining it, but I could identify its definition from a short list.	I have heard the term but do not know what it means.	I am unfamiliar with the term.
Patterning					
Autonomic Patterning					
Neuromuscular Patterning					
Pattern Recognition					
Forces that Shape Movement					
Sensorimotor Learning					
Sensorimotor Loop					
Habituation					
Defense Mechanisms					
Muscular Armor					
Startle Reflex					
Prevertebral and Vertebral Movement Patterns					
3 Components of Optimal Alignment					
Postural Muscle Function					
Postural Muscle Engagement in Bodywork					