

Eye Exercises for Home Lecture Handout

Helping Vision, Balance & Coordination Work Together
Balance and Eye Movement Challenges After Brain Injury or Surgery

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Before You Begin

Practice should be:

-  Short and enjoyable
-  Comfortable and safe
-  Part of everyday activities
-  Stopped if symptoms worsen significantly

Remember:

- **Small amounts of practice** performed consistently are often more effective than occasional long sessions.
- **Talk with your child's healthcare team** before starting any new exercise program. Exercises should be individualized based on the child's diagnosis, age, symptoms, and recovery goals.

1. 🥤 POINTER-IN-STRAW Exercise

Visual	How To Practice
	1. Hold a straw vertically. 2. Slowly move a skewer or pencil through the center. 3. Watch the tip move through the straw. 4. Keep eye movements smooth. 5. Try not to move your head.

- **Goal:**
 - Improve Eye Alignment & Visual Tracking
- **Practice**
 - ✅ 5–10 repetitions
 - 💡 **Family Fun Tip:** Pretend the skewer is a rocket moving through a tunnel.

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2. PENCIL PUSH-UPS

Visual	How To Practice
	1. Hold a pencil at arm's length. 2. Look at the tip. 3. Slowly move it toward your nose. 4. Keep the image single and clear. 5. Slowly move the pencil away again

- **Goal:**
 - Improve Eye Teaming & Convergence

- **Practice**

-  5–10 repetitions
-  **Family Fun Tip:** Place a favorite sticker on the pencil tip.

3. BROCK STRING Exercise

Visual	How To Practice
	1. Hold one end at your nose. 2. Stretch the string outward. 3. Focus on the nearest bead. 4. Shift to the middle bead. 5. Shift to the far bead. 6. Continue moving focus between beads.

- **Goal:**
 - Improve Depth Perception & Eye Coordination
- **Practice**
 -  1-2 minutes
 -  **Family Fun Tip:** Turn it into a color-identification game.

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4. VISUAL TRACKING Exercise

Visual	How To Practice
	1. Follow a moving ball, toy, or flashlight. 2. Keep eyes on the object. 3. Use only your eyes.

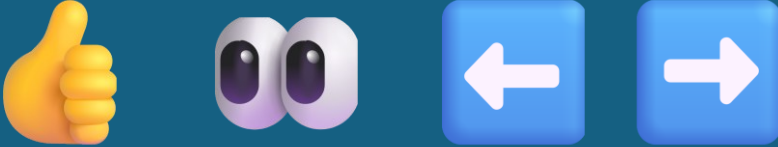
- **Alternative**
 - Trace shapes using only your eyes:  Circle,  Square,  Diamond,  Figure 8
- **Goal:**
 - Improve Eye Teaming & Convergence
- **Practice**
 -  1 – 2 minutes
 -  **Family Fun Tip:** Use favorite toys whenever possible.

5. ⇄ NEAR-FAR SHIFTING Exercise

Visual	How To Practice
	1. Hold a pencil at arm's length. 2. Focus on the pencil for 3 seconds. 3. Shift focus to a distant object. 4. Focus for 3 seconds. 5. Repeat.

- **Goal:**
 - Improve Visual Flexibility
- **Practice**
 -  10–20 focus shifts
 -  **Family Fun Tip:** Think of your eyes as "changing gears."

6. 👍 VESTIBULAR-EYE Exercise (VOR)

Visual	How To Practice
	1. Hold your thumb at arm's length. 2. Focus on your thumbnail. 3. Move your head side-to-side. 4. Keep the thumbnail clear. 5. Repeat up-and-down.

- **Goal:**
 - Keep Vision Clear During Head Movement
- **Practice**
 - ✅ 15–30 seconds
 - 💡 **Family Fun Tip:** "Can you keep your thumbnail clear?"

WHEN SHOULD I TALK TO MY HEALTHCARE TEAM?

Contact your provider if you notice:

- ☒ Frequent falls
- ☒ New dizziness
- ☒ Double vision
- ☒ Significant headaches
- ☒ Reading difficulties
- ☒ Avoidance of play activities
- ☒ Loss of previously regained skills



REMEMBER

- Recovery looks different for every child.
- Small improvements matter.
- Practice can happen at home, school, and play.
- Progress is not always linear.
- You do not have to navigate recovery alone.



Our Goal Is Not Perfection - Goal Is Participation.

Participation builds confidence.

Confidence builds independence.



The Current Research References

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2. **Crampton A**, Schneider KJ, Grilli L, et al. Characterizing the evolution of oculomotor and vestibulo-ocular function over time in children and adolescents after a mild traumatic brain injury. *Front Neurol*. **2022**;13:904593. [\[ncbi.nlm.nih.gov\]](#), [\[frontiersin.org\]](#)
3. **Ghosh D**, Marusic S, Haensel JX, et al. Evaluating post-concussion symptom profiles using the convergence insufficiency symptom survey in a pediatric and adolescent cohort. *Front Neurosci*. **2026**;20:1799528. [\[frontiersin.org\]](#), [\[frontiersin.org\]](#)
4. **Alvarez TL**, Scheiman M, Hajebrahimi F, et al. CONCUSS randomized clinical trial of vergence/accommodative therapy for concussion-related symptomatic convergence insufficiency. *Br J Sports Med*. **2025**. [\[pmc.ncbi.nlm.nih.gov\]](#)
5. **Scheiman M**, Kulp MT, Cotter SA, et al. Interventions for convergence insufficiency: a network meta-analysis. *Cochrane Database Syst Rev*. **2020**;12:CD006768. [\[pubmed.ncbi.nlm.nih.gov\]](#)