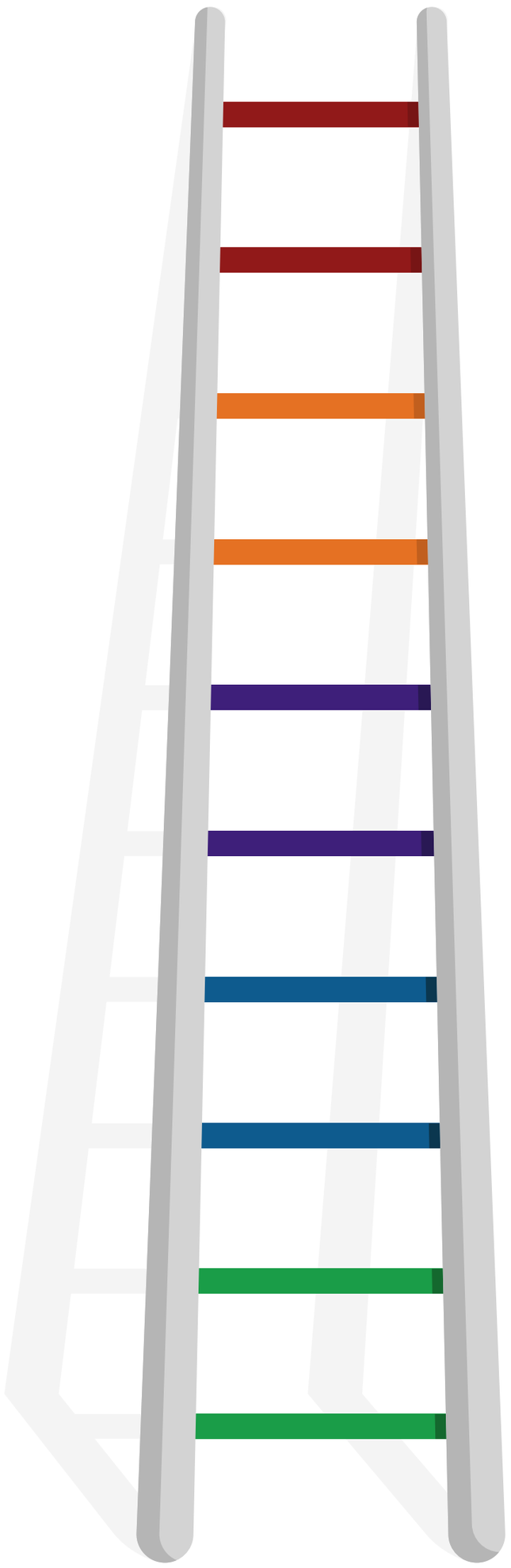
RETAINED REFLEXES

What They Are, and How They Are Connected to

Your Child's Behavior and Learning Struggles



FROM MELTDOWNS TO BREAKTHROUGHS

How Early Development Shapes

Learning, Attention, and Behavior

IN THIS GUIDE, YOU'LL DISCOVER:

The 7 key primitive reflexes that impact learning, attention, and emotional regulation — and:

- ✔ What these reflexes might ***look like*** to you
- ✔ What they might ***feel like*** to your child
- ✔ Educational challenges linked to each reflex
- ✔ Changes you'll notice once integrated

What You Can Do About It

Next Steps

The Learning Skills Continuum

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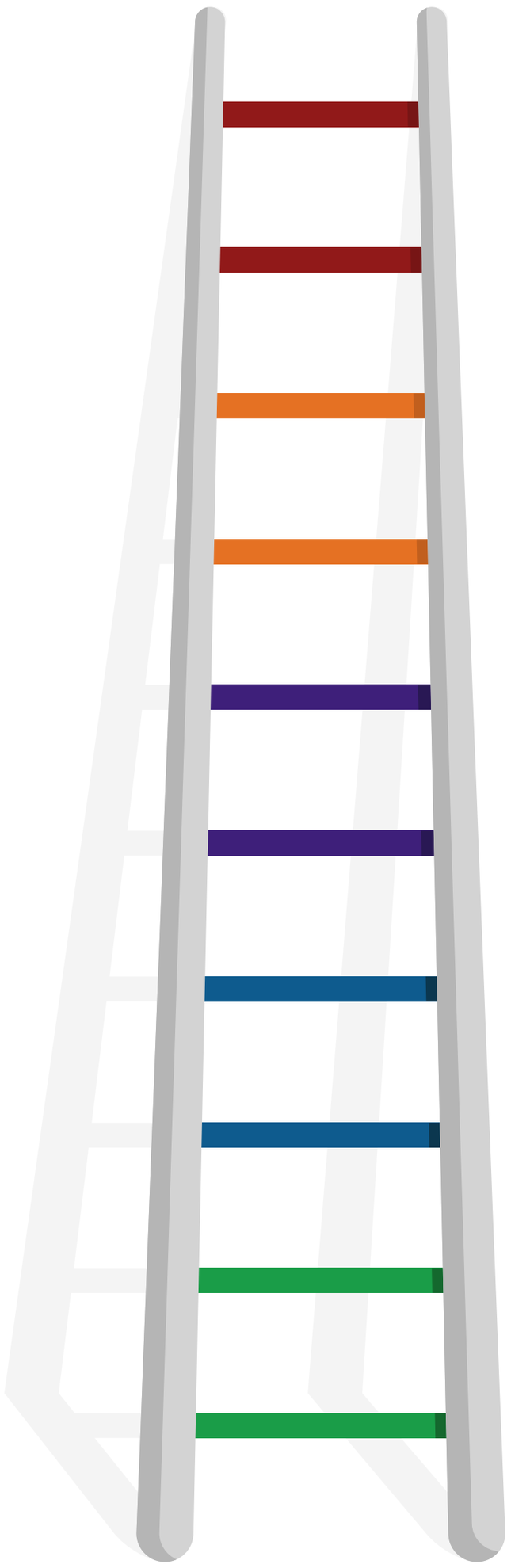
Is your child bright but struggling with focus, learning, or emotional regulation?



IT'S NOT THEIR FAULT — OR YOURS

Often the real culprit is something few parents have ever heard of:
retained primitive reflexes.

What Are Retained Reflexes?

These automatic survival responses help babies in early development — but if they don't integrate properly, they can create "glitches" between the brain and body.

This can cause ongoing challenges with:

- ✔ attention
- ✔ coordination
- ✔ learning
- ✔ emotional regulation

Retained reflexes place extra stress on the attention system, making children **seem** unfocused, impulsive, or anxious.

They are sometimes **mistaken** for ADHD or behavioral issues. But the real **root** is often neurological — and it can change.

ONCE ADDRESSED:

Children can experience tremendous growth in how they learn, behave, and feel about themselves.

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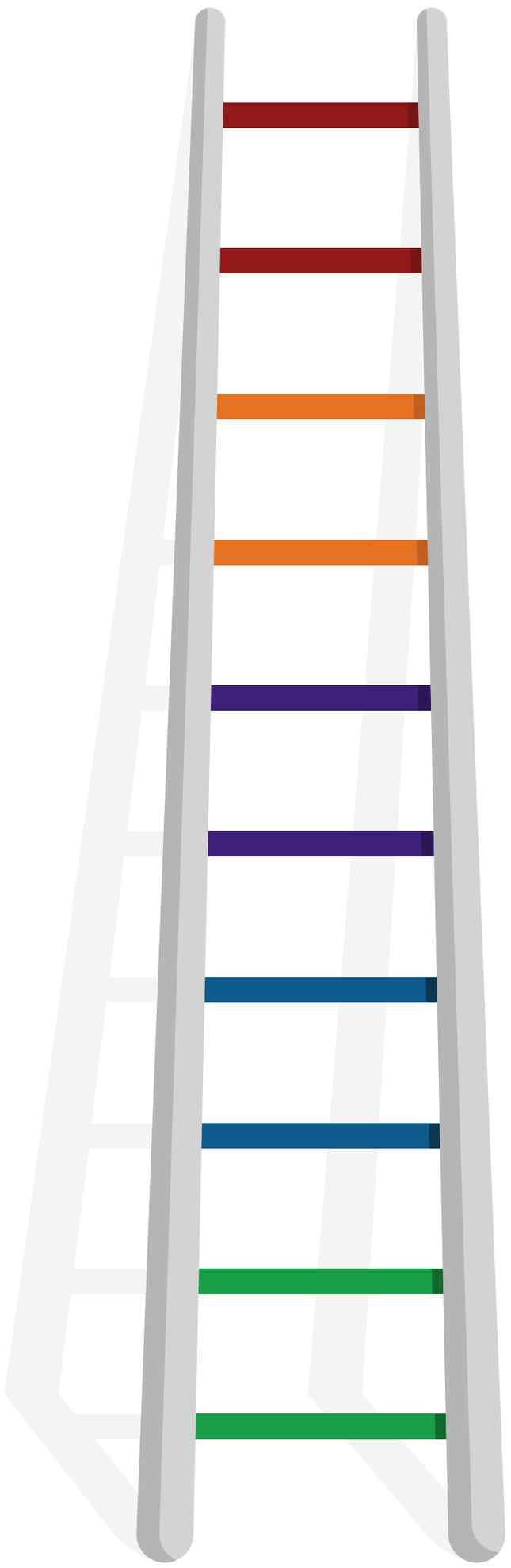
MORO REFLEX

The Moro Reflex is a baby's built-in survival mechanism — an automatic "startle" response that helps stimulate breathing and awareness at birth.



If it’s retained, it can cause:

- ✔ Hypersensitivity to sound, touch, and movement
- ✔ Overreactions to minor stress or change
- ✔ Emotional volatility
- ✔ Anxiety and sensory overload
- ✔ Challenges with focus and emotional regulation

What you might see:

- ✔ Startles easily at noises or touch
- ✔ Emotional meltdowns from small frustrations
- ✔ Struggles with transitions or changes
- ✔ Seems constantly "on edge"

What your child might feel:

- ✔ Overwhelmed in busy places (school, stores)
- ✔ Nervous or fearful even when "nothing is wrong"

Related educational challenges:

- ✔ Distractibility in class
- ✔ Emotional outbursts disrupting learning

Once integrated, changes you’ll notice:

- ✔ Calmer reactions to daily events
- ✔ Easier emotional regulation
- ✔ Greater resilience to change

TESTING HINT:

Notice if your child startles dramatically at unexpected sounds or touches.

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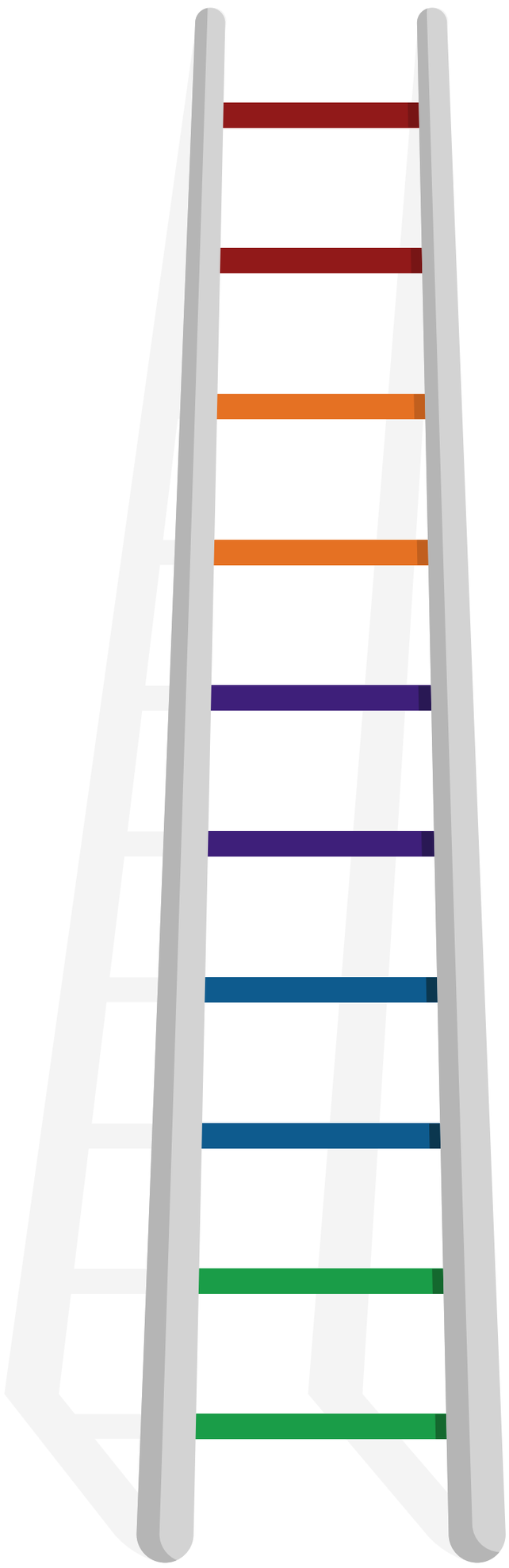
SPINAL GALANT REFLEX

The Spinal Galant Reflex assists with movement through the birth canal and early auditory development.



If it's retained, it can cause:

- ✔ Fidgeting and constant squirming
- ✔ Difficulty sitting still
- ✔ Bedwetting past age 5
- ✔ Sensitivity to clothing at the waist

What you might see:

- ✔ Frequent movement during homework
- ✔ Distraction from tight clothing (belts, wastebands, etc.)
- ✔ Bedwetting or urgency issues

What your child might feel:

- ✔ Physical irritation when sitting
- ✔ Restlessness or tension in the back and hips

Related educational challenges:

- ✔ Poor concentration
- ✔ Short-term memory struggles
- ✔ Handwriting challenges

Once integrated, changes you'll notice:

- ✔ Ability to sit still longer
- ✔ Better focus during seated tasks
- ✔ Improvement in bladder control

TESTING HINT:

Lightly stroke one side of your child's lower back — watch for squirming or hip movement.

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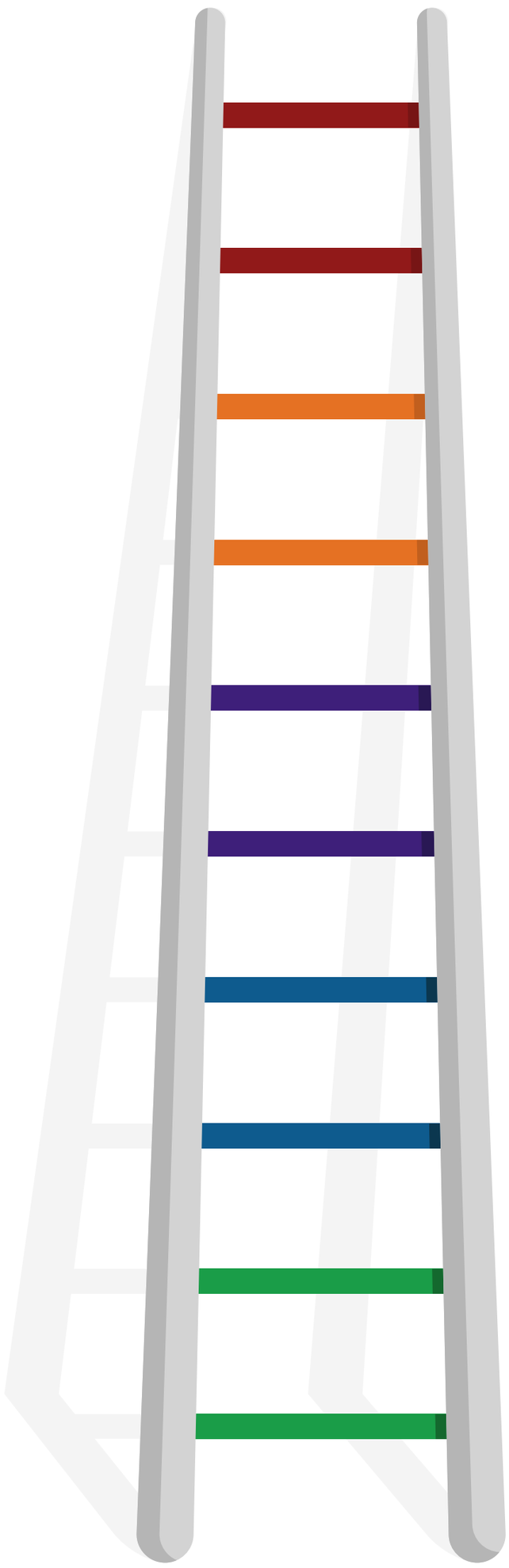
ASYMMETRICAL TONIC NECK REFLEX (ATNR)

The ATNR helps develop hand-eye coordination and prepares the body for crawling and later reading and writing skills.



If it's retained, it can cause:

- ✔ Difficulty crossing midline
- ✔ Poor handwriting
- ✔ Reading struggles
- ✔ Coordination issues

What you might see:

- ✔ Head tilting during writing
- ✔ Slanting lines when drawing or writing
- ✔ Skipping words or losing place while reading

What your child might feel:

- ✔ Frustration when writing or copying
- ✔ Clumsiness during sports or play

Related educational challenges:

- ✔ Dyslexia, dysgraphia, dyscalculia
- ✔ Attention challenges

Once integrated, changes you'll notice:

- ✔ Smoother, more organized handwriting
- ✔ Better reading fluency
- ✔ Improved gross and fine motor coordination

TESTING HINT:

Watch if your child's arm straightens when their head turns during seated activities.

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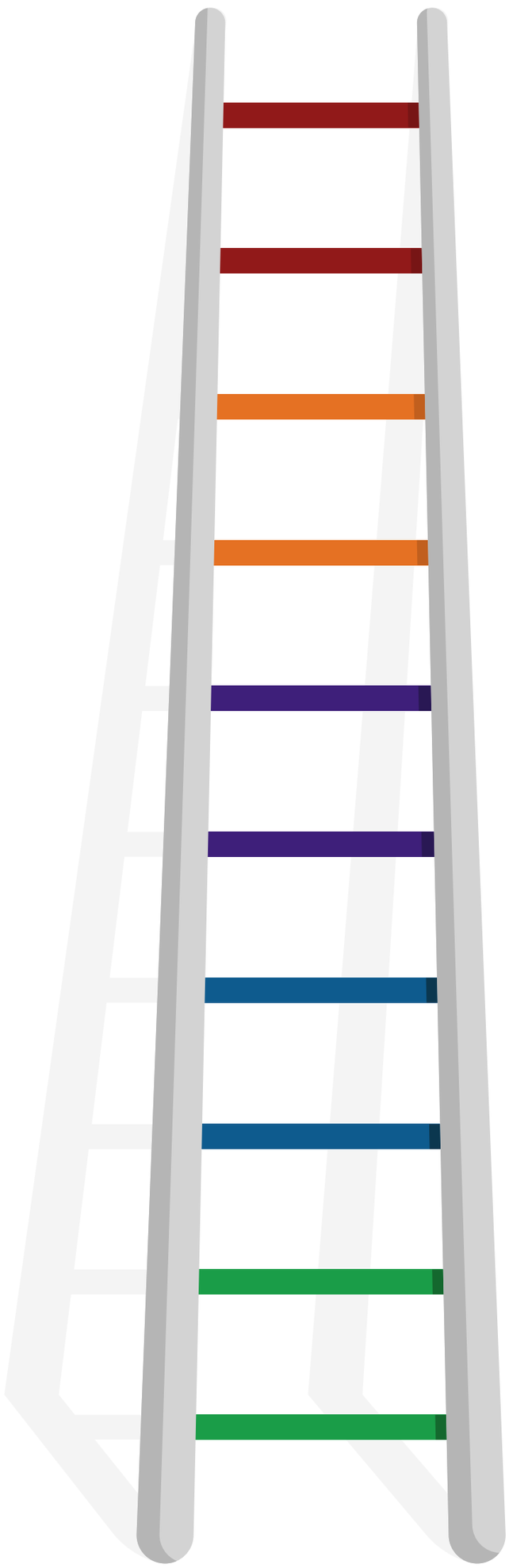
BABKIN PALMOMENTAL REFLEX

The Babkin Reflex supports early feeding, speech development, and hand-to-mouth coordination.



If it's retained, it can cause:

- ✔ Oral sensitivity
- ✔ Fine motor difficulties
- ✔ Messy eating behaviors
- ✔ Thumb-sucking, nail-biting

What you might see:

- ✔ Involuntary mouth movements when writing
- ✔ Clenched fists when stressed
- ✔ Difficulty with buttons, tying shoes

What your child might feel:

- ✔ Frustration using utensils or writing tools
- ✔ Increased need for oral stimulation

Related educational challenges:

- ✔ Handwriting struggles
- ✔ Delayed speech development

Once integrated, changes you'll notice:

- ✔ Improved speech clarity
- ✔ Smoother handwriting
- ✔ Reduced oral fixations

TESTING HINT:

Gently press the middle of the palm and watch for mouth opening or head movement.

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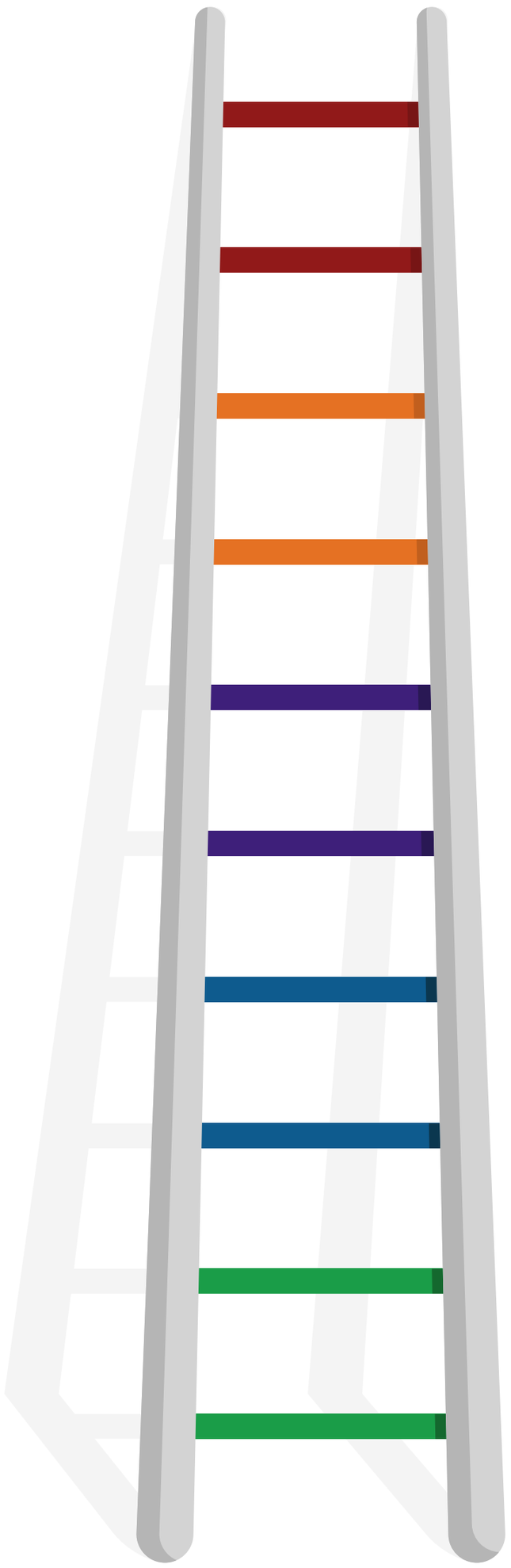
HANDS GRASPING REFLEX

The Hands Grasping Reflex supports early grasp development and fine motor skill building.



If it's retained, it can cause:

- ✔ Tight, tense pencil grip
- ✔ Poor handwriting endurance
- ✔ Shoulder tension when writing

What you might see:

- ✔ Fatigue quickly during writing
- ✔ Overgripping pencils or utensils
- ✔ Sloppy or tense writing

What your child might feel:

- ✔ Physical strain when writing or drawing

Related educational challenges:

- ✔ Dysgraphia
- ✔ Slow written output

Once integrated, changes you'll notice:

- ✔ More fluid handwriting
- ✔ Better dexterity with small objects
- ✔ Stronger, more confident hand use

TESTING HINT:

Observe if your child holds writing tools with excessive tension or grips too lightly.

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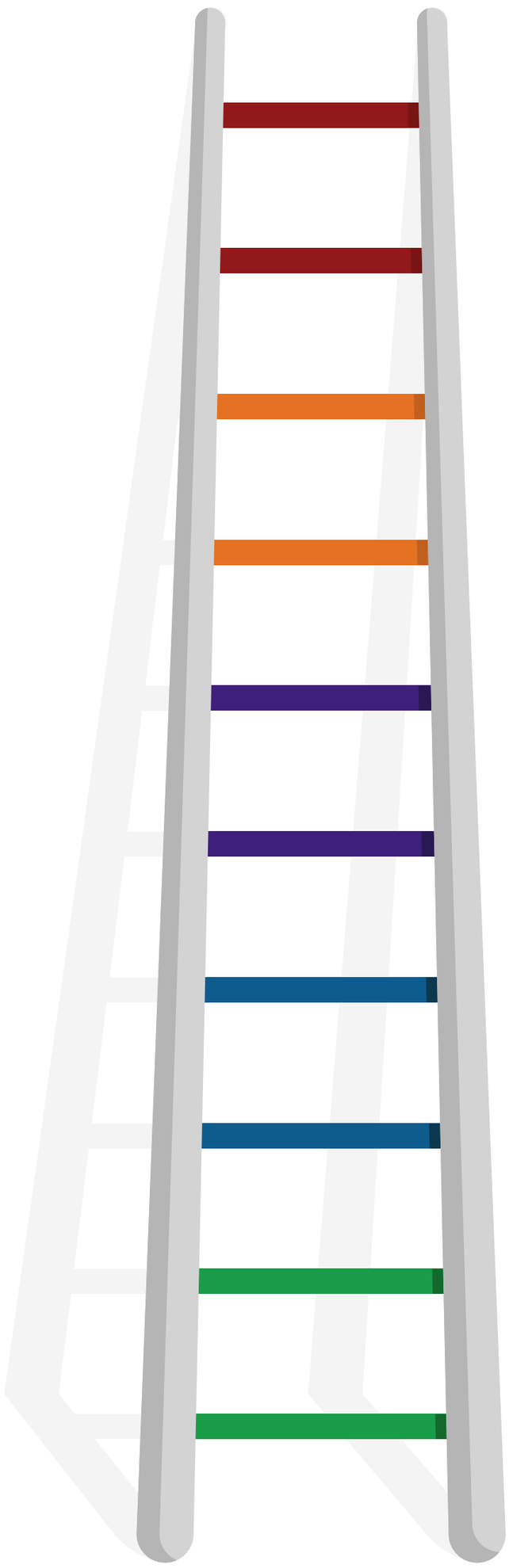
SYMMETRICAL TONIC NECK REFLEX (STNR)

The STNR prepares the baby for crawling and helps link the upper and lower body for coordinated movement.



If it’s retained, it can cause:

- ✔ Poor sitting posture
- ✔ Difficulty copying from the board
- ✔ Attention challenges
- ✔ Learning challenges

What you might see:

- ✔ Slumping at the desk
- ✔ Frequent fidgeting when seated
- ✔ Messy eating habits
- ✔ "W" sitting

What your child might feel:

- ✔ Physical discomfort sitting upright
- ✔ Restlessness during school tasks

Related educational challenges:

- ✔ Difficulty maintaining focus during desk work
- ✔ Reading and writing delays

Once integrated, changes you’ll notice:

- ✔ Improved posture
- ✔ Better endurance for writing and copying
- ✔ Enhanced attention span

TESTING HINT:

Watch for slumping, "W" sitting, or poor endurance during seated tasks.

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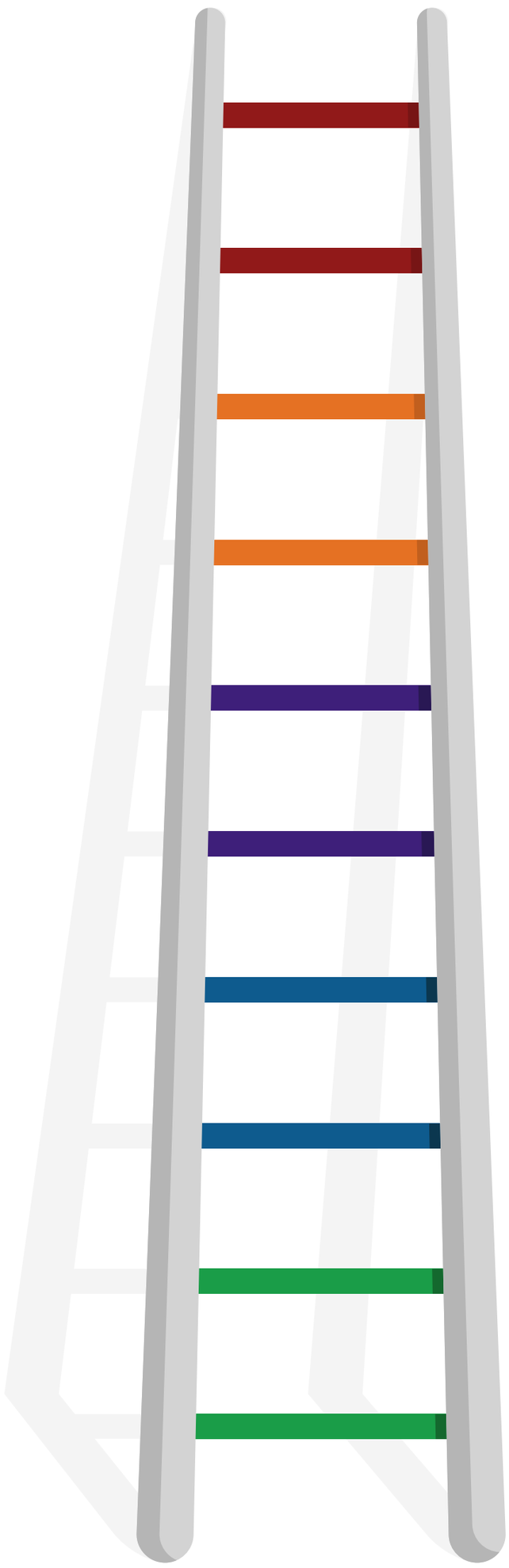
TONIC LABYRINTHINE REFLEX (TLR)

The TLR supports balance, muscle tone, and body orientation.



If it’s retained, it can cause:

- ✔ Poor balance
- ✔ Difficulty judging distances
- ✔ Motion sickness
- ✔ Spatial disorientation

What you might see:

- ✔ Clumsiness, frequent tripping
- ✔ Difficulty walking up/down stairs
- ✔ Toe walking

What your child might feel:

- ✔ Unsteady or dizzy easily
- ✔ "Off-balance" sensations even during calm activities

Related educational challenges:

- ✔ Visual-spatial difficulties
- ✔ Reading comprehension issues

Once integrated, changes you’ll notice:

- ✔ Better coordination
- ✔ More confidence in movement and sports
- ✔ Reduced motion sensitivity

TESTING HINT:

Watch if your child struggles with balance when changing head positions or navigating stairs.

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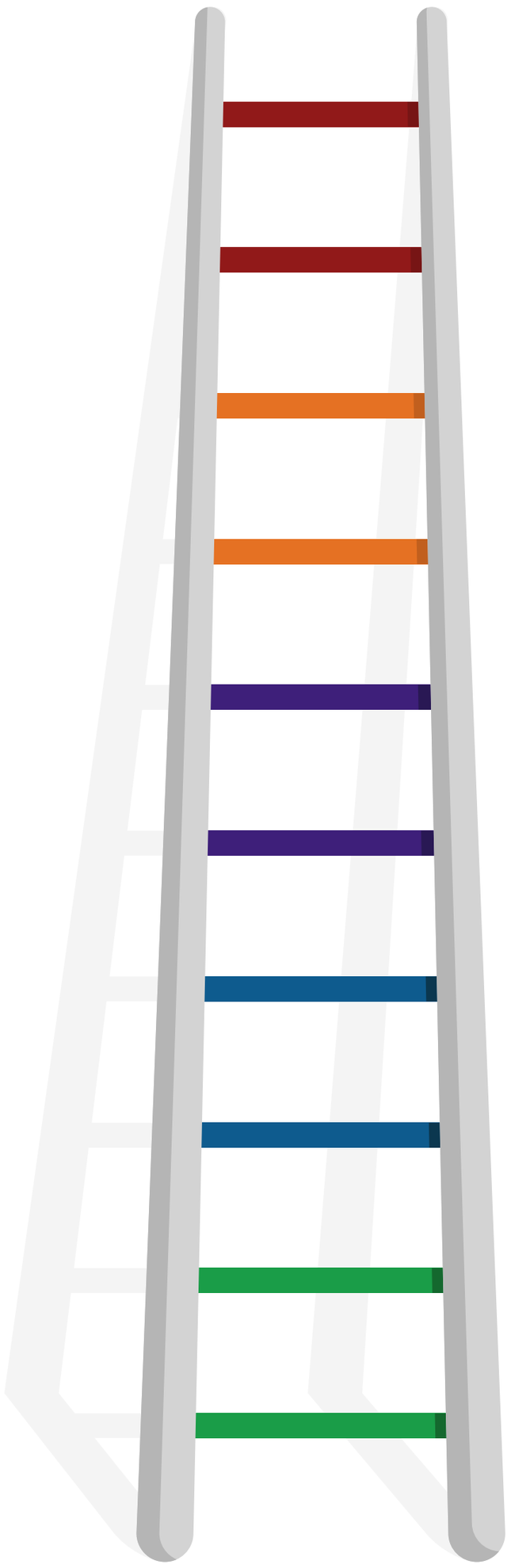
WHAT CAN BE DONE:

Treatment Options



CORE LEARNING SKILLS

Core Learning Skills (CLS) training is a series of daily physical activities specifically designed to:

- ✔ Integrate primitive reflexes
- ✔ Strengthen visual and motor skills
- ✔ Improve body and attention awareness
- ✔ Enhance coordination, regulation, and learning efficiency

Through targeted movement, rhythm exercises, and sensory activities, students can build stronger neurological pathways, improving attention, learning, and emotional regulation.

WITH SUPPORT:

These foundational skills can be strengthened, unlocking your child's full potential!

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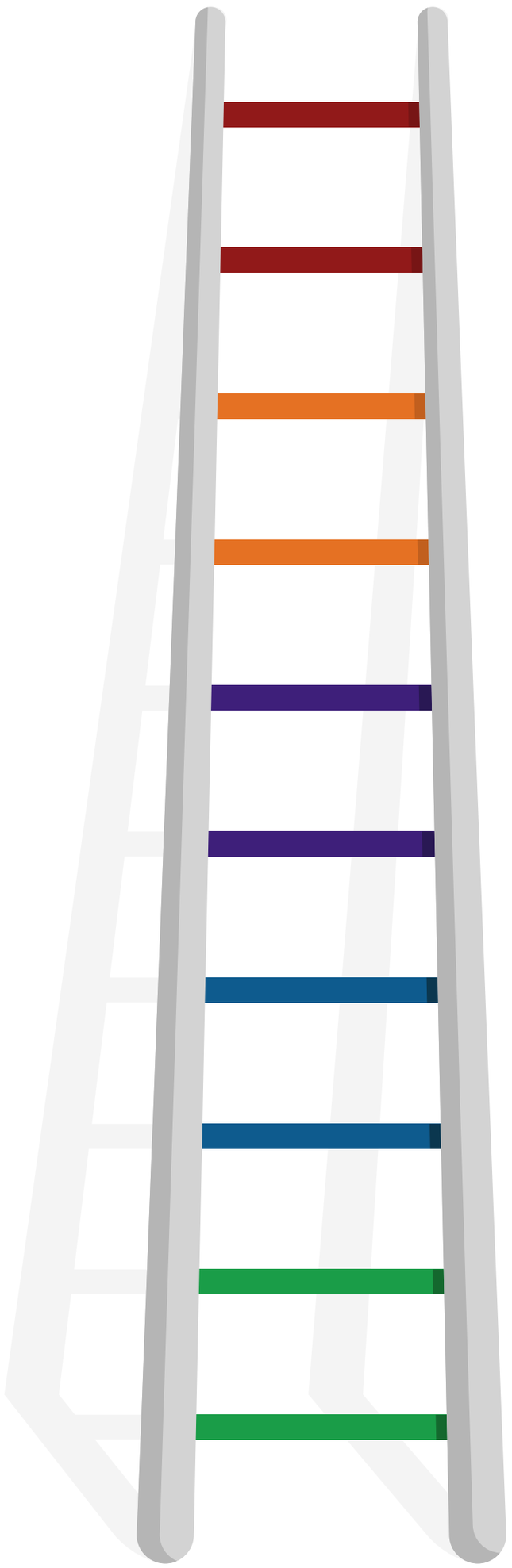
WHAT NOW?

Next Steps



If you recognize these signs in your child, you are not alone — and there is hope.

Retained reflexes are **not** a life sentence.

With targeted support like Core Learning Skills Training and Reflex Integration, children can build a stronger neurological foundation, leading to better learning, attention, regulation, and confidence.

The **LEARNING SKILLS CONTINUUM** on the following pages shows how strengthening those foundational Core Learning Skills — starting with reflex integration — supports the development of ALL higher learning abilities.

With a strong foundation in place, children can climb toward their true potential, experiencing lasting growth in learning, behavior, and emotional regulation.

NEXT STEPS

- ✔ Take an in-depth look at Core Learning Skills: StowellCenter.com/CLS
- ✔ Schedule a free call with a Learning Specialist at: StowellCenter.com/Call
- ✔ Or call us directly at 877-774-0444

We would love to help your child unlock their full potential!

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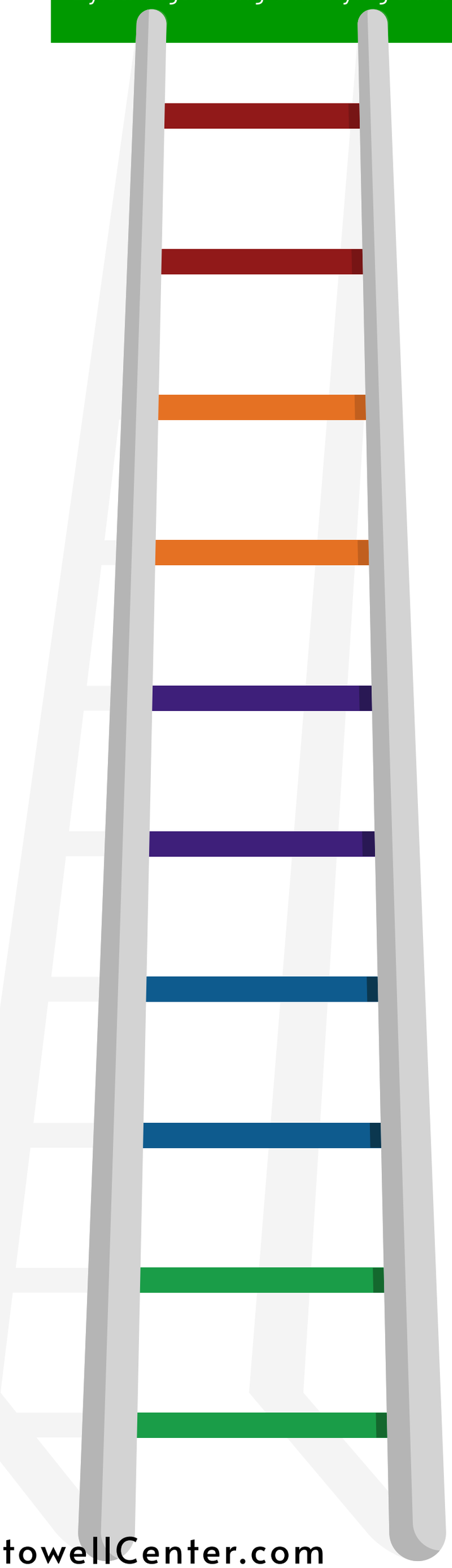
THE LEARNING SKILLS CONTINUUM

Having a learning challenge is like doing a job at the top of a ladder when some of the rungs underneath are unstable.

This diverts attention and causes everything to be harder and take longer.

By strengthening underlying skills (the rungs), attention, confidence, and success at the top of the ladder will improve!



CONTENT AREAS & HIGHER LEARNING

Refining and Applying Basic Academic Skills, Subject Areas, Social Success

Schools and Tutoring Focus Here

BASIC ACADEMIC SKILLS

Reading, Spelling, Writing, Math, Language

EXECUTIVE FUNCTION

Reasoning, Strategizing, Organizing, Planning, Self-Monitoring of Attention and Behavior, Study Skills

We Work Here

PROCESSING SKILLS

Memory, Attention Focus, Auditory and Visual Processing, Processing Speed, Language Processing

CORE LEARNING SKILLS

Developmental Visual and Motor Skills, Internal Organization, Body and Attention Awareness and Control

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THE LEARNING SKILLS CONTINUUM

CORE LEARNING SKILLS

- Good sensory input
- Postural security
- Body Awareness and control
- Reflex integration
- Interpret tactile, proprioceptive, and motor input
- Balance
- Motor planning
- Bilateral integration
- Cross Lateral Integration
- Eye-hand coordination
- Ocular-motor control
- Listening skills
- Visual-Spatial perception
- Attention awareness and control
- Sensorimotor integration

PROCESSING SKILLS

- Attention
- Memory
- Processing speed
- Auditory processing
- Phonological Awareness
- Language processing
- Visual processing
- Sensorimotor integration
- Sequential processing
- Simultaneous processing

EXECUTIVE FUNCTION

- Visual Inner Language
- Verbal Inner Language
- Working memory
- Organization
- Time Orientation
- Patterns and relationships
- Problem solving
- Reasoning
- Strategizing
- Using information
- Making connections
- Logic and Reasoning
- Relevance vs. Non-Relevance
- Planning
- Study Skills
- Test Taking Strategies
- Self-monitoring and management of attention and behavior
- Social awareness / tact

BASIC LANGUAGE & ACADEMIC SKILLS

- Language
  - Receptive
  - Expressive
  - Articulation
  - Vocabulary
  - Comprehension
- Reading
  - Sound-symbol
  - Phonics
  - Sight recognition
  - Morphology
  - Vocabulary
  - Comprehension
- Writing
  - Printing / Cursive
  - Spelling
  - Sentence structure
  - Grammar
  - Organization
  - Composition
  - Edit / Proof
- Math
  - Concepts: Numeration, Time, Measurement, Change, Amount
  - Computation
  - Problem solving

CONTENT AREAS & HIGHER LEARNING

- Subject areas
- Refining and applying basic academic skills
- Study Skills
- Life-long learning of new skills

Motor, Visual, Auditory, Language, Attention, Memory, and Executive Function Systems develop and are used with increasing sophistication as one moves up the continuum.

Higher level success is dependent on a solid lower lever foundation.

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