



SPORTS VISION INSTITUTE

# 8 WEEK BETA V3 ATHLETE PROGRAM



VISION, VESTIBULAR, VAGUS





### Welcome!

Studies show that professional athletes' eyes have better movement, depth perception, peripheral vision, accommodation, binocularity, coordination with the brain and body, and visual memory. The information the eyes bring in feeds into 30+ parts of the brain that we know of.

### The goals of this program are to:

- to help the you better understand how your eyes work
- to strengthen your basic extraocular and accommodative muscle facilities in tandem with your vestibular and vagus system
- to elevate your visual skills to higher levels than possessed by the average individual
- to provide a systematic path toward gaining a competitive edge
- to ultimately do more with your body with less effort
- to help you win more games



### The Eyes LEAD THE HEAD

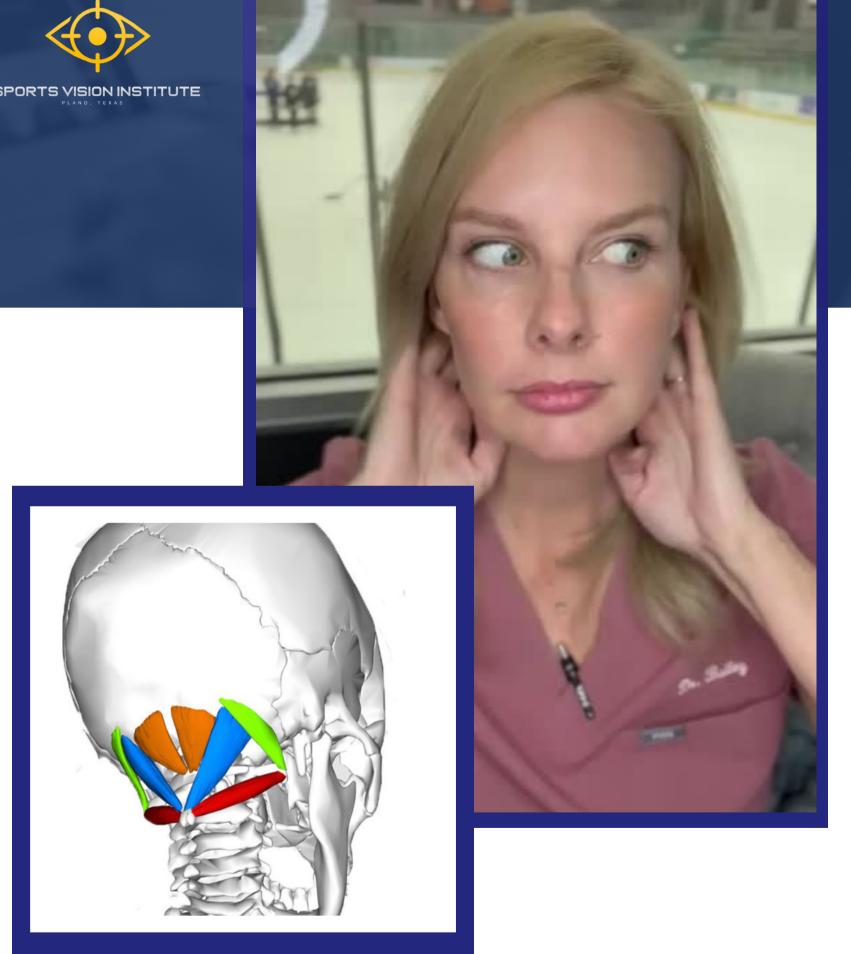


### Try this (just an illustration, not an exercise!):

Find your neck muscles just below base of the back of your skull (suboccipital muscles). Gently place the tips of your fingers on those muscles and hold them there.

Move your eyes left, then right, then left, then right, —> left —> right —> left —> right —> left... Did you feel anything?

You should have felt those neck muscles pump or move a little. These suboccipital muscles position our head, and they are neurologically linked to eye position and will respond as you move your eyes. Then the head leads the body.





### What to expect:

Expect 3-4 exercises to take 15-20 minutes. Do them for 3 days weekly for 8 weeks. You may feel free to do your exercises up to 5 days/week if you want to go above and beyond. I have provided a PDF that has a table to help you monitor your progress.

Where some athletes notice an improvement in 1-2 sessions, you may not notice any changes until after 8-12 sessions.

### **At Home Vision Therapy**

Doing daily oculomotor exercise as prescribed is a key component to success in improving the athlete's short- and long-term vision processing skills. Build awareness of the feeling of the eye muscles during therapy so that the brain can make a record of it. Do your best, stay positive in the process, be honest with yourself, and grow your mastery. Enjoy winning more games!



### Sports Vision Therapy

Non-prescriptive Vision, Vestibular, and Vagus exercises that any athlete can benefit from and screen for problems.



### Accommodation

Accommodation is a monocular muscle action that focuses vision along the z-axis and is the foundation for binocular alignment.

CRANIAL NERVE II, III



### Binocuar Alignment

Your brain merges
2 images into
1 single image. This
gives us depth.
CRANIAL NERVES
II, III, IV, & VI



### Vestibular Ocular Reflex

The ability for the eyes to be stable through a rotation is extremely important. CRANIAL NERVES II, III, IV, VI, & VIII



### Vagus

The vagus nerve
runs from the
brainstem to every
organ in the body.
Good vagal tone
keeps our body calm.
CRANIAL NERVE X



### Central-Peripheral Integration

Maintain your
attention on what
matters without
getting tunnel vision.
CRANIAL NERVE II

## A NOTE ABOUT SCREEN TIME

ZERO SCREEN TIME 2-3 HOURS BEFORE GAMES OR PRACTICE.

Also limit screen time to 2-4 hours/day. Read it and weep.

Staring up close at a screen can make an athlete's accommodation "stuck." This can easily interfere with z-axis quickness and depth perception. Screen time can also fatigue an athlete's eyes before they even get started with a game. I am seeing accommodative spasm in kids more and more, which directly affect athlete's near-far (z-axis) quickness.



### **EXERCISE 1**

### ACCOMMODATION

EXTRA CREDIT IF YOU DO THESE WHILE LISTENING TO HEMI-SYNC OR BACH

## Exercise 1 Accommodation aka Near-Far Quickness

#### You will need:

- One Large Near-Far Chart (print from PDF)
- One Small Near-Far Chart (print from PDF)
- Metronome or Metronome App
- Wear your glasses or contacts if you wear them

Tape the larger distance chart on a wall 10 ft away; hold the small chart at reading distance.

With an eye patch, spoon, or your hand, cover your left eye.

Large Near-Far Chart @10 ft Small Near-Far Chart @14-16 inches

### Continued....

Using the right eye (left eye covered), read aloud the first letter (top left) on the distance chart. Always make the letter clear and single. Move your focus to the first letter (top left) on the near chart. Make sure the letter is clear and single, and read it aloud.

Shift your vision to the next letter/number on the chart at distance then at near, saying it aloud when it is clear and single.

Keep shifting between the two charts until you have finished the chart.



### Continued....

- Always push yourself to GO FAST. Don't let yourself get in a rhythm. Go as fast as you can.
- Repeat the entire charts for the LEFT eye, then
  again for BOTH eyes. Complete 1 round per day,
  3-5 days per week. When each level is mastered,
  proceed to the next level.

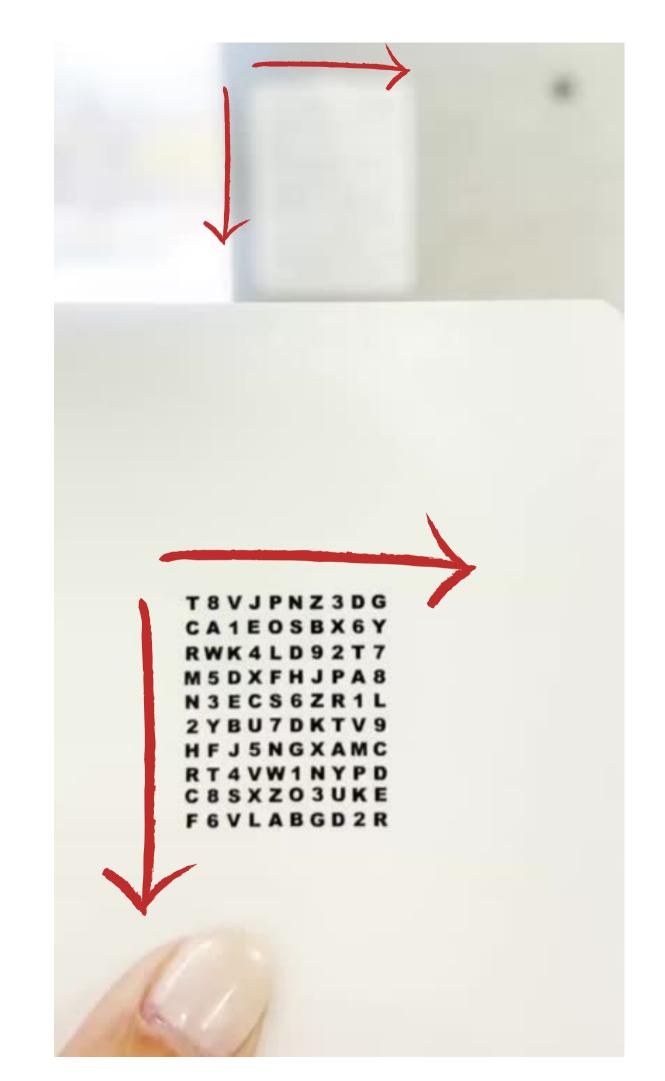


Continued....

### LEVEL 1

- While standing, complete the charts reading left—>right & up—>down (like you'd normally read a book) without slowing down in the middle or the end of the chart.
- Read the letters aloud (this helps vagal tone).

You have mastered this level when you are able to do all of this accurately without slowing down too much. Proceed to LEVEL 2.

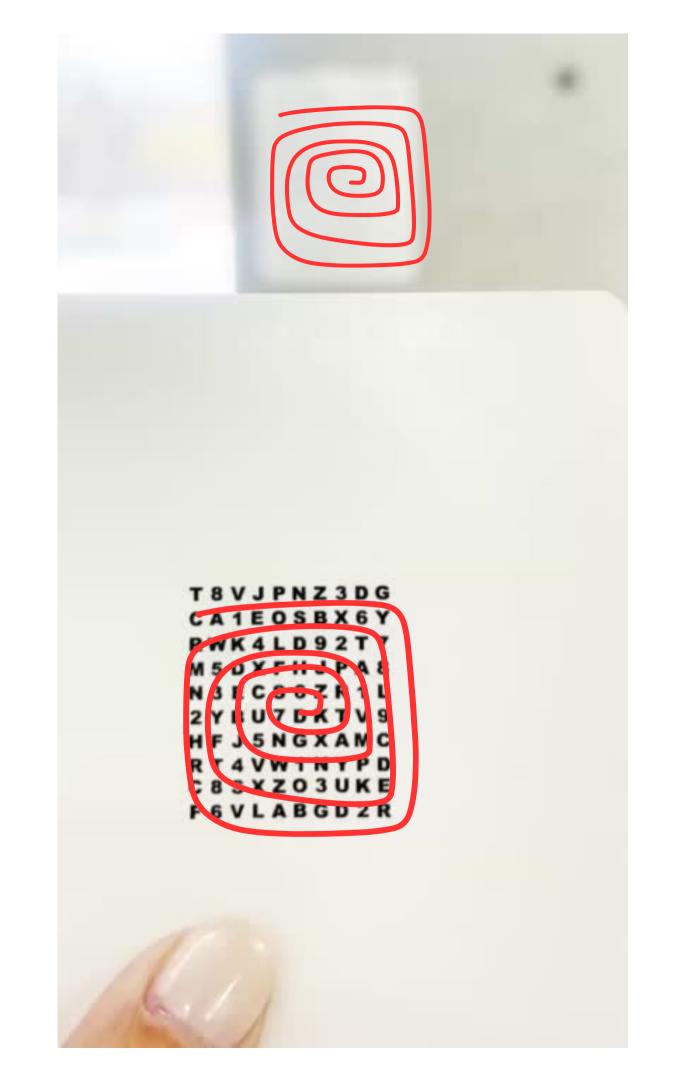


Continued...

#### LEVEL 2

- While standing, complete the charts reading in a spiral.
- Start with outer rectangle of letters, then move in a square, then again, until you reach the very middle.
- Read the letters aloud. Do right eye, then left eye, then both eyes.

You have mastered this level when you are able to do all of this accurately without slowing down too much. Proceed to LEVEL 3.

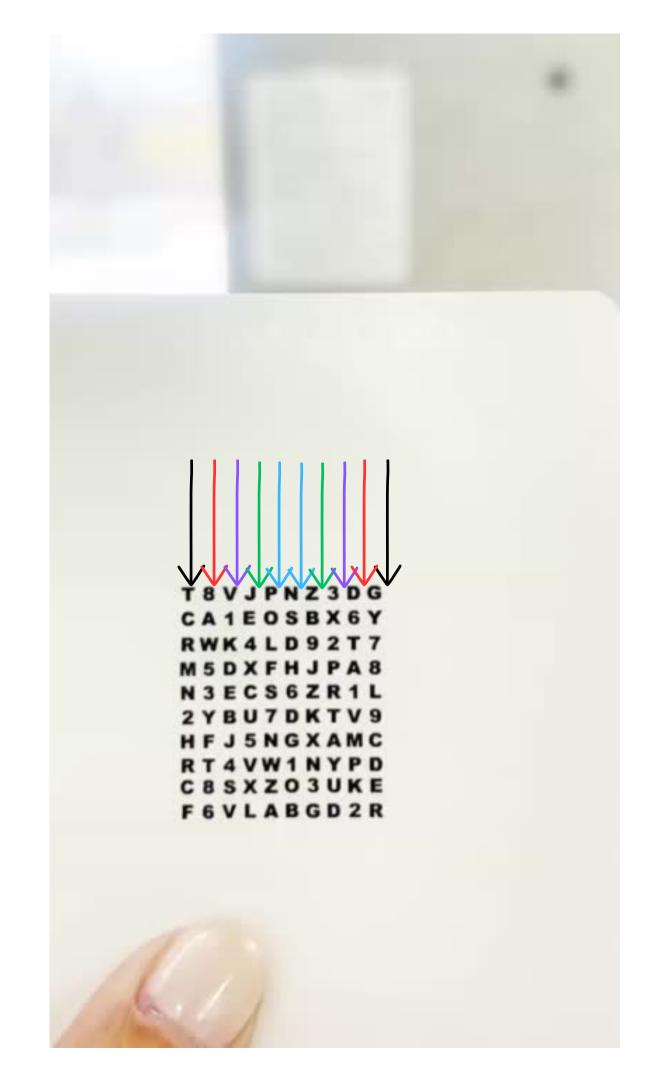


## Exercise 1 Accommodation Continued...

#### LEVEL 3

- While standing, complete the charts reading columns of letters from the top down.
- First jump from the first column to the last, then 2nd column to 2nd last, 3rd/3rd last, 4th/4th last, then the two middle columns at the end.
- Read the letters aloud.

You have mastered this level when you are able to do all of this accurately without slowing down too much. Proceed to LEVEL 4.



## Exercise 1 Accommodation Continued...

#### LEVEL 4

- REPEAT LEVEL 1 (reading right-->left, up-->down),
   but add:
  - SAYING LETTERS OUT LOUD WHILE PUSHING
     TONGUE TO TOP OF MOUTH

As you can see in the video, this feels and sounds funny. It's OK to laugh. This is a hack to increase vagal tone.

You have mastered this level when you are able to do all of this accurately without slowing down too much.

Proceed to LEVEL 5.



### LEVEL 5

• REPEAT LEVEL 2 (reading in a spiral), but add saying the letters aloud with tongue on the roof of your mouth like in LEVEL 4.

Once you have mastered this level, proceed to LEVEL 6.

#### LEVEL 6

 REPEAT LEVEL 3 (reading columns), but add saying the letters aloud with tongue on the roof of your mouth like in LEVEL 4 & 5.

Once you have mastered this level, proceed to LEVEL

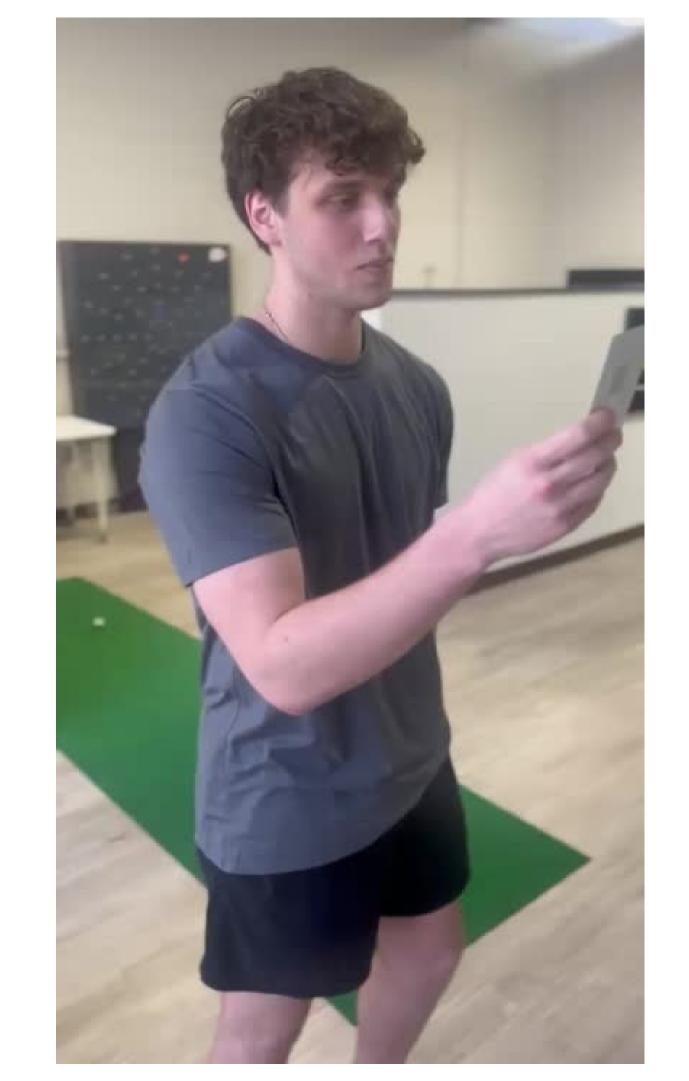


#### LEVEL 7

- REPEAT LEVEL 1 (reading right-->left, up-->down), but add:
  - SAYING LETTERS OUT LOUD WHILE ALTERNATING PUSHING TONGUE TO TOP LEFT OF YOUR MOUTH AND TOP RIGHT OF YOUR MOUTH. You may alternate every letter or every other letter.

Again, as you can see, this may feel and sound funny. It's OK to laugh. This is a hack to increase vagal tone.

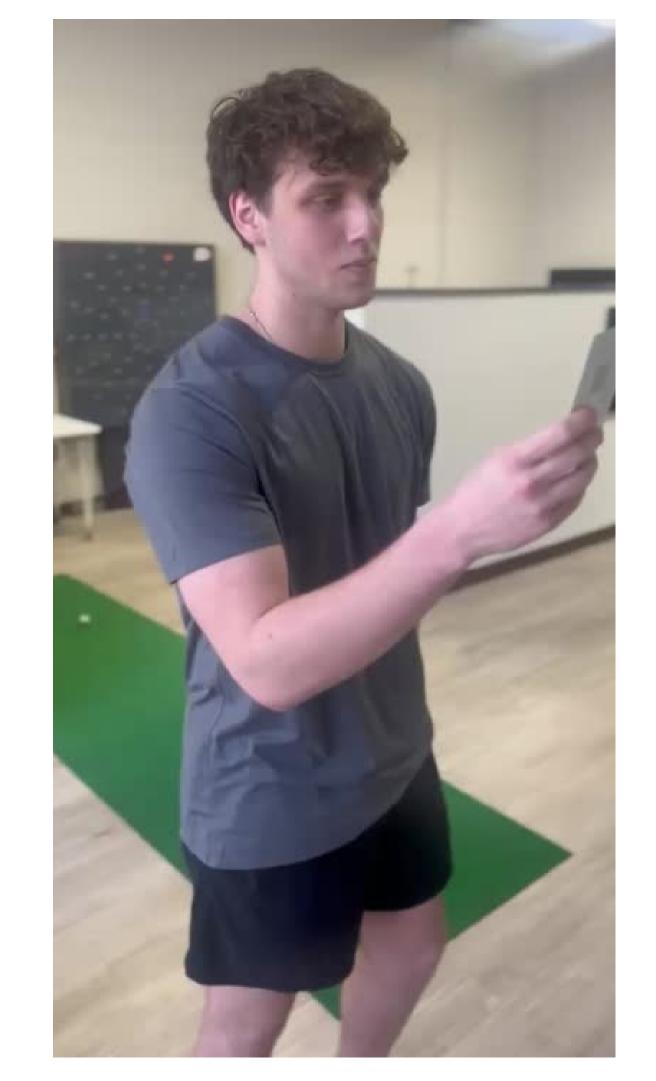
You have mastered this level when you are able to do all of this accurately without slowing down too much. Proceed to LEVEL 8.



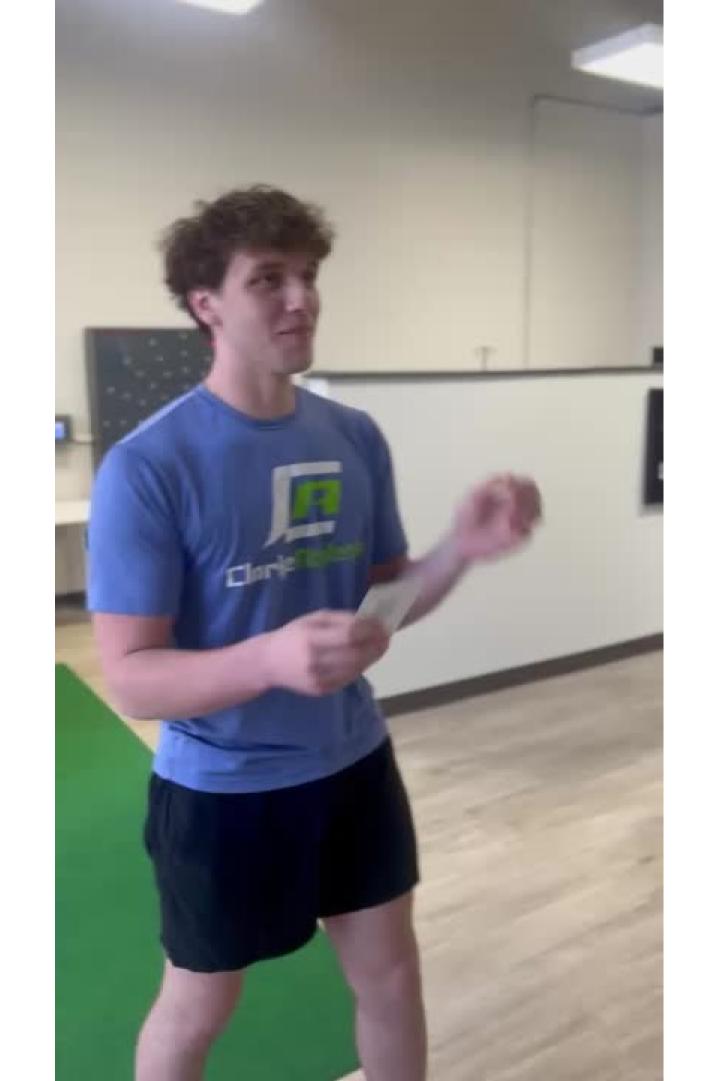
#### LEVEL 8

- REPEAT LEVEL 2 (reading in a spiral), but add saying the letters aloud alternating your tongue on the top left and top right of your mouth like in LEVEL 7.
- Once you have mastered this level, proceed to LEVEL 9.

- REPEAT LEVEL 3 (reading columns), but add saying the letters aloud alternating your tongue on the top left and top right of your mouth like in LEVEL 7 & 8.
- Once you have mastered this level, proceed to LEVEL 10.

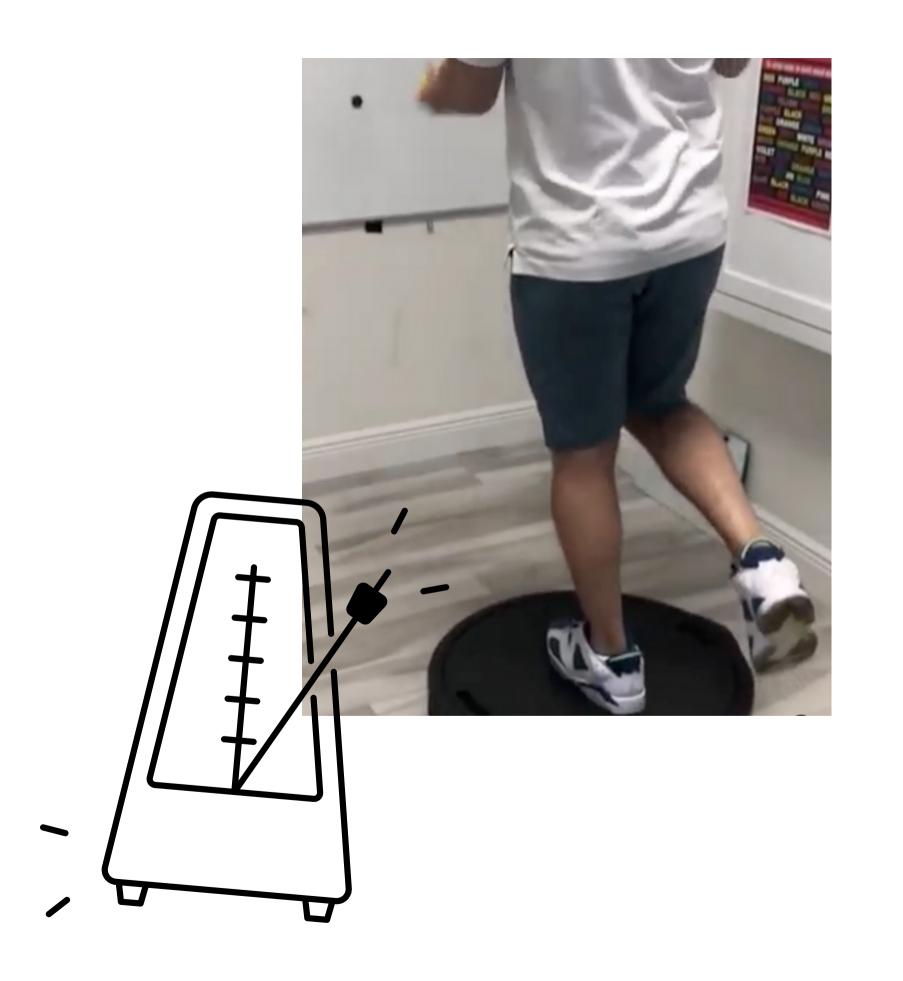


- REPEAT LEVELS 7-9, saying the letters aloud alternating your tongue on the top left and top right of your mouth every letter or every other letter.
  - ADD TURNING HEAD LEFT & RIGHT
     WHILE YOU SWITCH THE SIDE OF
     YOUR MOUTH YOUR TONGUE IS.



If you complete all 10 levels before the end of the 8 weeks (or if you want to continue on afterward), repeat LEVEL 10 ADDING CORE ENGAGEMENT, such as standing on a bosu ball, standing on one leg, riding a stationary bike, or planking. Proceed to the next level once mastered.

If you master THAT before 8 weeks (or if you want to continue on afterward), repeat the levels with core engagement and USE A METRONOME (or metronome app) (start at 60bpm, then 70bpm, then 80bpm, 90bpm, 100, 110, 120 etc.).





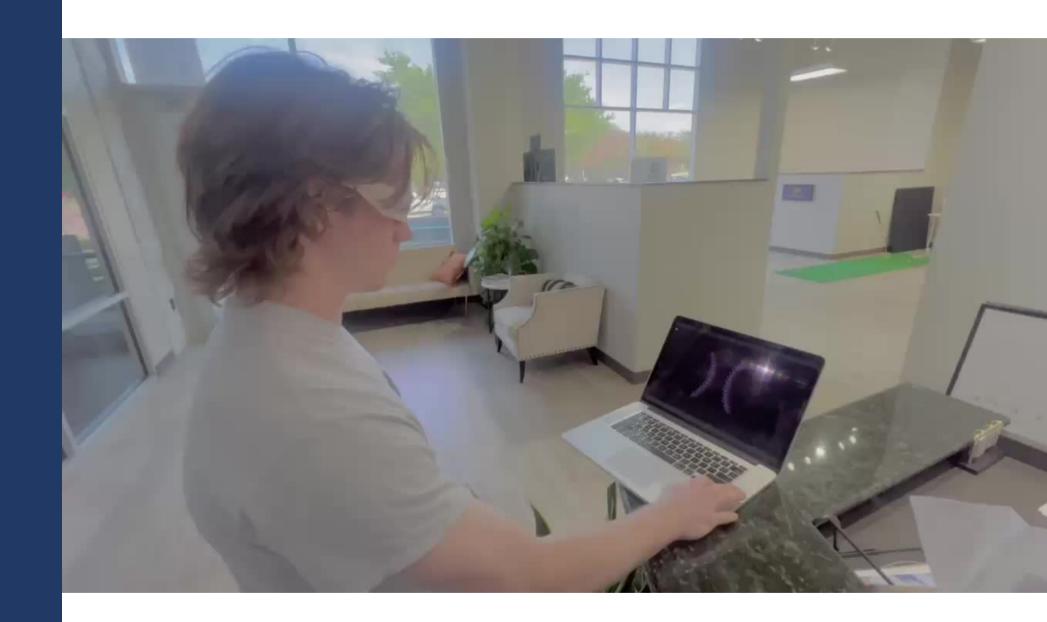
### MOVE ON TO EXERCISE 2

### BINOCULAR ALIGNMENT & DEPTH PERCEPTION

## Exercise 2 Binocular Alignment For Depth Perception

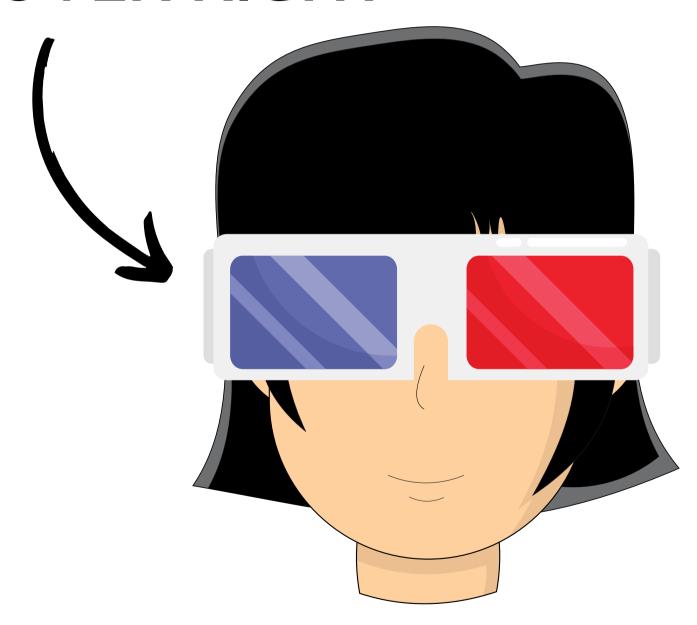
#### You will need:

- One pair of red-blue glasses
  - Wear behind your glasses if you wear them
  - Wear over your contacts if you wear them
- A computer screen or tablet preferred, if the only screen available is a phone that is better than nothing
- TURN YOUR BRIGHTNESS ALL THE WAY
   UP



- Click the link in your email entitled "DIVERGENCE." The presentation should fill up the full screen.
- Put the red/blue glasses on with the BLUE lens over the RIGHT eye.
- Screen with the 4-dot test first. If you see 3 or 5 dots, contact Dr. Bailey's office. Then on the next slide make sure you are observing just ONE image. If you are seeing two images, contact Dr. Bailey's office.
- If you are unable to do this exercise or if it makes you feel sick, contact Dr. Bailey's office. Sometimes kids with color deficiencies struggle, or if they have a binocular misalignment, struggle with this.

### **BLUE OVER RIGHT**



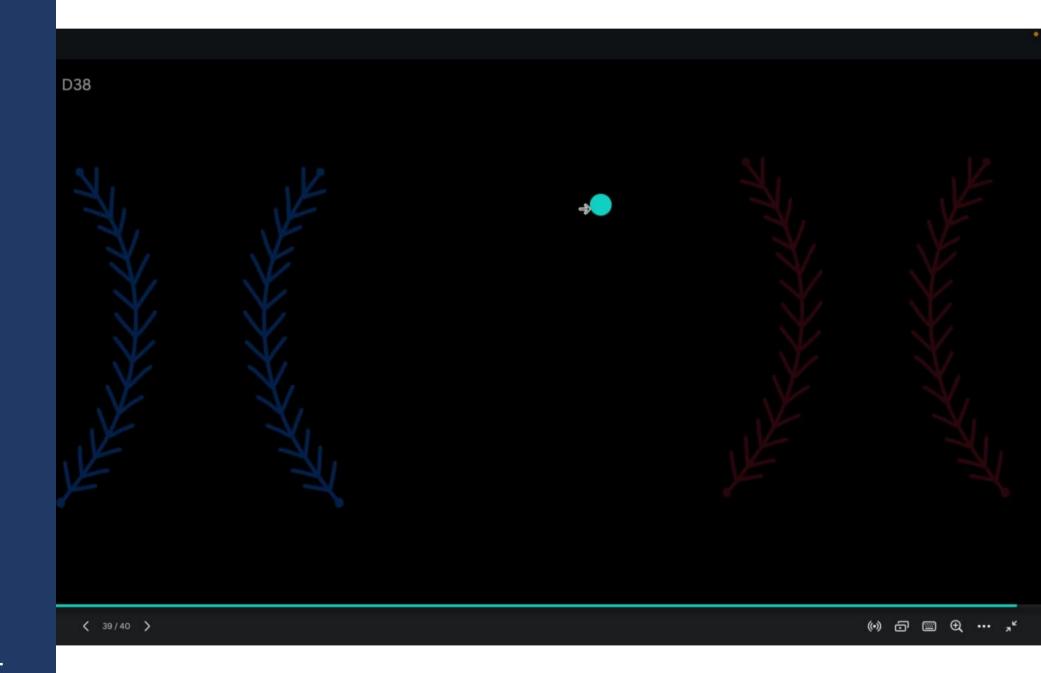
- Click the right arrow on your keyboard or take your mouse and click the right side of the screen to go to the next slide.
- The images on the screen separated a little, but with the red/blue glasses you should be able to fuse them into one single image.



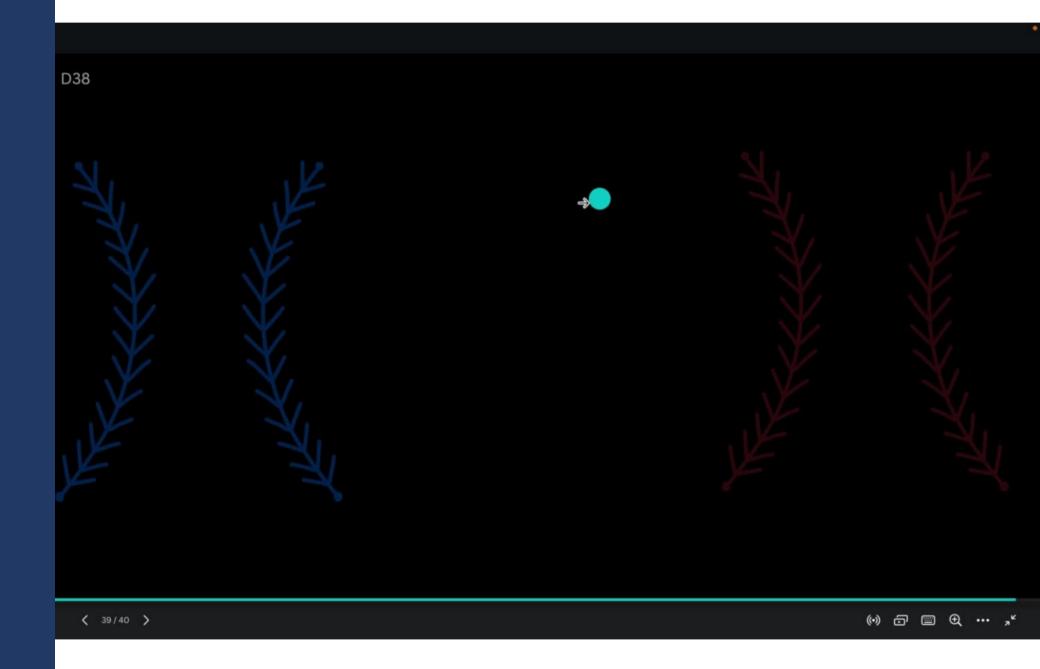
- Fusion is obtained when you see one image flickering red and blue.
- Once fusion is obtained, hold the image single for 5 seconds.
- Proceed to the next slide. This slowly and gradually moves the images further apart on the screen and makes fusion more difficult. Easy does it!
- Once fusion is obtained, hold the image for 5 seconds then proceed to the next slide again.



- Slowly move the images apart as mentioned before until fusion is lost.
  - Fusion is lost when you no longer see one red/blue flickering image, but you see two images (one red one blue) OR one image that is only red or only blue.
  - This is the "break" point.
  - NOTE THE D# (top left) of your break point
     ON YOUR LOG AT THE END OF YOUR
     WEEK.

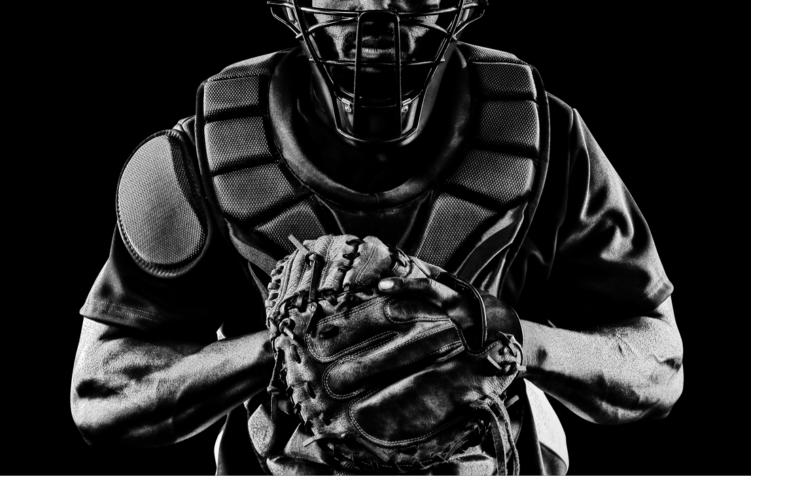


- When fusion is lost, try relaxing your eyes and opening your periphery to fuse the two images again.
- Once fusion is lost and unable to be regained, slowly move the slides backward (by clicking left or on the left side of the screen) to make the images come closer together.
  - When fusion is regained, hold for 5 seconds.



- Repeat the same process you did for DIVERGENCE except for CONVERGENCE.
- Do one round of both exercises once daily, 3-5 days/week.
- Try to increase your ranges a little bit every day or two! Easy does it!



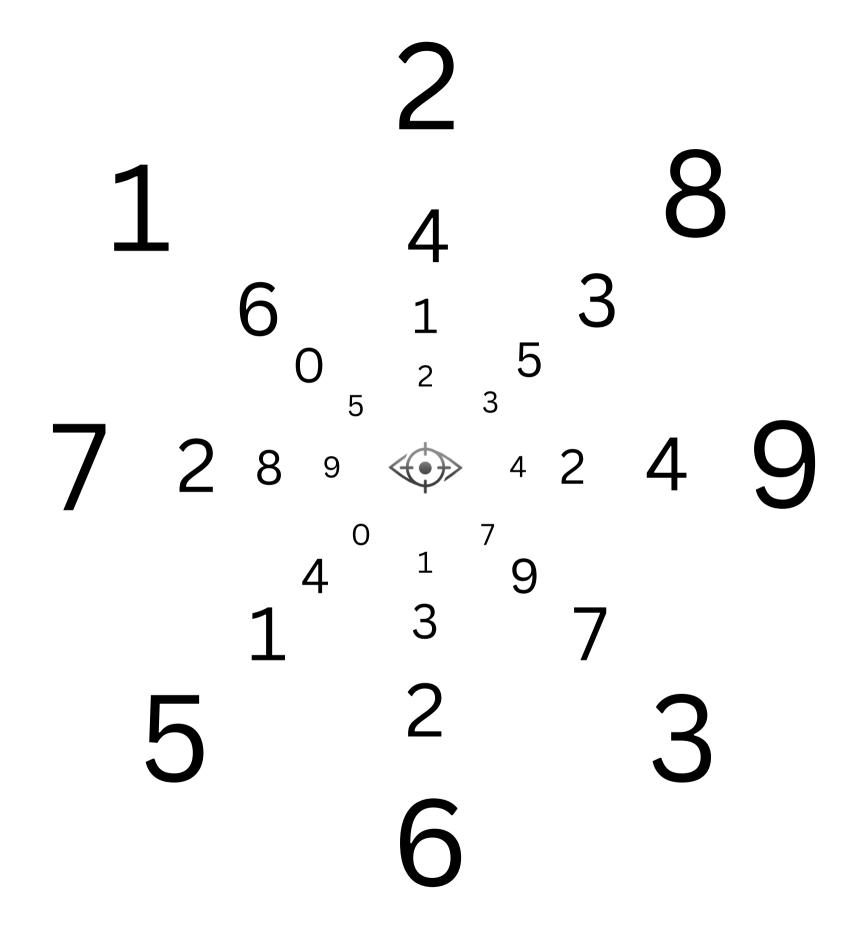


### MOVE ON TO EXERCISE 3

PERIPHERAL AWARENESS

### You will need:

- One of the Peripheral Awareness
   Charts (printable from PDF)
- Wear your glasses or contacts if you wear them





LEVEL 1

Start with the SVI PA Chart.

At a distance of about 16 inches in front of the page stare directly at the SVI Target. It's important you look only at the logo and resist the urge to look at the numbers in the periphery.

Without moving your head or eyes, look at the SVI LOGO while finding the numbers in order (1-18) using your side vision.



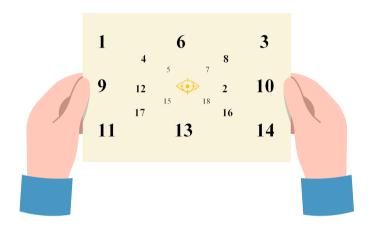


LEVEL 1 continued...

Do only one session/day.

You have completed this level after 3 sessions. I don't want you to memorize it!

Proceed to LEVEL 2 after 3 sessions.

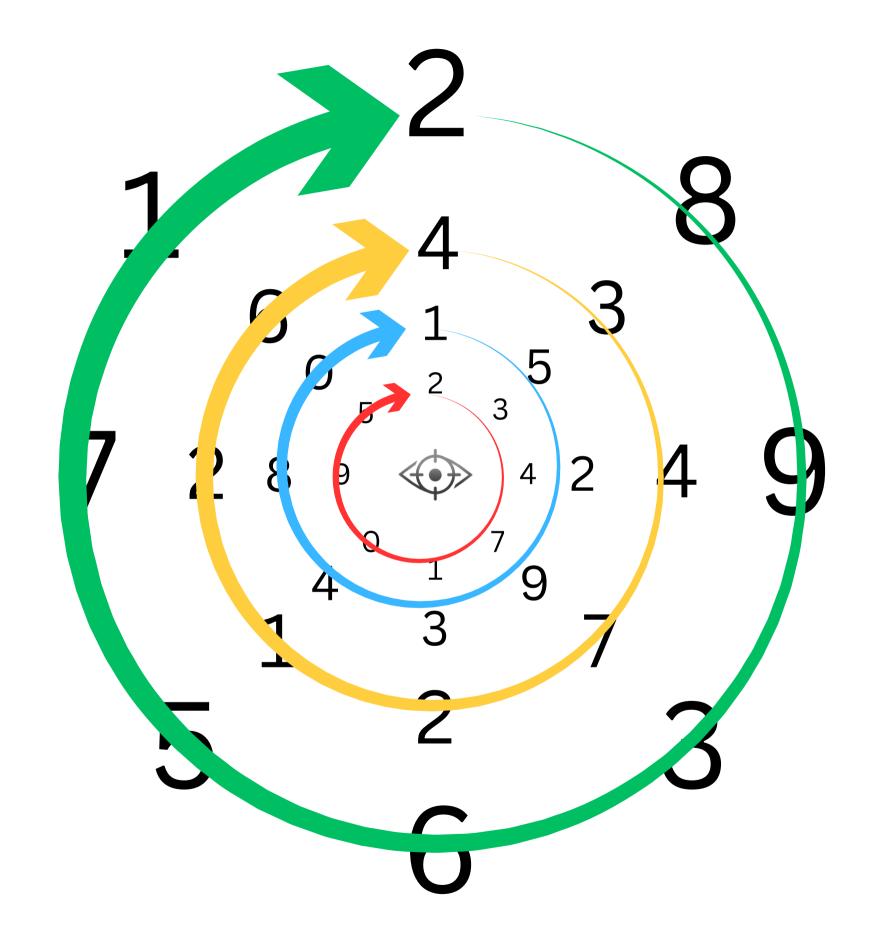




LEVEL 2

Print one of the other PA charts.

While looking at the SVI target in the middle, without moving your head or eyes away from the SVI target, identify the numbers/letters within the most inner circle. Once that section is complete, move outward to the next section. Keep moving outward, identifying the numbers/letters using only your periphery, until the chart is complete.





LEVEL 2 continued...

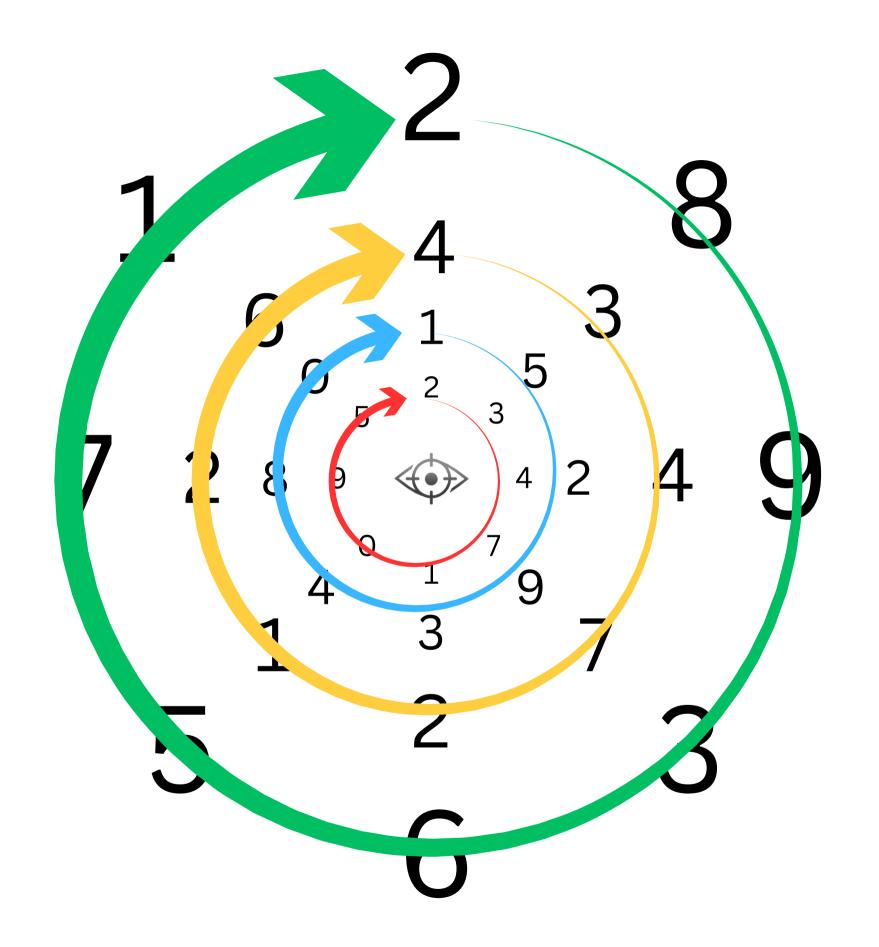
Complete 3 sessions of each of the following charts.

Letters

Numbers

Letters & Numbers

Once they are all completed 3x, proceed to LEVEL 3.

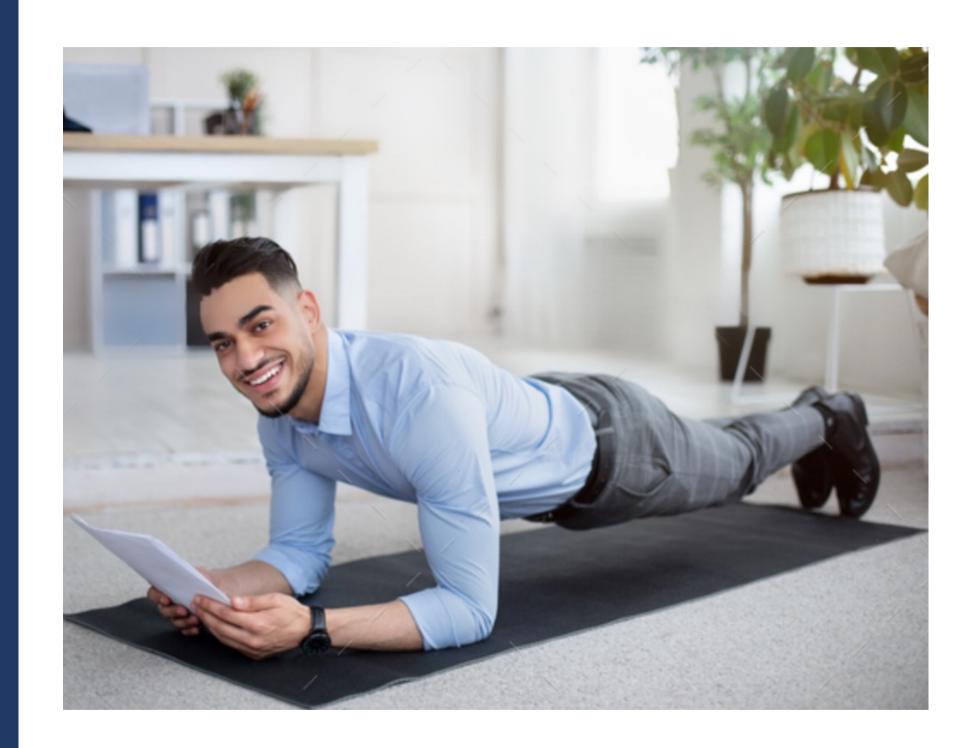




#### LEVEL 3

Complete 3 Sessions of all the charts (SVI Logo, Letters, Numbers, and Letters & Numbers) while engaging your core. You may stand on one leg at a time, stand on a Bosu ball, plank, etc.

If you complete LEVELS 1-3 before the end of the 8 week period, feel free to repeat LEVEL 3 just once a week.

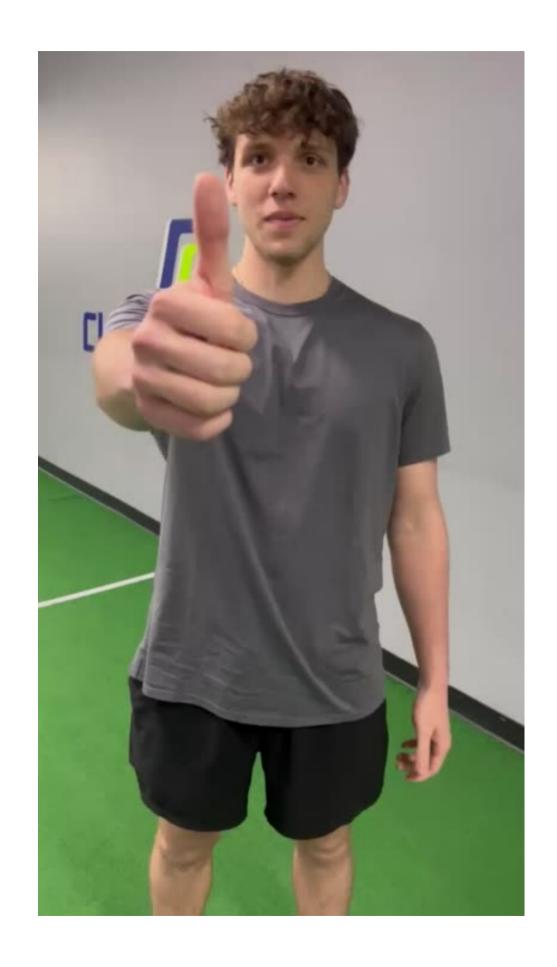




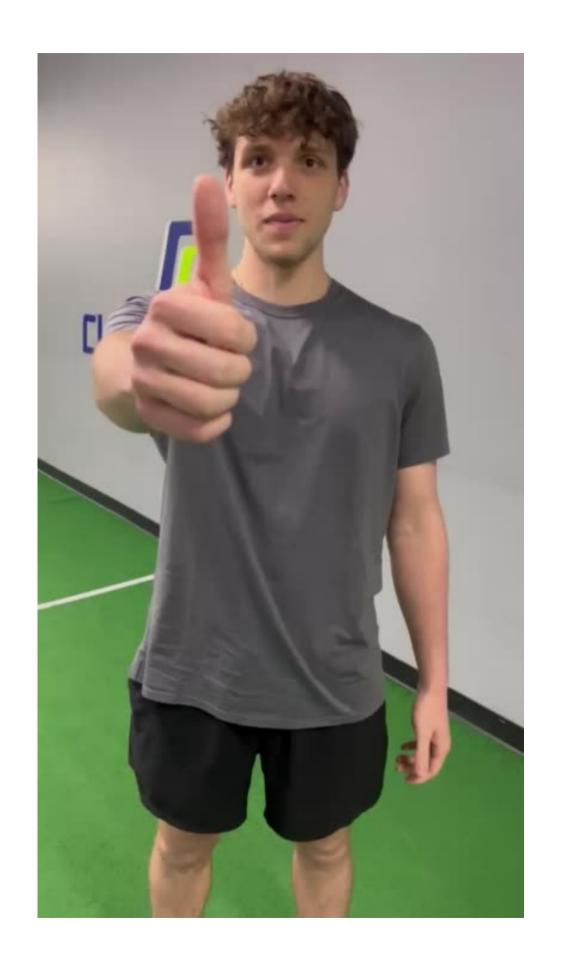
## MOVE ON TO EXERCISE 4 VESTIBULAR OCULAR REFLEX

### You will need:

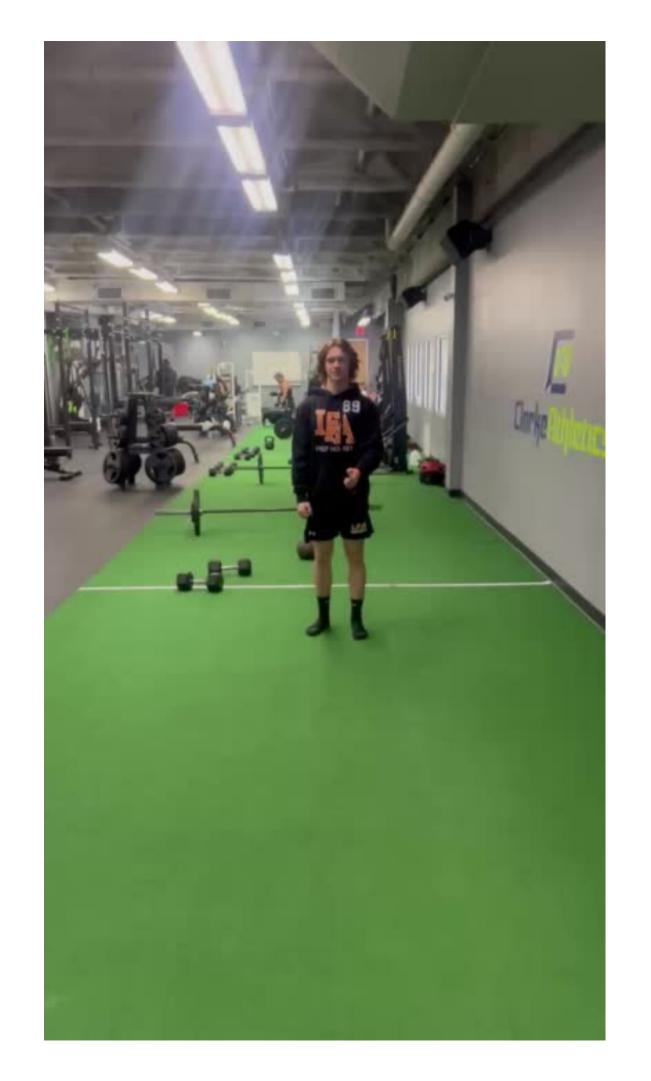
- Nothing!
- Use your glasses or contacts if you wear them



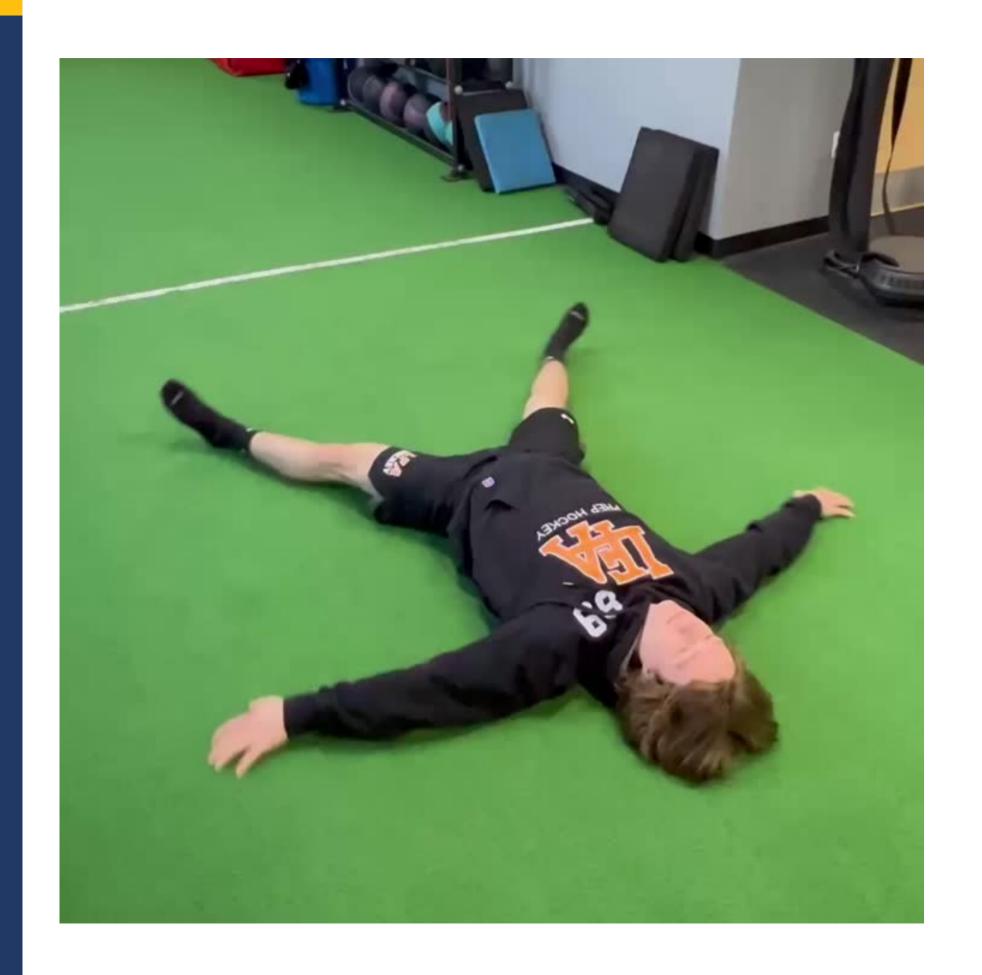
- Simply look at a fixed object in the distance (such as a doorknob) or hold your thumb out in front of you.
   Fixate on the target.
- Start nodding your head "no," never looking away
  from the target. Start with small, slow 10° nods and
  slowly increase the range and speed of head rotation.
  Aim for turning your head wider and faster over time.
  Do 20 cycles (one cycle being one full nod).
- When you feel this level is mastered, proceed to LEVEL 2.



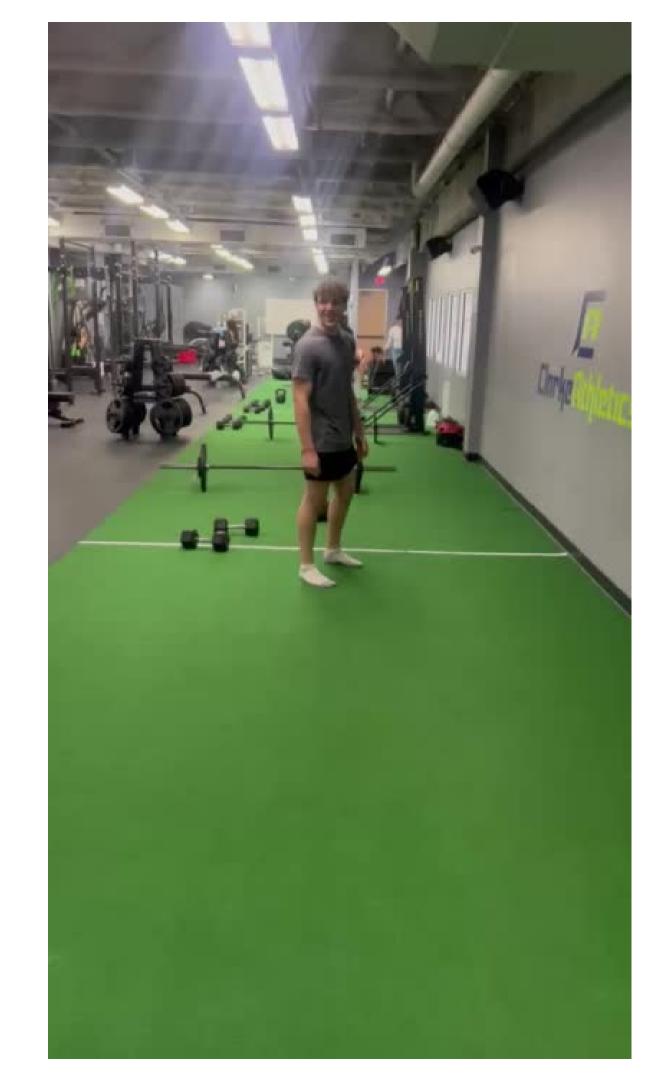
- Do the same thing you did in LEVEL 1
  - ADD WALKING
  - Find a space where you can walk without running into anything or tripping over anything.
  - Do 20 successful nods "no" left and right.
- When you feel this level is mastered, proceed to LEVEL 3.

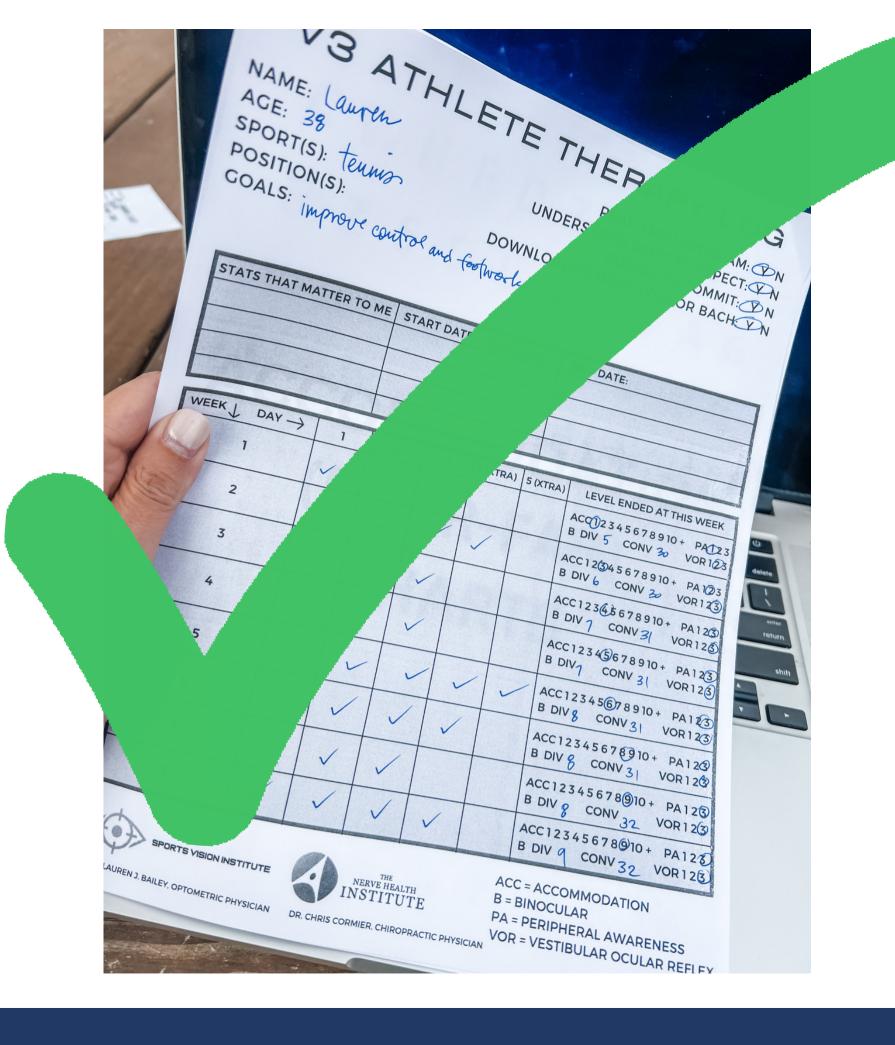


- Lay on your back on the ground where you have plenty of room to make a snow angel.
- Find a target to look at directly above you, such as something on a ceiling fan, a smoke alarm, a light bulb (that is turned off), etc.
- Do snow angels. Pay attention to your awareness of where your hands, arms, legs, and feet are in space.
   Once you feel your coordination is perfect, add nodding "no" left and right while maintaining your fixation on your target above you. Do 25 snow angels while nodding "no" and maintaining fixation.



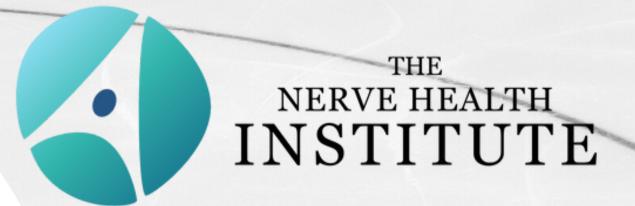
Once you have mastered all 3 levels, do one of the Vestbiular Ocular Reflex exercises once a week.





# Keep Track of your Progress in the table provided in the PDF





### **Thanks For Participating**

sportsvisioninstitutepllc.com nervehealth.com



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