Standing Exercises

Chair assisted standing exercises are aimed at improving balance and lower body strength while performing various cognitive tasks. Balance and leg strengthening exercises can help prevent falls by improving the body's ability to control and maintain its center of gravity.

Index

- 1. Sit-to-Stand
- 2. Reverse Number Counting
- 3. Number Skipping by 3's
- Number Recall
- 5. Alphabet with Numbers
- 6. Math Equations
- 7. Number Skipping by 4's
- 8. Alphabet Foot Drawing
- 9. Number Foot Drawing
- 10.Leg Stances
- 11. Grounders
- 12. Toe Squats
- 13. Four Squares with Numbers
- 14. Color Squares
- 15.Leg Raises
- **16.** Leg Lifts 4
- **17.**Leg Lifts 3
- 18. Clap Tap 2
- 19. Three Cup Toe Taps
- 20. Tennis Ball Drill
- 21.Scarf Toss
- *Equipment needed: Tennis balls, 24x24 in. silk or nylon scarfs, 12oz. plastic cups (red, blue, green per participant)

1. Sit-to-Stand

Repeat proper technique before allowing the participants to stand anytime.

Description: The sit to stand movement is an excellent exercise for leg strengthening and its proper form is crucial in the safe transition from sitting to standing.

- 1. Sit tall in the chair with the feet flat on the floor.
- 2. Move the hips forward approximately 6 inches.
- 3. Bring toes beneath the knees.
- 4. Have feet pointed forward and at hip width.
- 5. Position the chin parallel to the floor.

- 6. Depending upon the conditioning level of the participant they may utilize one of the following arm positions in order of diff A) Hands placed on arm rests. B) Hands placed on thighs. C) Arms positioned outstretched in front of body. D) Arms positioned across the chest.
- 7. Slight forward bend at the waist bringing the chin over the balls of the feet.
- 8. With the eyes looking forward, stand straight up to the ceiling.

Single Leg Stands with Cognitive drills

Description: Considered one of the best leg endurance and balance exercises for older adults, the participant will perform the "flamingo" stand with each leg while completing a cognitive drill.

2. Reverse Number Counting

- 1. Explain to the participants that will counting backwards by twos starting from 51.
- 2. Have the participants stand to the right of their chair.
- 3. Place the left hand on top of the chair using the "piano touch technique" by keeping a light grasp.
- 4. Instruct the participants to relax and to take a deep breath.
- 5. Tell the participants that if their lifted leg becomes fatigued that it's ok to tap their toe to the floor.
- 6. Instruct the participants to lift their Right leg and perform a "flamingo" stance by keeping the knee high.
- 7. Instruct the participants to keep the base leg soft and to not lock the knee.
- 8. Progression: Dynamic motion with the leg moving up and down.
- 9. Print out a copy of the numbers from the Drill Appendix and keep the copy for future use. As the facilitator, it can be useful to have a reference sheet to keep the group on track in the number drill.

Reverse Number Counting

Right Leg: Count backwards by twos starting from 51 51,49,47,45,43,41,39,37,35,33,31,29,27,25,23,21,19,17,15,13,11,9,7,5,3,1

Left Leg: Count Backwards by threes starting from 74 74,71,68,65,62,59,56,53,50,47,44,41,38,35,32,29,26,23,20,17,14,11,8,5,2

3. Number Skipping by 3's

- 1. Explain to the participants that they will be counting from 1 to 50 and skipping every third number by not saying the number.
- 2. Have the participants stand to the right of their chair.

- 3. Place the left hand on top of the chair using the "piano touch technique" by keeping a light grasp.
- 4. Instruct the participants to relax and to take a deep breath.
- 5. Tell participants that if their lifted leg becomes fatigued that it's ok to tap their toe to the floor.
- 6. Instruct the participants to lift their Right leg and perform a "flamingo" stance by keeping the knee high,
- 7. Instruct the participants to keep the base leg soft and to not lock the knee.
- 8. Print out a copy of the numbers from the Dill Appendix and keep the copy for future use. As the facilitator, it can be useful to have a reference sheet to keep the group on track in the number drill.

4. Number Recall

- 1. Explain to the participants that they will be recalling a series of numbers given to them.
- 2. After the facilitator has called out the four numbers, the participants will repeat the same numbers in the order given.
- 3. Have the participants stand to the right of their chair.
- 4. Place the left hand on top of the chair using the "piano touch technique" by keeping a light grasp.
- 5. Instruct the participants to relax and to take a deep breath.
- 6. Tell participants that if the lifted leg becomes fatigued that it's ok to tap their toe to the floor.
- 7. Instruct the participants to lift their Right leg and perform a "flamingo" stance by keeping the knee high.
- 8. Instruct the participants to keep the base leg soft and to not lock the knee.
- 9. Recall progressions: 1) Forward/Reverse three numbers up to 30 seconds2) Forward/Reverse four numbers up to 60 seconds.
- 10. Print out a copy of the numbers from the Drill Appendix and keep the copy for future use.

```
3,4,6,7
5,3,9,1
8,2,1,5
1,4,3,8
6,7,4,9
2,3,9,5
4,1,8,3
7,5,3,6
9,1,4,1
6,5,2,3
Left Leg: Reverse number recall (3 or 4 numbers) as appropriate
8,3,4,7
6,2,9,4
7,4,5,6
5,8,3,2
3,7,1,9
3,4,7,5
5,6,8,9
4,1,0,5
2,8,1,3
7,4,2,9
```

Right Leg: Forward number recall (3 or 4 numbers) as appropriate

5. Alphabet with Numbers

Equipment needed: A/V set up

Material needed: Math: Alphabet with Numbers 1 PPT

Math: Alphabet 2 x Multiples PPT, Math: Alphabet 2 x Multiples Odd PPT

- 1. Explain to the participants that they will be saying the alphabet with its corresponding number.
- 2. Have the participants stand to the right of their chair.
- 3. Place the left hand on top of the chair using the "piano touch technique" by keeping a light grasp.
- 4. Instruct the participants to relax and to take a deep breath.
- 5. Tell participants that if the lifted leg becomes fatigued that it's ok to tap their toe to the floor.
- 6. Instruct the participants to lift their Right leg and perform a "flamingo" stance by keeping the knee high.
- 7. Present the first slide displaying A1, using it as a cue.
- 8. Have the participants verbalize the next letter and number i.e. B2, and advance the PPT to display B2.

- 9. Continue thru Z26
- 10. Instruct the participants to relax and to take a deep breath.
- 11. Inform the participants that they will be doing the alphabet and numbers in "reverse".
- 12. Instruct the participants to lift their Left leg and perform a "flamingo" stance.
- 13. Instruct the participants to keep their base leg soft and to not lock the knee.
- 14. Present the first slide displaying Z26, using it as a cue.
- 15. Have the participants verbalize the prior letter and number i.e. Y25, and advance the PPT to display Y25.
- 16. Continue thru A1.

6. Math Equations

- 1. Explain to the participants that they will be completing math equations while performing a single leg stance.
- 2. Have the participants stand to the right of their chair.
- 3. Place the left hand on top of the chair using the "piano touch technique" by keeping a light grasp.
- 4. Instruct the participants to relax and to take a deep breath.
- 5. Tell participants that if their lifted leg becomes fatigued that it's ok to tap their toe to the floor.
- 6. Instruct the participants to lift their Right leg and perform a "flamingo" stance by keeping the knee high.
- 7. Instruct the participants to keep their base leg soft and to not lock the knee.
- 8. Call out the math equations and return the leg upon completion.
- 9. Have the participants take a deep breath before lifting the Left leg.
- 10. Call out the math equations and return the leg upon completion.
- 11. Print out a copy of the equations from the Drill Appendix and keep the copy for future use.

Right Leg equations:

 $35 \div 7 = 5$

4×7=28

22-13=9

7+18=25

6×8=48

49÷7=7

80-12=68

4/16+4/16=1/2

18÷6=3

5+8+7=20 41-11-9=21 60÷4=15 9×6=54 18+3+4=25 Left Leg equations: 42÷2=21 3×12=36 39-13=26 17+18=35 4×11=44 51÷17=3

3×14=42

60-14=46

3/4+3/4=1 1/2

28÷4=7

5×14=70

6+9+4=19

31-5-8=18

30÷6=5

7×6=42

108+12+4=124

7. Number Skipping by 4's

8. Alphabet Foot Drawing

Description: A single leg stance exercise where the participant "traces" letters with the tip of the foot.

- 1. Have the participants stand to the right of their chair.
- 2. Place the left hand on top of the chair using the "piano touch technique" by keeping a light grasp.
- 3. Instruct the participants to visualize the letter called by the facilitator.
- 4. Instruct the participants to "trace" the alphabet letter with the toe of the foot.
- 5. Instruct the participants to relax and to take a deep breath.
- 6. Instruct the participants to lift their Right heel keeping the toe lightly touching the floor.
- 7. Instruct the participants to keep their base leg soft and to not lock the knee.
- 8. Right foot: Capital letters A-M
- 9. Left foot: Capital letters N-Z

10. Progressions: A) Cursive letters B) Upside down letters C) Mirrored letters

9. Number Foot Drawing

10. Leg Stances

Description: A progressive series of altered bases of support utilizing a two legged stance.

- 1. Have the participants stand to the right of their chair.
- 2. Place the left hand on top of the chair using the "piano touch technique" by keeping a light grasp.
- 3. Have the participants begin by standing in the neutral position where the feet are pointed forward and are positioned at shoulder width.
- 4. Instruct the participants to relax and to take a deep breath.

Staggered Split Stance with eyes closed:

- 1) Slide the Left foot forward so that the heel is even with the toes of the right foot.
- 2) Shift weight in a forward direction approximately 3-4 inches until the hips are between the heel of the left foot and the toes of the right foot.
- 3) Instruct the participants to relax and to take a deep breath.
- 4) Close eyes and hold for 15 seconds.
- 5) Repeat the split stance with the Right foot forward.

Semi-Tandem Stance with head turns:

- 1) Slide the Left foot directly in front of the right foot where there is 4-5 inches of space between the heel and the toe.
- 2) Instruct the participants to relax and to take a deep breath.
- 3) Instruct the participants to lead with their eyes first before turning their head.
- 4) Turn eyes/head to the right and hold.
- 5) Return eyes/head to center.
- 6) Turn eyes/head to the left and hold.
- 7) Return eyes/head to center.
- 8) Turn eyes/head upward toward the ceiling and hold.
- 9) Return eyes/head to center.
- 10) Turn eyes/head downward to the floor and hold.
- 11) Return eyes/head to center.
- 12) Repeat the **Semi-Tandem stance** with head turns with the Right foot forward.

Tandem stance with arm release:

- 1) Slide the Left foot directly in front of the right foot where the heel and toe are touching.
- 2) Instruct participants that the Tandem stance is one of the most challenging balance exercises.

- 3) Instruct the participants to relax and to take a deep breath.
- 4) When the participants feel comfortable enough, instruct them to lift their left hand from the chair backrest.
- 5) Count backwards from 10 to 1 as the participants "surf".
- 6) Repeat the **Tandem stance** with the Right foot forward.

11. Grounders

Description: A thigh strengthening two legged stance exercise that is easy on the knees.

- 1. Have the participants stand behind their chair.
- Place feet apart wider than shoulder width.
- 3. Keep Left foot pointed forward.
- 4. Position the Right foot to where the heel is pointing to the instep of the Left foot.
- 5. Place hands on the hips.
- 6. Keep head, torso and pelvis facing forward (to the facilitator).
- 7. Bend the right knee and "glide" in a straight line.
- 8. Bring the right knee no further than to the front of the foot.
- 9. Hold for 2-3 seconds.
- 10. Return to upright position.
- 11. Complete 5-10 repetitions as tolerated.
- 12. Repeat with Right foot forward.
- 13. Position the Left foot to where the heel is pointing to the instep of the Right foot.
- 14. Place hands on the hips.
- 15. Keep head, torso and pelvis facing forward (to the facilitator).
- 16. Bend the left knee and "glide" in a straight line.
- 17. Bring the left knee no further than to the front of the foot.
- 18. Hold for 2-3 seconds.
- 19. Return to upright position.
- 20. Complete 5-10 repetitions as tolerated.

12. Toe Squats

Description: An upper and lower leg strengthening exercise.

- **1.** Have participants stand in a neutral position behind their chair with the feet hip width apart.
- 2. Place hands on top of the chair using the "piano touch technique" by keeping a light touch.
- **3.** Instruct the participants to relax and to take a deep breath.
- **4.** Stand on toes by raising the heels and hold.
- **5.** Keeping the heels raised, perform a half squat by releasing and flexing the knees.
- **6.** Keeping the heels raised, straighten the legs.
- 7. Lower the heels to the floor.

- **8.** Bring toes and the balls of feet off the floor.
- **9.** Body weight will shift to the heels of the feet.
- **10.** Hold for a count of two.
- **11.** Return to a neutral starting position.
- **12.** Complete 5-10 repetitions as tolerated.

13. Four Squares with Numbers

Description: A leg strengthening and balance exercise with a cognitive component where one toe touches of a series of numbers.

Equipment: A/V set-up for Exercise: Four Squares with Numbers PPT display

- 1. Have the participants stand behind their chair.
- 2. Place hands on top of the chair using the "piano touch technique" by keeping a light touch.
- 3. Instruct the participants to relax and to take a deep breath.
- 4. Display the first Four Square with Numbers PPT slide.
- 5. Instruct participants to imagine that they are positioned in the center of the four squares.
- 6. Instruct participants that they will be touching the numbers with their toe.
- 7. Shift weight to Left leg keeping knee "soft" by not locking the knee.
- 8. Touch the "imaginary" numbers with the Right toe after they are called out by the facilitator.
- 9. Have the participants provide the sum of the numbers called out "after" they have completed the toe touch series.
- 10. Complete 5 repetitions
- 11. Display the second Four Square PPT slide.
- 12. Shift weight to Right leg keeping knee "soft" by not locking the knee.
- 13. Touch "imaginary" numbers with the Left toe "after" they are called out by the facilitator.
- 14. Have the participants provide the sum of the numbers called out "after" they have completed the toe touch series.
- 15. Complete 5 repetitions
- 16. Repeat with Reverse Right toe touch
- 17. Touch the "imaginary" numbers with the Right toe in reverse order after they are called out by the facilitator.
- 18. Have the participants provide the sum of the numbers "<u>after</u>" they have completed the toe touch series.
- 19. Complete 5 repetitions
- 20. Repeat with Reverse Left toe touches
- 21. Touch the "imaginary" numbers with the Left toe in reverse order after they are called out by the facilitator.

- 22. Have the participants provide the sum of the numbers "<u>after</u>" they have completed the toe touch series.
- 23. Complete 5 repetitions.

Right Toe	Left Toe	Reverse Right Toe	Reverse Left Toe
1, 2, 3 = 6	1, 2, 3, 1 = 7	3, 4, 2 = 9	1, 3, 1, 4 = 9
2, 3, 2 = 7	4, 1, 2, 1 = 8	4, 2, 1 = 7	3, 1, 4, 2 = 10
2, 1, 1 = 4	1, 2, 1, 2 = 6	2, 1, 3 = 6	1, 4, 1, 2 = 8
2, 4, 2 = 8	3, 1, 2, 4 = 10	1, 3, 1 = 5	2, 3, 2, 1 = 8
4, 4, 1 = 9	1, 3, 1, 2 = 7	3, 4, 1 = 8	4, 1, 2, 3 = 10

24. Print out a copy of the number sequences from the Drill Appendix and keep the copy for future use.

14. Four Square with Colors

15. Leg Raises

Description: A core and upper leg strengthening leg exercise where one leg is raised while standing on the opposite leg.

- 1. Have the participants stand to the right of their chair.
- 2. Place the left hand on top of the chair using the "piano touch technique" by keeping a light grasp.
- 3. Stand tall in the neutral position.
- 4. Instruct the participants to take a deep breath.
- 5. Lift Right leg forward with the foot pointed upward.
- 6. Hold the leg up for a count of two.
- 7. Slowly, return the leg to the floor.
- 8. Complete five repetitions
- 9. Lift the Left leg laterally to the side with the foot pointed forward.
- 10. Hold the leg to the side for a count of two.
- 11. Slowly, return the leg to floor.
- 12. Complete five repetitions
- 13. Keeping the knee straight, do a "rear kick" lifting the Right leg behind the body.
- 14. With the foot pointed downward, hold the leg up for a count of two.
- 15. Slowly, return the leg to floor.
- 16. Complete five repetitions
- 17. Change sides by having the participants stand to the left of their chair.
- 18. Place the right hand on top of the chair using the "piano touch technique" by keeping a light grasp.
- 19. Stand tall in the neutral position.
- 20. Instruct the participants to take a deep breath.
- 21. Lift the Left leg forward with the foot pointed upward.

- 22. Hold the leg up for a count of two.
- 23. Slowly, return the leg to the floor.
- 24. Complete five repetitions
- 25. Lift the Right leg laterally to the side with the foot pointed forward.
- 26. Hold the leg to the side for a count of two.
- 27. Slowly, return the leg to floor.
- 28. Complete five repetitions
- 29. Keeping the knee straight, do a "rear kick" lifting the Left leg behind the body.
- 30. With the foot pointed downward, hold the leg up for a count of two.
- 31. Slowly, return the leg to floor.
- 32. Complete five repetitions

16. Leg Lifts 4 with PPT

Description: A dynamic balance drill where the participant is given a cue to raise one leg while the opposite side hand to the other shoulder.

Equipment: A/V set-up

Materials needed: Exercise: Leg Lifts 4 PPT display.

- 1. Have the participants stand behind their chair.
- 2. Place the both hands on top of the chair using the "piano touch technique" by keeping a light grasp.
- 3. Stand tall in the neutral position.
- 4. Instruct the participants that the letters **R** or **L** will be displayed on a series of slides.
- 5. When a Black **R** appears: lift the Right leg and place the Left hand to the Right shoulder.
- 6. When a Black **L** appears: lift the Left leg and place the Right hand to the Left shoulder.
- 7. When a Red L appears: lift the Right leg and place the Left hand to the Right shoulder.
- 8. When a Red L appears: lift the Right leg and place the Left hand to the Right shoulder
- 9. Instruct the participants to take a deep breath.
- 10. Proceed with PPT slide presentation.

17. Leg Lifts 3 with PPT

18. Clap Taps 2 PPT

Description: A dynamic balance and concentration drill where the participant has to first perform a hand clap then touch one hand to a knee followed by a hand clap.

Equipment: A/V set-up for Cross-Lateral: Clap Taps 2 PPT display.

- 1. Have the participants stand behind their chair.
- Place the both hands on top of the chair using the "piano touch technique".
- 3. Stand tall in the neutral position.
- 4. Instruct the participants that the words Right and Left will be displayed on a series of slides.
- 5. For example: If the words Right/Right is displayed the following action need to be performed.
 - 1) Clap hands once.
 - 2) Lift Right knee.
 - 3) Touch Right knee with Right hand.
 - 4) Return foot to floor while making another single hand Clap.
- 6. Left/Left = Clap, Left hand to Left knee, Clap
- 7. Right/Left = Clap, Right hand to Left knee, Clap
- 8. Left/Right = Clap, Left hand to Right knee, Clap

19. Three Cup Toe Tap

Description: A leg strengthening and balance exercise with a cognitive component where one toe touches of a series of colored plastic cups.

Equipment: One Red, Green, Blue 12 oz. plastic cup per participant.

- 1. Put three cups upside down behind the participant's chair.
- 2. Place the cups 3 inches apart horizontally (behind the chair legs).
- 3. Have the participants stand behind their chair.
- 4. Instruct the participants that the drill calls for the tapping of the toe of the foot to the cup.
- Demonstrate the flexion of the foot to touch the cups rather than "cup stomping".
- 6. Instruct the participants that you will be first calling either the word Right or Left to designate which foot will be "tapping" the cups.
- 7. Instruct the participants to tap the floor between each cup tap.
- 8. Instruct the participants to wait to tap the cups until the facilitator has called out the series of colors.
- 9. Call out the designated foot and the series of three or four colors.

Right- Blue/Red/Green/Red

Left- Green/Blue/Red/Blue

Right Red/Green/Blue/Red

Left- Blue/Red/Green/Red

Left- Green/Blue/Red/Green

Right- Red/Green/Blue/Red

Left- Blue/Red/Green/Red

Right- Red/Green/Blue/Green

Right- Blue/Red/Green/Red

Left- Green/Blue/Red/Green

- 10. Progression: With the designated foot, tap the colored cups in the "opposite" order after they are called out by the facilitator.
- 11. Progression: With the designated foot, tap the colored cups in the "progressive" order after they are called out by the facilitator.

Right-

B, G

B, G, R

B, G, R, G

B, G, R, G, B

B, G, R, G, B, R

Left-

R, G

R, G, R

R, G, R, G

R, G, R, G, B

R, G, R, G, B, R

12. Make a copy of the color sequences from the Drill Appendix for future use.

20. Tennis Ball Drills

21. Scarf Toss