# **Toe Targets**

## Activity 1

This is a simple activity with multiple benefits for all ages. Doing Toe Targets helps us improve our focus, our ability to analyze words, sentences, and text, as well as interact with our environment.

Place poker chips or small circles or rectangles on the ground or floor in randomly spaced distances covering thirty to forty feet. Each target or chip should be slightly larger than a half dollar coin.

You may cut out the chips on the next page and use them.

Walk down the line of dots and per her or his toe on the chip so that the tip of their toe is centered on the chip.

Precisely targeting the toe of each foot on a randomly spaced target (spot) requires a higher level of balance and visual motor control than normal walking requires.

This activity is helpful for those that have difficulty with keeping their place in a book while reading, those that skip or repeat words while reading, as well as slow and labored handwriting. The toe target activity aids us in focus and our ability to analyze words and text. This is also beneficial for those that spend a lot of time sitting and working in front of a computer or other electronic device. Additionally, it is helpful for those with neck and/or back problems.

### Things to look for:

Observe the accuracy the student targets the toe and how balanced and relaxed he/she is while doing the activity. When the activity becomes stable and accurate, try to do it faster with the same accuracy. The faster this activity can be performed accurately, the higher the level of performance. Additionally, observe over time how efficiently the student works on reading or other academic or work related pursuits.



## WHY DO THESE SIMPLE ACTIVITIES?

Most of us don't think about learning skills in conjunction with the brain-body connection and movement. However, the brain-body connection and movement are very important to your ability to learn and master reading skills. The brain and body work together as a machine, one designed to move through space efficiently, walking, moving, and maintaining balance.

The vestibular system maintains balance and spatial orientation. As you walk, your arms and legs swing, counterbalancing each other. The hips and buttocks stabilize the body. Your eyes need to be stable in space so you can both see and read a sign that is 20 feet away while walking. Together, the neck and vestibular system stabilize and refine the head and vision system.

## The Vestibular System and Learning

The vestibular system is the sensory system that sends signals to the neural structures that control eye movement. Because we learn and read through eye movements, the vestibular system is a critical piece of the brain-body connection. It helps us focus on and perceive both objects and words, take in and analyze shapes, sizes, and directions of objects, words, sentences, and passages. It helps us interact with our environment every day.

Movement triggers the vestibular system. The body then passes information received in a round-trip pattern from the spinal cord to the brain to and back. When an action is completed, the cortex (brain) processes the information received during the action and sorts it into usable, retrievable pieces. Higher-order thinking takes place during this process, and both short-term and long-term memory banks store information.

## The Brain-Body Connection Impacts Reading Skills

The vestibular system needs to be activated to have higher-order thinking, receiving, and interpreting take place. The brain takes in information from our visual, auditory, and tactile/kinesthetic systems. The vestibular system then sifts through words, shapes, sizes, directions, and space, interpreting the data. Next, it sends it to specific areas of the brain to make sense of and retain meaning from it.

The vestibular system and the brain-body connection directly impact your ability to receive and interpret words, sentences, paragraphs, and stories. It allows you to see the shapes, sizes, and positions of letters in space. Additionally, it helps you visually scan words across a page in order to read fluently and accurately. Without the ability to scan words across a page quickly and accurately, reading is stilted and comprehension is lost. As we improve the vestibular system, the system of brain-balance, reading, and overall learning improves.

## Brain-Body Connection Activities Improve Learning Skills

Brain-body activities are specific movement activities such as toe targets, balancing on an exercise ball, doing a tree pose, or even tossing a bean bag in specific ways. Do these short activities for only a few minutes each day. Sensory movement activities like these help improve academic skills such as reading. Extensive research from NASA demonstrates how brain-body activities can impact our ability to learn.

### SET-UP

Make a line poker chips or small circles or rectangles on the ground or floor in randomly large circular or rectangular shapes, spacing them a variety of distances apart. Each target or chip should be slightly larger than a half dollar coin.

You may cut out the chips on the next pages and use them.

### **OBJECT OF THE GAME**

Precisely targeting the toe of each foot on a randomly spaced target (spot) and keep your balance. This requires a higher level of balance and visual motor control than normal walking requires. It is harder than you might think!

This activity is helpful for those that have difficulty with keeping their place in a book while reading, those that skip or repeat words while reading, as well as slow and labored handwriting. This is also beneficial for those that spend a lot of time sitting and working in front of a computer or other electronic device. Additionally, it is helpful for those with neck and/or back problems.

#### **PLAY**

Each turn, players must walk around the shape, precisely targeting the toe of each foot on the randomly spaced target (spot) and keep your balance.

### MORE ADVANCED TOE TARGET 2 ACTIVITIES

Alternate the shapes you are walking in from squares to circular shapes and even 5-sided or 6-sided shapes in the same way as described above.

Do the same activities as described above but increase your speed.

### THINGS TO LOOK FOR

- 1. Observe the accuracy the student targets the toe and how balanced and relaxed he/she is while doing the activity.
- 2. When the activity becomes stable and accurate, try to do it faster with the same accuracy. The faster this activity can be performed accurately, the higher the level of performance.
- 3. Additionally, observe over time how efficiently the student works on reading or other academic or work related pursuits.

Activity adapted from A Life in Balance by Frank Belgau



