Concentration Drills

The brain is like a muscle. The more you use it, the more you can continue to use it. Our brain thrives on variety. This can be done by exercising the brain with activities and drills that are both novel and challenging. The brain exercises that are utilized in the **CogworxABC** activity program are physically simple but cognitively complex. They require a level of concentration to be able to perform the purposeful finger, hand and arm movements. Concentration is an ability that can be improved with practice. As we age, there tends to be a decrease in our ability to pay attention. Attention is the brain process necessary for learning. Think about it, in order to learn or remember anything, you have to pay enough attention to the information so it can be memorized. Without attention, there would be no new material to memorize or master! Performing attention requiring activities and drills are an essential part of any program wanting to develop working memory.

Index

- 1. Yardstick Counting
- 2. Pinkie-Thumb
- 3. Yardstick Tap
- **4.** Alternating Finger Touches
- **5.** Three to Three Finger
- 6. Six Shooter
- 7. Itsy Bitsy spider
- 8. Hand Circles
- 9. Alternating Finger Numbers
- 10.Locomotion with plates

Equipment needed for Concentration drills: One yardstick and one Styrofoam plate per participant

1. Yardstick Counting

Equipment needed: 36 inch yardstick for each participant (preferably ones with dark lettering for easier viewing)

Description: A cognitive, visual-spatial drill where the participants will be touching a yardstick and recalling sequential number pairs.

- 1. Have the participants place the yardstick on their lap (or on the arm rests of their chair) with the numbers upright.
- Number pair progressions: 18/18,17/19,16/20,15/21,14/22,13/23,12/24,11/25,10/26,9/27,8/28,7/29,6/30, 5/31,4/32,3/33,2/34,1/35,0/36
- 3. There will be two rotations of the drill.
- 4. Facilitator will initiate by verbalizing each number sequence.

- 5. With each finger touch, have the participants verbalize the number.
- 6. Touch the number 18 with the Right forefinger, then remove it.
- 7. Touch the number 18 with the Left forefinger, then remove it.
- 8. With each subsequent number pair, continue touching each number to the Left of 18 with the Right forefinger and each number to the Right of 18 with the Left forefinger, removing the finger after each touch.
- 9. After completing the first progression (12/24, 6/30 or 0/36) reverse the sequence and return to 18/18.
- 10. Second rotation: the participants will not touch the yardstick, but will verbalize each number pair.
- 11. Instruct the participants that they may continue to use the yardstick (as a cue) to remember the number pairs.
- 12. Progression: encourage the participants to close their eyes during the drill and to mentally think of the next number pair sequence. One helpful cue to tell the participants is that all the number pairs equal to 36.
- 13. Print the number pairs from the Drill Appendix document to use as cue tool to assist in facilitating the number pair recall.

2. Pinkie-Thumb

Description: A concentration drill alternately utilizing the flexion and extension of the thumb and little finger of both hands.

- 1. Supinate the hands by turning the palms upward.
- 2. Keeping very light tension, close the fingers and thumb into the palm of the hand.
- 3. Keep elbows and hands at body width.
- 4. Simultaneously extend the thumb of the **right** hand while extending the pinkie of the **left** hand.
- 5. Bring both the thumb and pinkie back into the palm of the hands.
- 6. Simultaneously extend the thumb of the **left** hand while extending the pinkie of the **right** hand.
- 7. Bring both the thumb and pinkie back into the palm of the hands.
- 8. Complete 10 repetitions, (remind participants to keep their hand tension loose).
- 9. Complete 2-3 sets as tolerated, (have the participants shake their fingers between sets).
- 10. Progression: 1) have participants cross their arms at the wrist while performing the drill 2) perform the thumb-finger movements in sequential order

3. Yardstick Tap Drill

Equipment needed: 36 inch yardstick for each participant (preferably ones with dark lettering for easier viewing)

Description: A concentration, speed - processing drill where the participants will be touching a yardstick with either Right or Left forefinger onto a number verbalized by the facilitator.

- 1. Have the participants place the yardstick on their lap (or on the arm rests of their chair) with the numbers upright.
- 2. Instruct the participants that they are to touch the number on the yardstick with the forefinger of the hand as verbalized by the facilitator
- 3. Hand/Number Pairs: Right/Left 6,12,18,24,30
- 4. As this is a speed processing drill, allow no more than 2 seconds between calls.
- 5. Progression: Allow only 1 second between calls and increase as tolerated.
- 6. Print the letter/number pairs from the Drill Appendix document.
- 7. Sample call list:

R6,L12,L24,R24,L18,R30,L30,L12,R6,R18,L6,L24,R12,L18,R18,R24,L30,L6, R12,R24,L30,R30,R6,L12,L24,R24,L18,R30,L30,L12,R6,R18,L6,L24,R12, L18,R18,R24,L30,L6,R12,R24,L30,R30,L12,R24,R30,L12,R6,L6,R12,R18, L30,R12,L30,R6,L24,L18,L30,R6,L6,R12,R18,L30,R12,L30,L12,R24,R30,L12

4. Alternating Finger Touches

Description: A concentration drill where the fingers sequentially touch the thumb of one hand while the fingers touch the thumb of the other hand in the opposite direction.

- 1. Supinate the hands by turning the palms upward.
- 2. Keeping very light tension, close the fingers and thumb into the palm of the hand.
- 3. Keep elbows and hands at body width.
- 4. With the **left** hand begin by touching the forefinger and thumb together.
- 5. Continue with touching the middle finger, ring finger and little finger to the thumb.
- 6. Hold the thumb-little finger position.
- 7. With the **right** hand begin by touching the little finger and thumb together.
- 8. Continue with touching the ring finger, middle finger and fore finger to the thumb.
- 9. Hold the thumb-fore finger position.

- 10. Reverse the finger touch order on the **left** hand.
- 11. Reverse the finger touch order on the **right** hand.
- 12. One rotation has been completed.
- 13. Complete 5 rotations.
- 14. Encourage the participants to perform the drill slowly to maximize the concentration effort
- 15. Progression: A) Increase the number of rotations B) Using both hands at the same time, perform the finger-thumb touches

5. Three to Three Finger

Description: A concentration drill alternately utilizing the flexion and extension of the thumb, forefinger, middle finger and ring finger of both hands.

1. Supinate the hands by turning the palms upward.

2. Keeping very light tension, close the fingers and thumb into the palm of the hand.

3. Keep elbows and hands at body width.

- 4. This is a sequential series.
- 5. Extend the thumb, forefinger and middle finger of the **right** hand
- 6. Extend the forefinger, middle finger and ring finger of the **left** hand.

7. With the **left** hand, extend the thumb and bring the ring finger back into the palm of the hand

8. Extend the ring finger and bring in the thumb into the palm of the **right** hand.

9. This completes one repetition.

10. Next, extend the thumb of the **right** hand while bringing in the ring finger.

11. With the **left** hand, bring the thumb back into the palm of the hand while extending the ring finger.

12. To promote concentration, encourage the participants to perform the drill slowly.

13. Complete 5 repetitions, (remind participants to keep their hand tension loose).

14. Complete 2-3 sets, (have the participants shake their fingers between sets).

15. Progression: Repeat finger movements with both hands simultaneously.

6. Six-Shooter

Description: A concentration drill alternately utilizing the flexion and extension of the thumb and forefinger of both hands.

- 1. Point the forefinger of both hands outward.
- 2. Point the thumb of both hands upward.
- 3. With arms at body width, the participant should have both hands in a "six-shooter" position.
- 4. With the **righ**t hand, flex the forefinger inward to the palm while keeping the thumb pointed upward.
- 5. With the **left** hand, flex the thumb inward to the palm while keeping the forefinger pointed outward.
- 6. With the **righ**t hand, extend the forefinger outward while keeping the thumb pointed upward.
- 7. With the **left** hand, extend the thumb outward while keeping the forefinger pointed outward.
- 8. This completes one rotation
- 9. With the **left** hand, flex the forefinger inward to the palm while keeping the thumb pointed upward.
- 10. With the **right** hand, flex the thumb inward to the palm while keeping the forefinger pointed outward.
- 11. With the **left** hand, extend the forefinger outward while keeping the thumb pointed upward.
- 12. With the **right** hand, extend the thumb outward while keeping the forefinger pointed outward.
- 13. To promote concentration, encourage the participants to perform the drill slowly.
- 14. Complete 5 repetitions, (remind participants to keep their hand tension loose).
- 15. Complete 2 sets, (have the participants shake their hands between sets).
- 16. Progression: Repeat a finger-thumb movement of the opposite hands simultaneously.

7. Itsy Bitsy Spider

Description: A concentration drill where the finger of one hand sequentially touches the thumb of the other hand.

- 1. Point the forefinger of both hands upward.
- 2. Point the thumb of both hands toward each other. (The hands should look like a "goalpost")
- Keeping both forefingers pointed upward, touch the thumb of the left hand to the tip of the forefinger of the right hand. (The left hand should look like an "L" on top of a backwards "L" of the right hand)
- 4. Keeping the left thumb and right finger together, rotate the right thumb inward and upward until the right thumb and left forefinger touch.
- 5. Rotate the hands to the right, 90 degrees by bringing the right arm into the body. (The hands should look like a rectangle with the thumbs pointed vertically and the forefingers pointed horizontally.)
- 6. To perform an "upward" rotation, keep the left forefinger and right thumb together.
- 7. Rotate the left thumb inward while rotating the right forefinger outward.
- 8. Continue the rotation until the left thumb and the right forefinger touch.
- 9. Repeat by keeping the left thumb and right forefinger together.
- 10. Complete 1 set of 10 "upward " rotations
- 11. To perform the "downward" rotation, rotate the right thumb inward while rotating the left forefinger outward.
- 12. Continue the rotation until the right thumb and the left forefinger touch.
- 13. Rotate the Right forefinger outward while rotating the Left thumb inward.
- 14. Continue the rotation until the Left thumb and Right forefinger touch.
- 15. Complete 1 set of 10 "downward" rotations.
- 16. Progression: perform drill with eyes closed.