

MOVEMENT NEUROGENIC EXERCISES

Adaptability

- 1. <u>Step-Touch with Direction Change:</u> Perform step-touch movements side-to-side, changing direction based on cues from a partner.
- 2. Forward and Backward Walk with Tempo Change: Walk forward and backward at different speeds based on verbal cues.
- 3. Alternating Step-Up and Down: Step up onto a low step, alternating feet and switching step direction every few reps.
- 4. Slow to Fast Arm Circles: Perform arm circles at varying speeds, switching from slow to fast when signaled.
- 5. <u>Side Shuffle with Pauses:</u> Shuffle side-to-side, pausing at random intervals based on partner cues.
- 6. Heel-to-Toe Walk with Stop Cues: Walk heel-to-toe, stopping on cue from a partner or visual signal.
- 7. Seated March with Speed Variation: March in place while seated, changing speed based on hand signals.
- 8. Box Tap with Alternating Feet: Tap a box with alternating feet, changing the foot that taps on a cue.
- 9. Backward Walk with Direction Change: Walk backward, switching to side or forward movement based on cues.
- 10. <u>Stationary Arm Movements with Speed Adjustments:</u> Move arms in front and to the sides, switching between slow and fast movements on cue.

Working Memory

- 1. Step Sequence Recall: Step side-to-side, then recall and repeat a sequence of numbers or colors given at the start.
- 2. <u>Balance Hold with Item Recall:</u> Hold a balance position while a partner reads a short list, then recall items after.
- 3. Seated Leg Lift with Math Tasks: Lift each leg in a seated position while solving simple math problems aloud.
- 4. Heel-to-Toe Walk with List Recitation: Walk heel-to-toe while recalling a short list of items given before starting.
- 5. Arm Circle and Memory Task: Perform arm circles while repeating a memorized number or word sequence.
- 6. Squat Hold with Word Recall: Hold a squat, then recall words read by a partner before starting the exercise.
- 7. March in Place with Sequence Memory: March in place while memorizing a sequence of colors or numbers.
- 8. Toe Tap with Pattern Recall: Tap toes in a specified pattern, then repeat the pattern from memory.
- 9. Sit-to-Stand with Object Recall: Perform sit-to-stand exercises, reciting a list of items after each rep.
- 10. Forward Lunge with Item Recall: Perform a forward lunge, then recall items from a short list after each lunge.



Rapid Processing of Information

- 1. Hand Claps with Verbal Cues: Clap hands based on verbal cues, alternating between fast and slow claps.
- 2. Cone Touch Drill: Place cones in a circle and touch each one based on verbal cues given by a partner.
- 3. Toe Tap with Direction Cues: Tap toes forward, backward, or to the side based on direction cues called out.
- 4. Step-Touch with Color Recognition: Step side-to-side and tap a color mat based on colors called out by a partner.
- 5. Light Ball Toss with Catch Cues: Toss a light ball and catch it only when a specific color or hand is shown by a partner.
- 6. <u>Reaction Stick Drop:</u> Partner drops a stick, and you attempt to catch it bef<mark>ore it hits</mark> the floor.
- 7. Arm Raise with Visual Signal: Raise alternating arms based on a visual signal (like a color card or hand gesture).
- 8. <u>Lateral Walk with Reaction Taps</u>: Walk laterally, tapping your foot on a spot whenever a partner claps.
- 9. Quick Feet Drill with Verbal Instructions: Perform quick feet drills, changing the pattern based on partner cues.
- 10. Seated March with Verbal Reaction: March in place and lift each leg based on a color called out by a partner.

Body Synchronization

- 1. Cross Body Arm and Leg Movements: While seated, tap opposite hand to opposite knee, alternating sides.
- 2. <u>Heel Tap with Arm Raise</u>: Tap one heel forward while lifting the opposite arm overhead, then alternate sides.
- 3. Single-Leg Balance with Arm Circles: Balance on one leg while making small arm circles, alternating arms every few seconds.
- 4. Forward Step with Arm Reach: Step forward with one foot while reaching both arms in the opposite direction.
- 5. Side Step with Opposite Arm Swing: Step side-to-side while swinging arms in the opposite direction.
- 6. <u>Cross-Legged March in Place:</u> March in place, crossing one leg over the other while coordinating with opposite arm swings.
- 7. <u>Step-Up with Arm Extension</u>: Step onto a low platform while extending arms forward, alternating legs.
- 8. Toe Touch with Arm Stretch: Touch one toe while extending the opposite arm overhead, switching sides each time.
- 9. Knee Lift with Elbow Tap: Lift one knee and tap it with the opposite elbow, alternating sides.
- 10. Side Tap with Forward Arm Reach: Tap one foot to the side while reaching both arms forward, switching sides with each tap.



Movement Adequacy

- 1. Heel-to-Toe Walk: Walk in a straight line, focusing on smooth, controlled heel-to-toe steps.
- 2. <u>Lateral Step with Arm Reach:</u> Step to the side, extending one arm forwa<mark>rd a</mark>s you move.
- 3. Side-to-Side Weight Shift: Shift weight from side to side in a wide stance, focusing on smooth transitions.
- 4. Forward Lunge with Controlled Return: Step forward into a lunge, returning to a standing position slowly.
- 5. <u>Seated Leg Extension with Hold:</u> Extend one leg forward, holding it out bri<mark>efly befo</mark>re switching legs.
- 6. <u>Slow High Knee March:</u> Perform a high knee march slowly, alternating legs in a controlled movement.
- 7. <u>Balance Hold with Foot Lift:</u> Balance on one leg, lifting the opposite foot off the ground and holding.
- 8. Seated Arm and Leg Extension: Extend one arm and the opposite leg simultaneously while seated, alternating sides.
- 9. Step-Touch with Arm Extension: Step to the side, extending arms outward and focusing on smooth, even movements.
- 10. Standing Calf Raise with Controlled Descent: Rise onto the balls of the feet, then lower heels slowly back down.

Sports Vision

- 1. Ball Toss with Color Identification: Partner tosses colored balls, and you call out the color of each one caught.
- 2. Spot the Target: Partner holds up different objects around the room, and you point to the correct one on cue.
- 3. Peripheral Catch Drill: Partner tosses a light ball from different angles, and you catch it using peripheral vision.
- 4. Cone Touch with Visual Focus: Touch colored cones in front of you based on the color shown by a partner.
- 5. Wall Spot Focus: Focus on specific spots on a wall, shifting gaze based on partner cues.
- 6. <u>Color Spot Walk:</u> Walk heel-to-toe on colored spots, identifying each color as you step.
- 7. Quick Gaze Shift Drill: Shift gaze between two objects held up by a partner, practicing quick focus changes.
- 8. Catch Drill with Moving Target: Partner moves a target around, and you attempt to tap it as it moves.
- 9. Hand-Eye Coordination with Toss: Partner tosses a light ball, and you catch it with one hand while tracking its movement.
- 10. <u>Visual Spot Tap:</u> Partner signals different colored spots to tap, practicing both vision and reaction.



Anticipation

- 1. Reaction Catch: Partner tosses a ball and pauses mid-toss before completing the throw, and you anticipate the catch.
- 2. <u>Lateral Step with Cue Reaction</u>: Step side-to-side, anticipating which direction to move based on partner signals.
- 3. Backpedal with Visual Cue: Walk backward, turning to face a partner wh<mark>en t</mark>hey raise a han<mark>d o</mark>r give a cue.
- 4. Quick Side Shuffle with Reaction: Shuffle side-to-side, reacting to a partner's visual cue to change direction.
- 5. <u>Anticipatory Ball Tap:</u> Tap a bouncing ball based on partner cues, practicing timing and prediction.
- 6. <u>Step and Catch Drill:</u> Partner fakes a ball toss, and you anticipate and catc<mark>h based on m</mark>ovement cues.
- 7. Forward Walk with Paused Cue: Walk forward, anticipating and stopping on a partner's cue.
- 8. Hand Clap Drill with Delayed Reaction: Partner claps, and you respond by clapping back as quickly as possible.
- 9. Toe Tap with Anticipation: Tap toes to different cones, anticipating the direction based on partner's signals.
- 10. Reaction Walk: Walk in place, reacting to a partner's cue to step forward or back.

Proprioception/Balance with Cognitive Exercises

- 1. Single-Leg Balance with Counting: Stand on one leg while counting backward from 20.
- 2. Foam Pad Stand with Recitation: Stand on a foam pad and recite a list of items (e.g., animals or colors).
- 3. <u>Heel-to-Toe Balance Walk with Math Task:</u> Walk heel-to-toe while solving simple math problems aloud.
- 4. <u>Balance Beam Walk with Word Recall:</u> Walk on a narrow surface, recalling words provided by a partner at the start.
- 5. <u>Seated Balance with Memory Task:</u> Balance on the edge of a chair, repeating a number sequence given by a partner.
- 6. <u>Single-Leg Stand with Hand Movements:</u> Balance on one leg while tracing letters or shapes in the air with your hand.
- 7. Foam Pad Side Step with Alphabet Recall: Stand on a foam pad, stepping side-to-side and reciting the alphabet backward.
- 8. <u>Balance on One Foot with Arm Circles:</u> Stand on one leg while making small circles with your arms.
- 9. Heel Raise on Pad with Number Recall: Perform heel raises on a foam pad, recalling numbers in a sequence after each rep.
- 10. Side-to-Side Weight Shift with Story Recall: Shift weight from side to side, recalling details of a short story told by a partner.



Cognitive Exercise Management

- 1. Step-Tap with Task Switching: Perform step-taps, alternating between counting and naming objects.
- 2. <u>Sit-to-Stand with Opposite Arm Reach:</u> Stand and sit while reaching with the opposite arm, changing tasks as prompted by a partner.
- 3. Side Shuffle with Task Shift: Shuffle side-to-side, switching between reciting numbers and colors.
- 4. Forward Step with Verbal Cues: Step forward with one leg, naming objects that start with a specific letter, switching letters on cue.
- 5. <u>Heel Raise with Counting Sequence:</u> Perform heel raises, switching betwee<mark>n counting</mark> by 2s, 5s, or 10s based on partner cues.
- 6. Seated March with Number Sequence Change: March in place, changing number sequences with each movement.
- 7. Step-Up with Color Recall: Step up onto a low platform, switching between color and number recall.
- 8. <u>Balance Hold with Task Shift:</u> Hold a balance position, alternating between counting and reciting names based on partner prompts.
- 9. Forward Lunge with Task Change: Perform lunges while switching between math and word recall tasks.
- 10. Side Step with Pattern Recall: Side step while switching between different tasks, like counting or naming items.

Emotional Regulation

- 1. Deep Breathing in Isometric Squat: Hold a light squat while focusing on deep, controlled breathing.
- 2. Wall Sit with Calm Visualization: Hold a wall sit, visualizing a relaxing scene or repeating a calming phrase.
- 3. Seated Arm Raise with Breath Focus: Raise arms overhead while inhaling deeply, then exhale slowly.
- 4. <u>Standing Calf Raise with Relaxed Focus:</u> Perform calf raises, focusing on slow, steady breathing.
- 5. <u>Balance Hold with Calming Thoughts:</u> Stand on one leg, visualizing a calm and peaceful scene.
- 6. <u>Bridge Hold with Slow Breathing:</u> Hold a glute bridge, inhaling and exhaling slowly, focusing on relaxation.
- 7. <u>Side Step with Mindful Breathing:</u> Step side-to-side, coordinating each step with a breath cycle.
- 8. Chair Pose with Controlled Inhalations: Hold a chair pose while focusing on slow, controlled breaths.
- 9. Forward Lunge with Calm Visualization: Perform a forward lunge, visualizing a peaceful environment.
- 10. Standing Balance with Deep Breathing: Balance on one leg while practicing deep breathing, focusing on calm thoughts.

