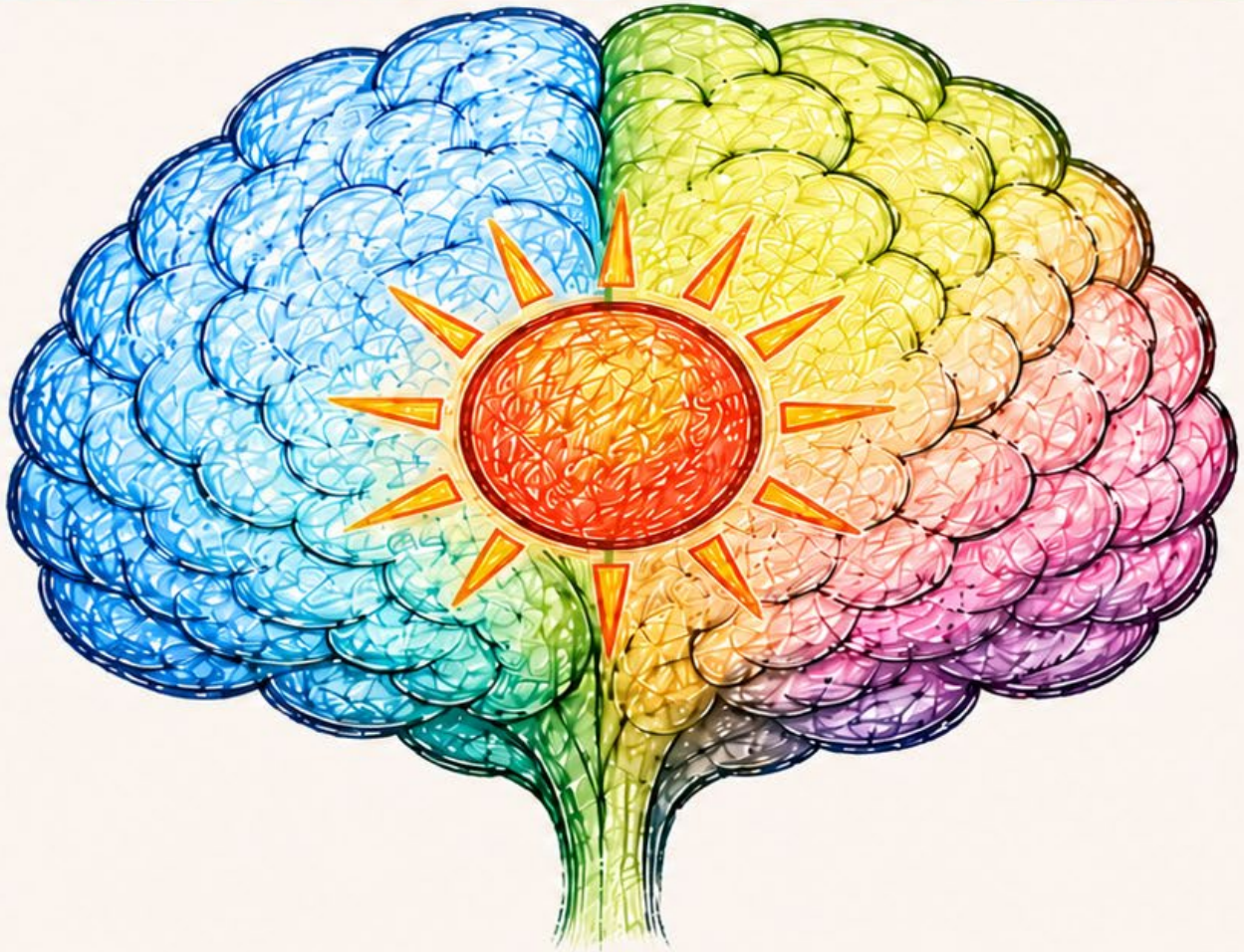
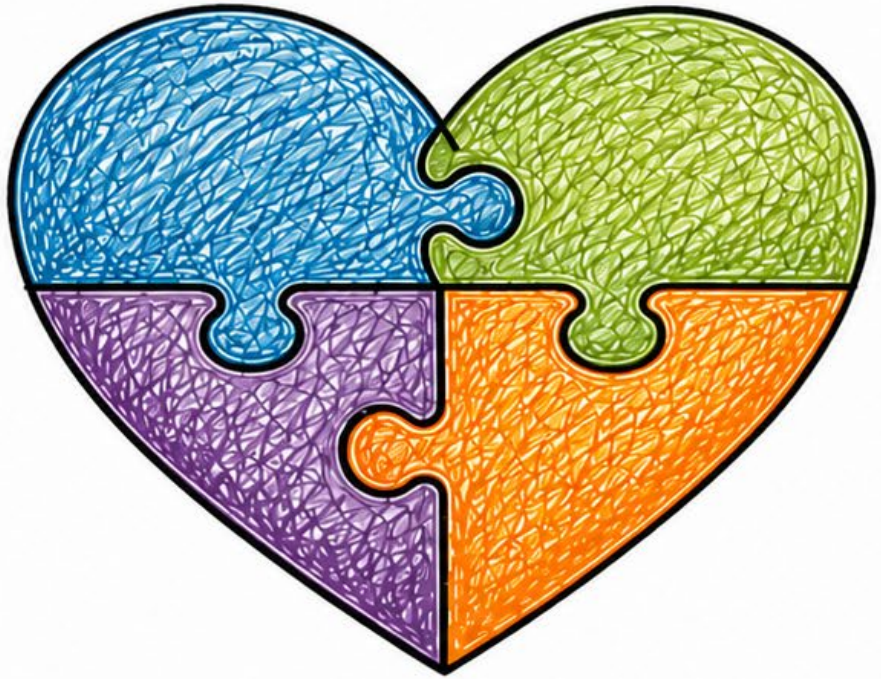
Executive Functions:

The Foundation for Success





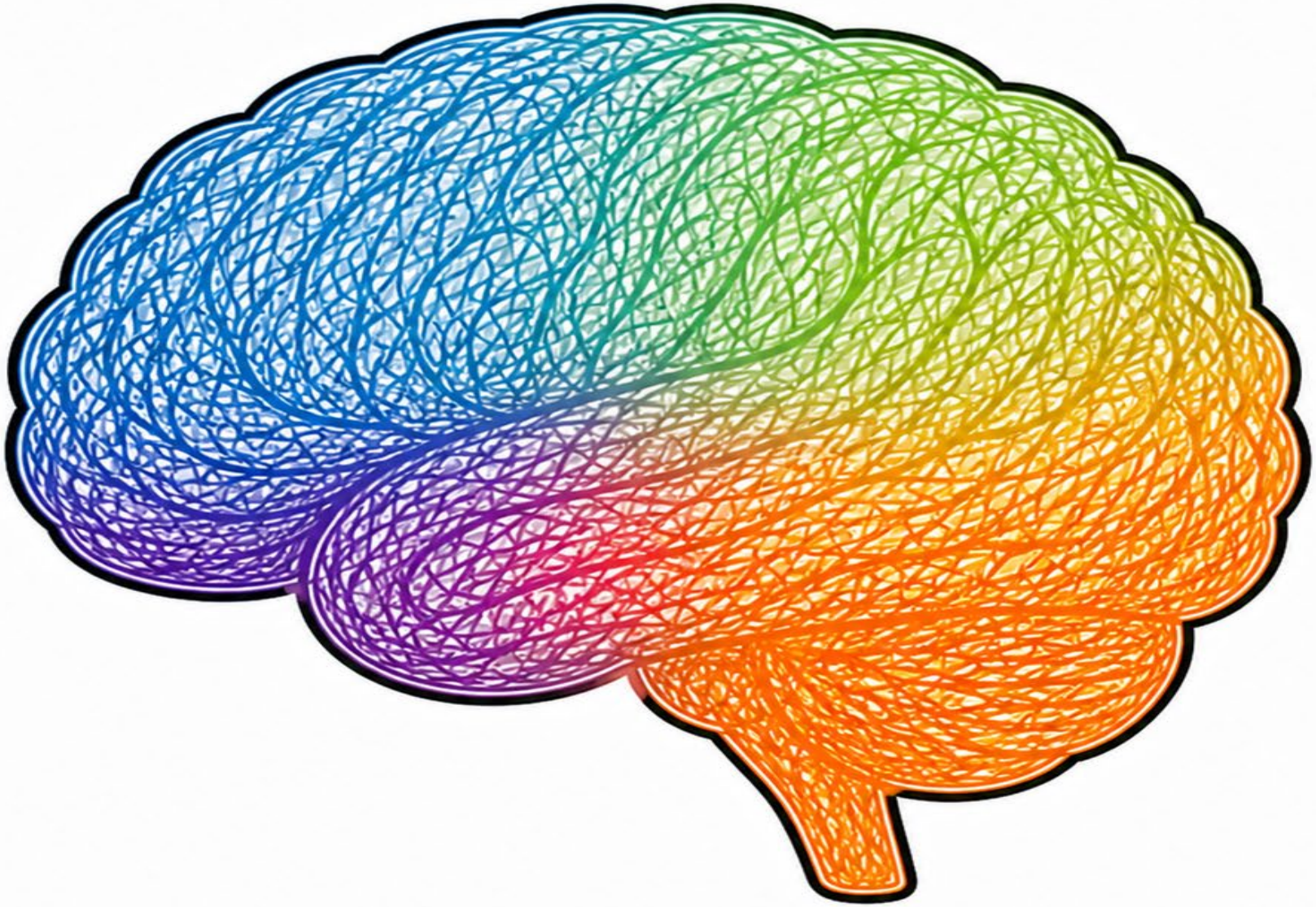
EXECUTIVE FUNCTIONS

CO-REGULATION

LITERACY

PLAY

BALANCE ACTIVITIES

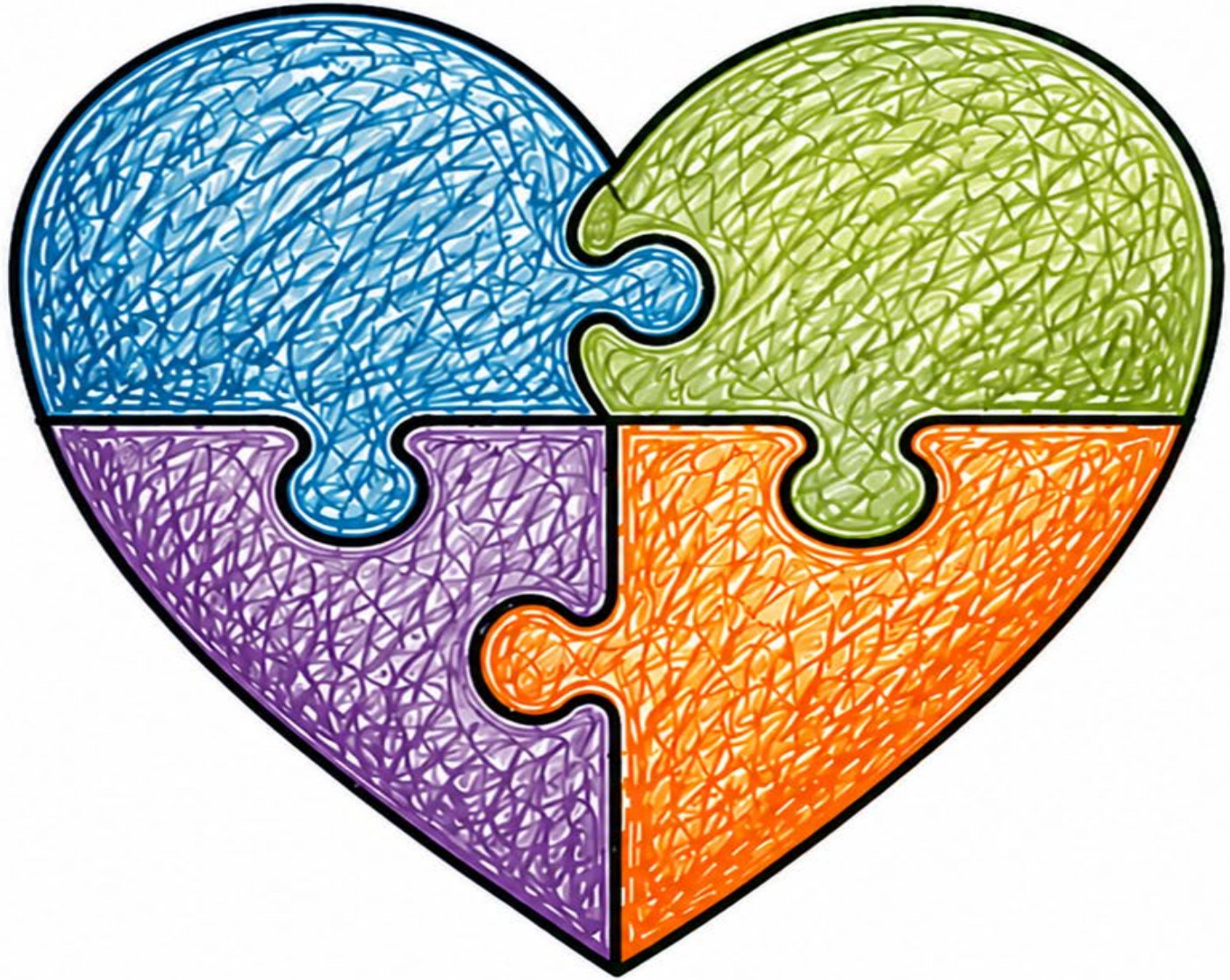


Balance activities are like a neural power-up for the brain's control system, firing up the cerebellum and vestibular system while strengthening the connections that keep the prefrontal cortex online.

For children, this means better focus, emotional control, coordination, and readiness to learn…they're literally stabilizing the brain and that directly affects thinking and behavior.

For adults, balance work sharpens **attention,** improves **reaction time,** reduces **stress,** and protects **brain health** by keeping neural pathways active and efficient. When the body learns to stay steady, the brain learns to stay steady too…under pressure, in motion, and in life.

EXECUTIVE FUNCTIONS



EXECUTIVE FUNCTIONS

are the brain's "control center" that help your child learn, behave, and handle life as they grow.

THEY AFFECT EVERYDAY THINGS LIKE...

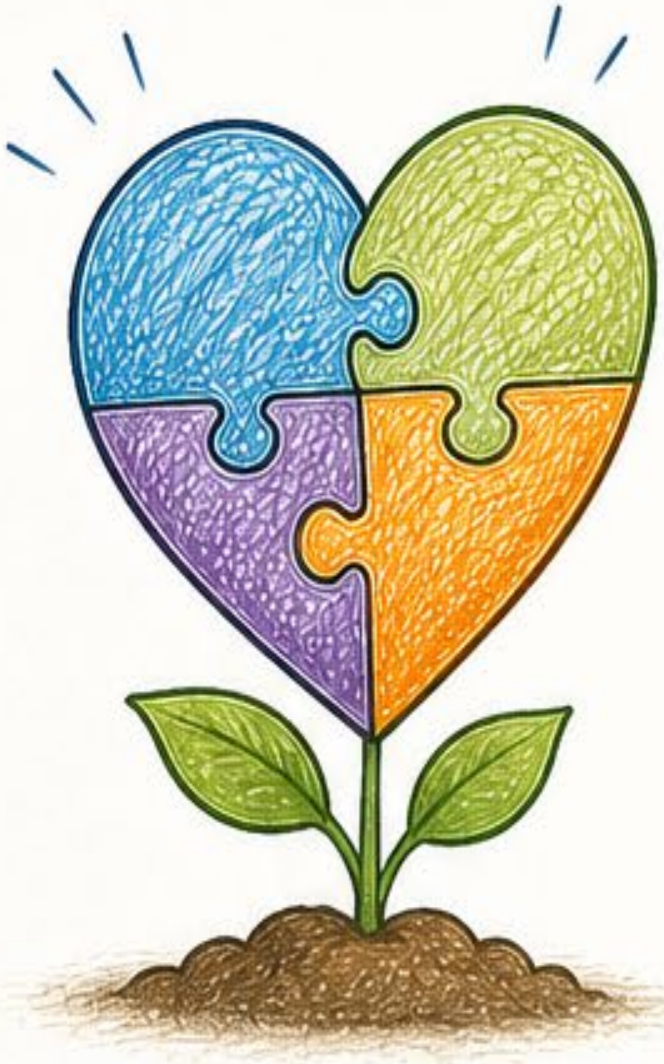
MANAGING BIG EMOTIONS

PAYING ATTENTION

MAKING FRIENDS

SOLVING PROBLEMS

GETTING THINGS DONE



When we build these skills early, we're not just helping with behavior or school... we're setting them up for

- CONFIDENCE
- INDEPENDENCE
- SUCCESS FOR LIFE.

STRONG SKILLS TODAY. BRIGHTER TOMORROWS.

YOUR BRAIN. MANY SUPERPOWERS.

WHEN ALL PARTS WORK TOGETHER, YOU CAN DO AMAZING THINGS!

WORKING MEMORY

Holds and uses information to learn, reason, and get things done.

COGNITIVE FLEXIBILITY

Helps you switch gears, adapt to change, and find new solutions.

INHIBITORY CONTROL

Helps you pause, think, and make good choices by controlling impulses.

PLANNING AND PRIORITIZING

Helps you set goals, make a plan, and focus on what matters most.

SELF-MONITORING / SELF-REGULATION

Helps you notice your feelings and actions and adjust to stay on track.

ORGANIZATION

Helps you keep things in order, stay tidy, and find what you need.

EMOTIONAL CONTROL

Helps you understand and manage your emotions in healthy, helpful ways.

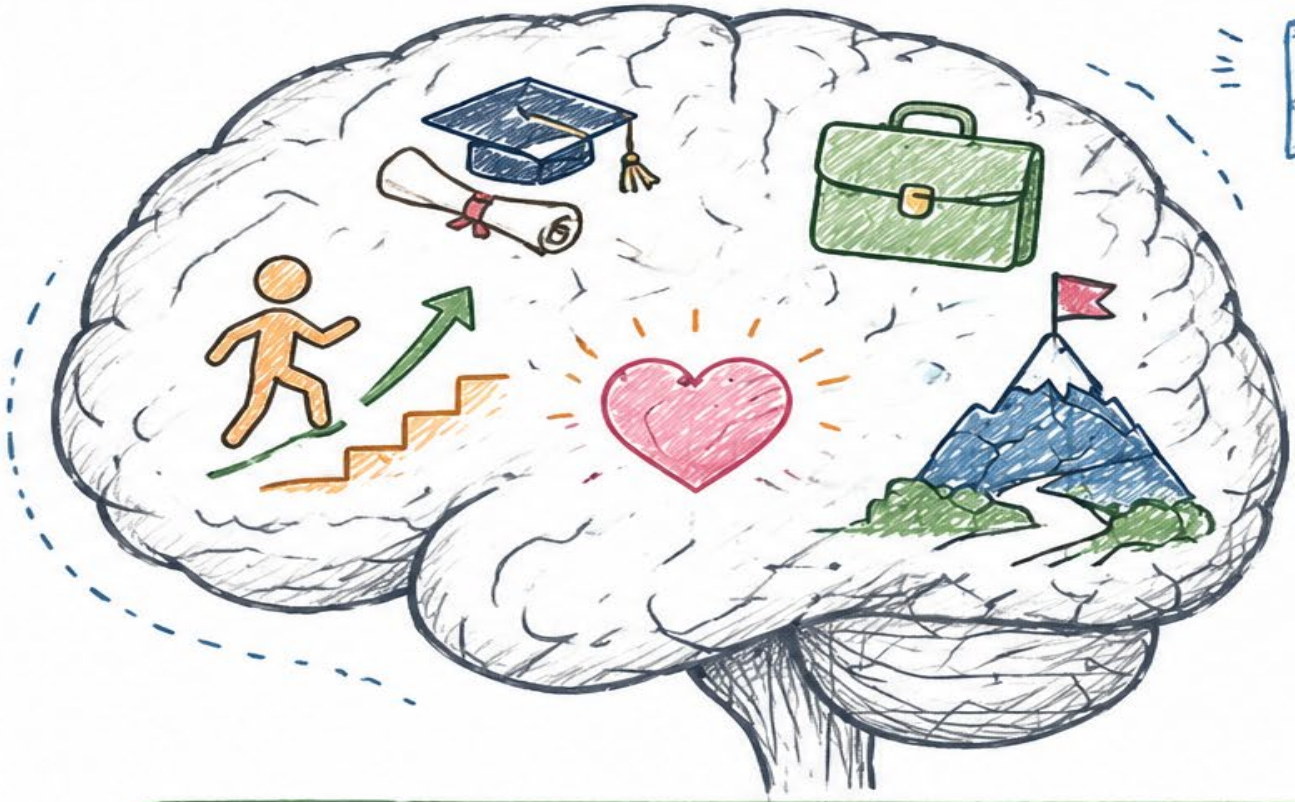
TIME MANAGEMENT

Helps you plan how to use your time wisely and stay on track to complete your tasks.

EVERY PART OF YOUR BRAIN IS IMPORTANT.
TOGETHER, THEY HELP YOU LEARN, GROW, AND THRIVE!

IT'S NOT ABOUT BEING PERFECT.
IT'S ABOUT PROGRESS.

EXECUTIVE FUNCTIONS
PREDICT LONG-TERM SUCCESS
MORE THAN IQ AND GRADES

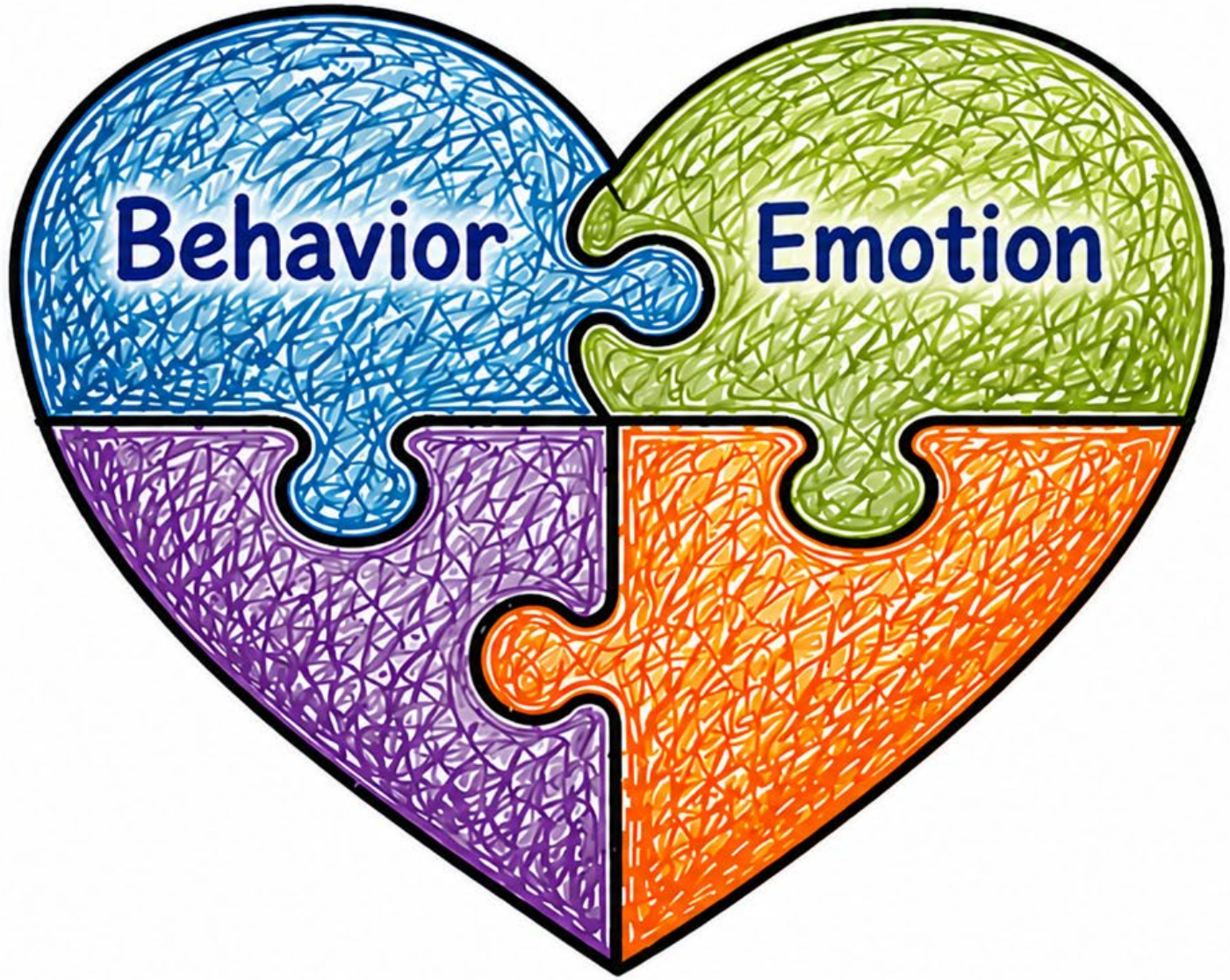


Research consistently shows
EF skills are stronger predictors of:

- GRADUATION
- EMPLOYMENT
- INDEPENDENCE
- MENTAL HEALTH
- LIFE OUTCOMES

STRONG EXECUTIVE FUNCTIONS BUILD THE FOUNDATION
FOR A SUCCESSFUL, HEALTHY, AND FULFILLING FUTURE!

EXECUTIVE FUNCTIONS



UPSTAIRS BRAIN & DOWNSTAIRS BRAIN

TWO PARTS. ONE POWERFUL YOU.

UPSTAIRS BRAIN

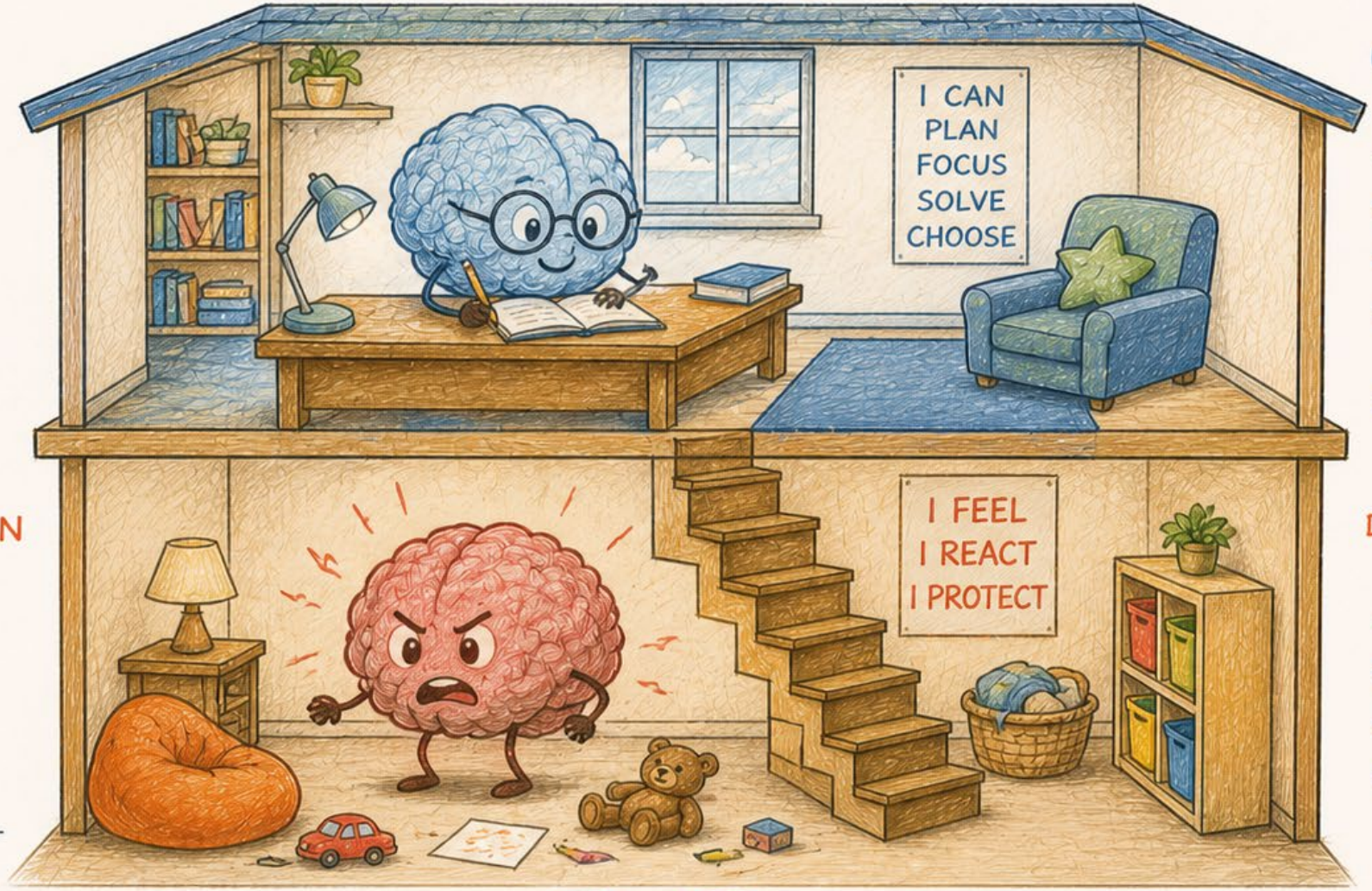
THINKING BRAIN

- Helps us plan, solve problems and focus.
- Learns, remembers and makes good choices.
- Uses words to express feelings.

DOWNSTAIRS BRAIN

FEELING BRAIN

- Notices danger and big feelings.
- Helps us react quickly to stay safe.
- Works automatically—fast and strong.



UPSTAIRS BRAIN HELPS US:

- ✓ Stay calm
- ✓ Think before acting
- ✓ Learn new things
- ✓ Build strong relationships
- ✓ Dream big

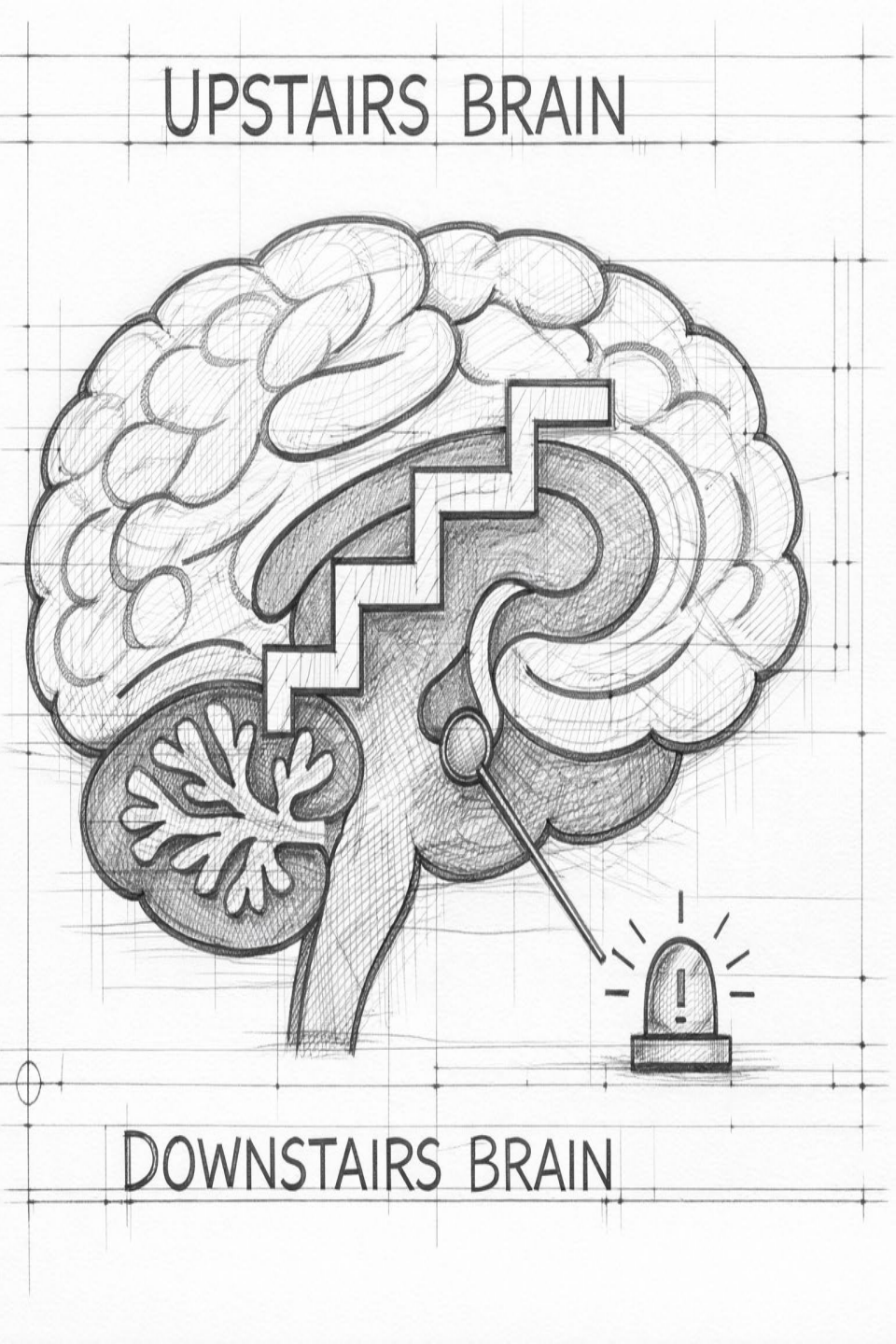
DOWNSTAIRS BRAIN HELPS US:

- ✓ Stay safe
- ✓ React in emergencies
- ✓ Feel our feelings
- ✓ Know when something isn't right

WHEN BOTH BRAINS WORK TOGETHER, WE FEEL CALM, CONNECTED AND CONFIDENT.

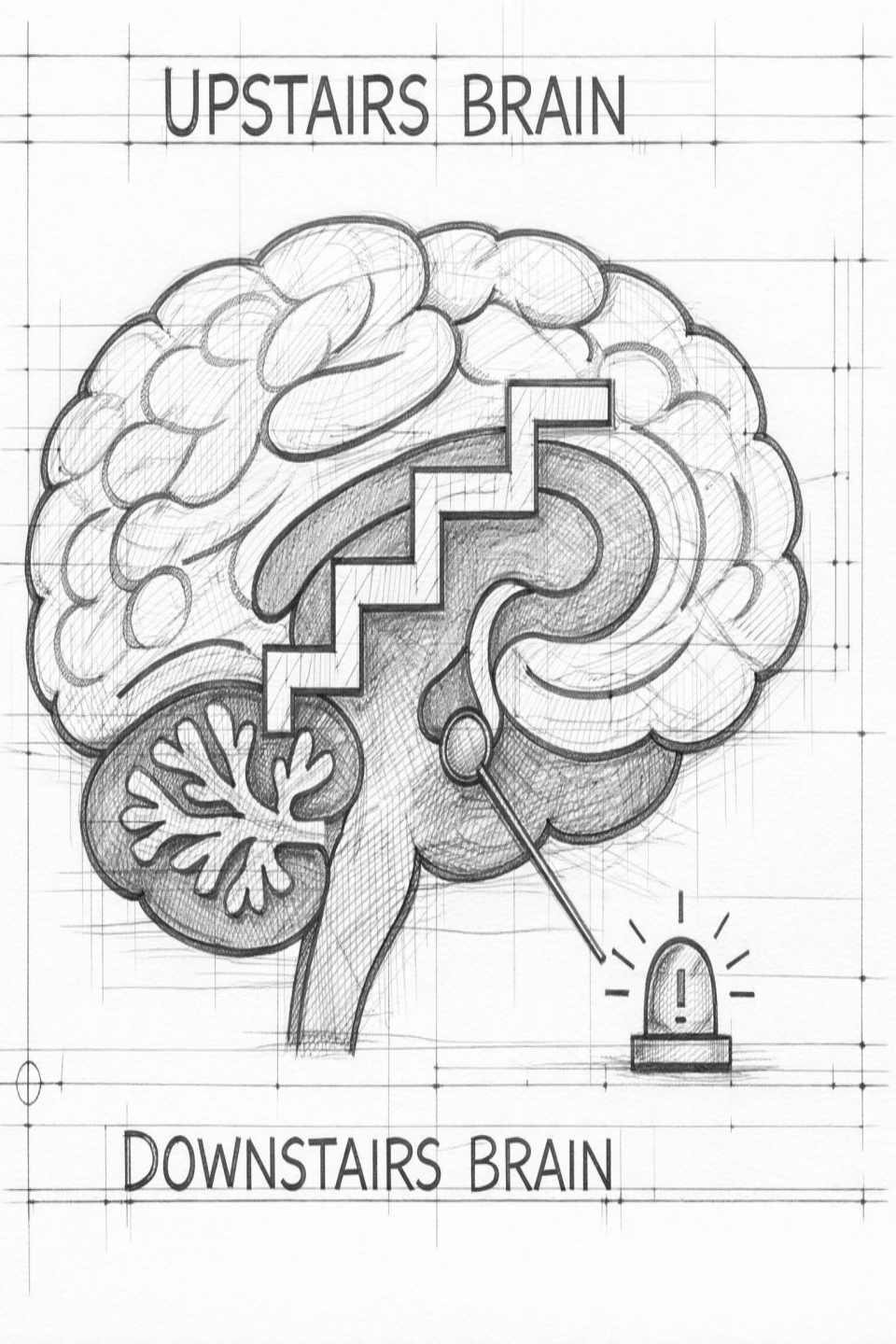
WE CAN'T ALWAYS STAY UPSTAIRS— BUT WE CAN COME BACK.

BIG FEELINGS ARE NORMAL. COMING BACK IS GROWTH.



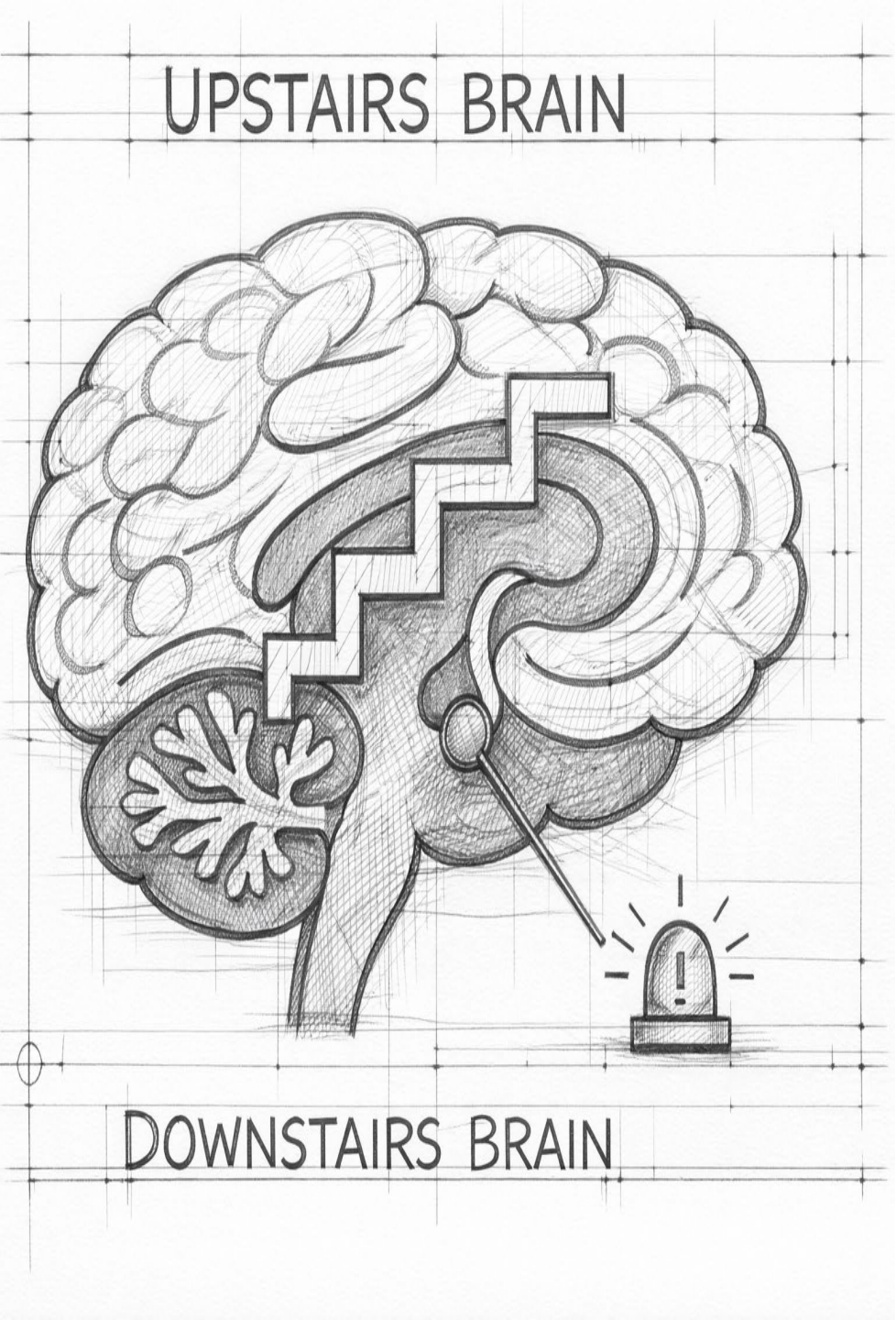
What We NEED to Know

- The **downstairs brain** is online, operational, and fully furnished at birth! It prefers power and control over cooperation!



What We NEED to Know

- The **upstairs brain** is still very much under construction, littered with random pieces and gaping holes that will **literally take <u>another 25+ years</u>** to complete!

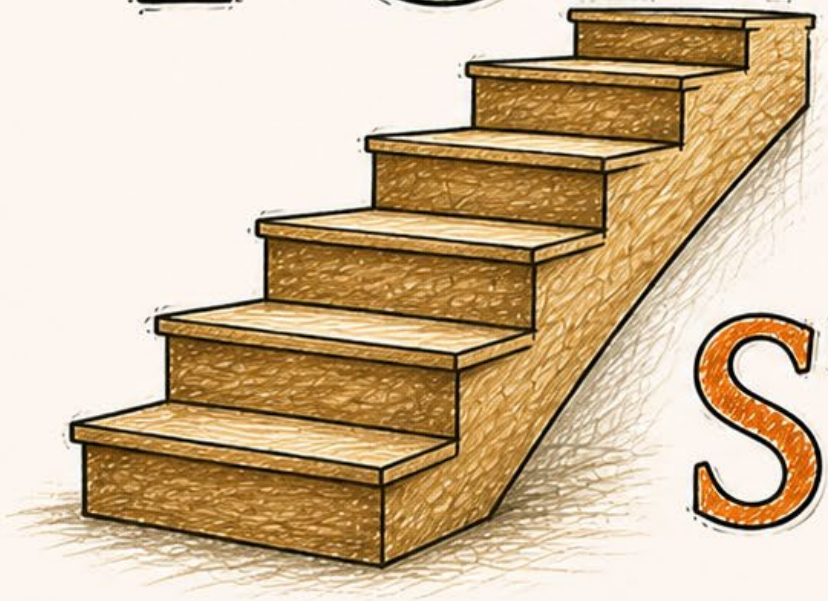


Growth & Development

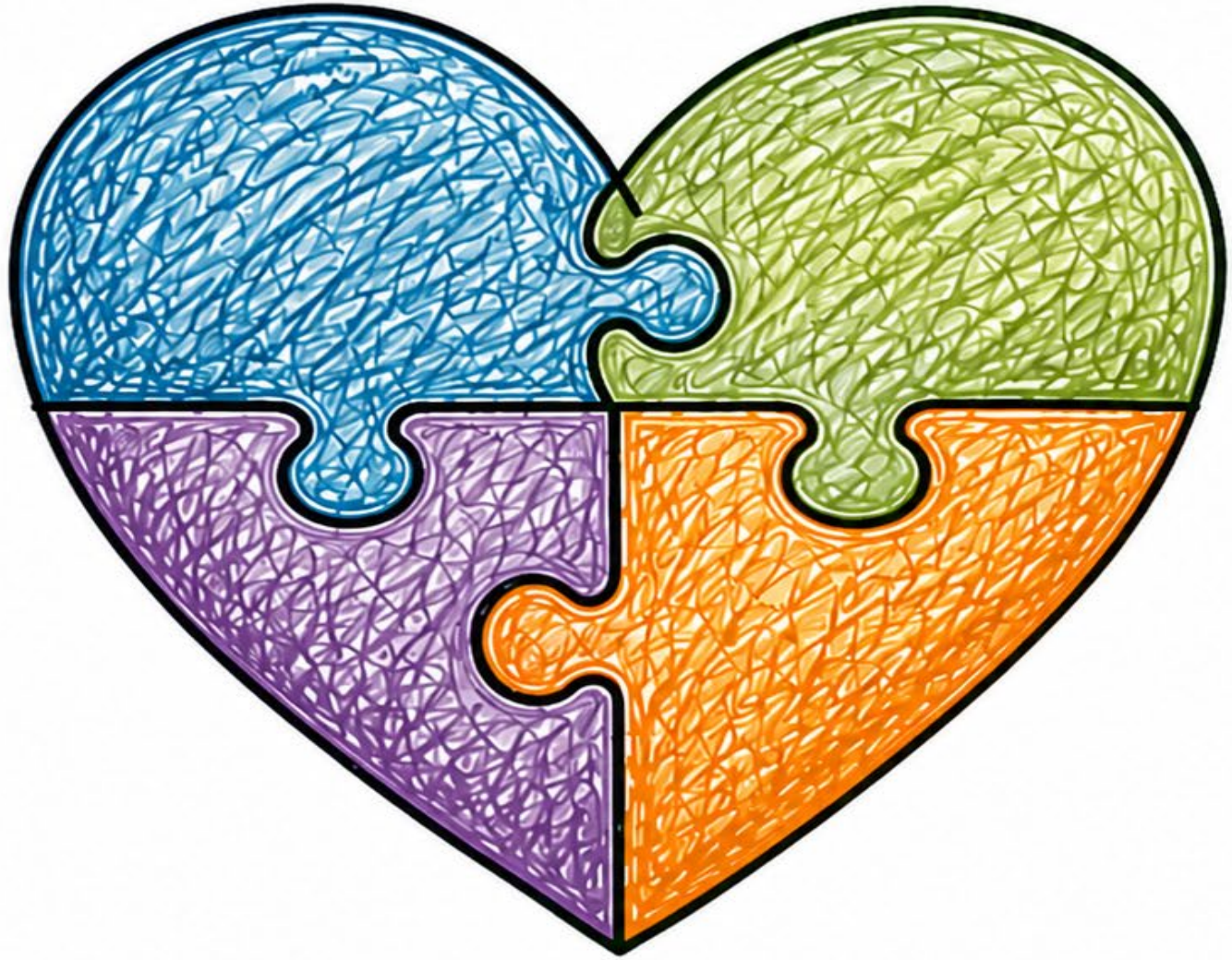
- **Relationship dependent**: extremely vital from birth to 5 (and beyond).

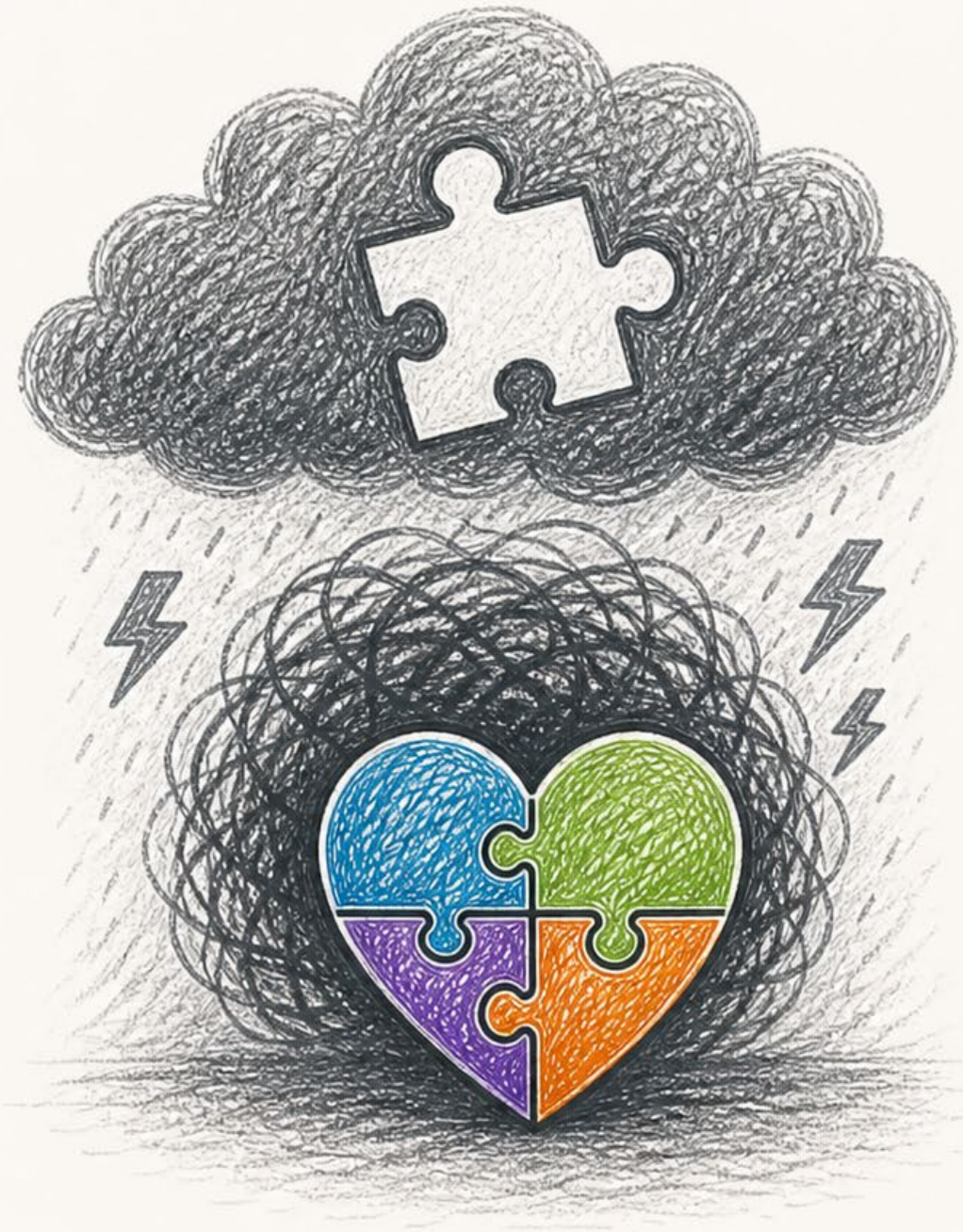
- Changing behavior is **NOT** transactional!

EXECUTIVE FUNCTIONS BUILD THE STAIRCASE

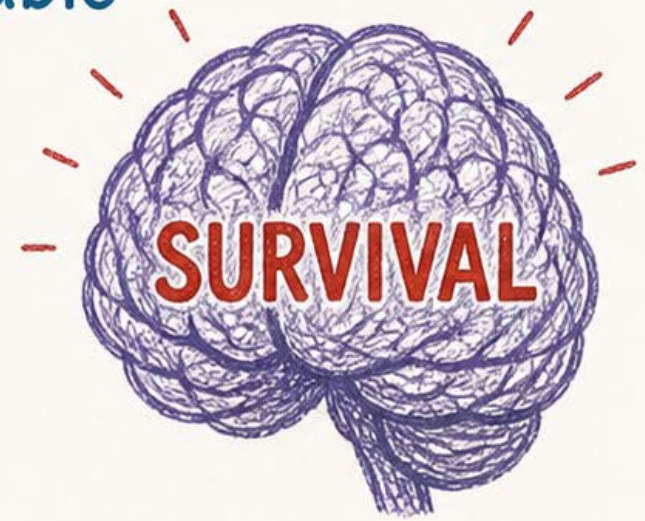


CO-REGULATION





When adults fail to **co-regulate**, children are left **alone** with emotions their brains are **biologically incapable** of managing, and **survival** replaces **learning.**



A CHILD'S BRAIN BEGINS TO CO-REGULATE WITH AN ADULT'S BRAIN IN SECONDS, NOT DAYS OR WEEKS.

Neuroscience shows that the moment a regulated adult enters a child's sensory field, the child's nervous system starts syncing through neuroception (the brain's unconscious safety scanner).

HERE'S WHAT HAPPENS IN SECONDS:

- Child detects the adult through sight, sound, and presence.
- Neuroception scans for safety.
- If the adult is regulated and safe, the child's nervous system begins to settle.
- Brains and bodies sync. Connection creates calm.

CONNECTION COMES FIRST. CO-REGULATION HAPPENS FAST.
CALM ADULTS HELP CHILDREN FEEL SAFE, SEEN, AND READY TO LEARN.

HEART RATE VARIABILITY SHIFTS, CORTISOL BEGINS TO DROP, AND THE LIMBIC QUIETS WITHIN 30–90 SECONDS WHEN THE ADULT IS TRULY REGULATED.

HEART RATE VARIABILITY SHIFTS
The body moves from stress to connection.

CORTISOL BEGINS TO DROP
Stress hormone levels start to decrease.

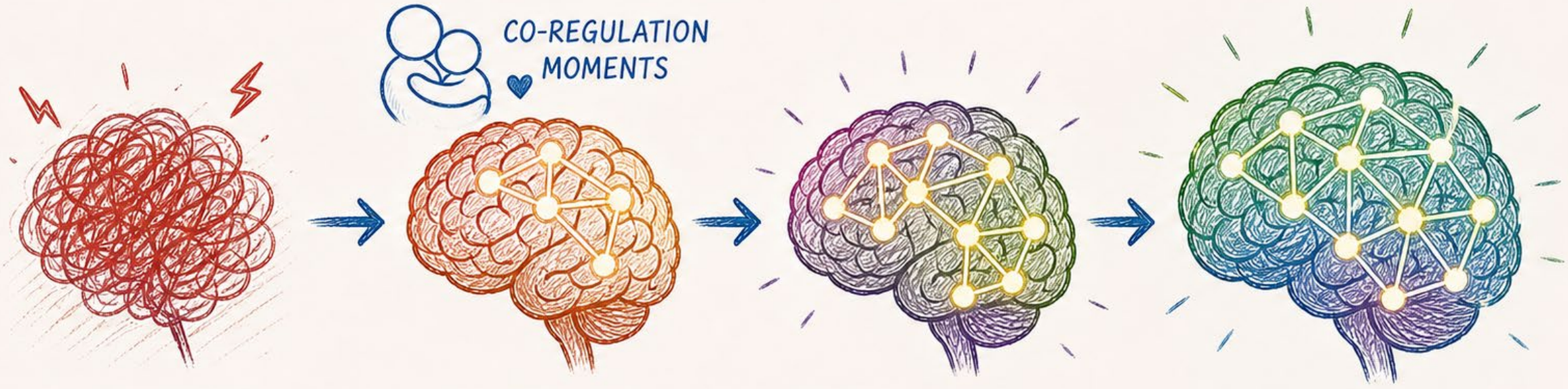
THE LIMBIC SYSTEM QUIETS
Emotional reactivity settles and calm returns.

THIS IS WHY...

DYSREGULATED ADULTS
ESCALATE SITUATIONS
because their stress triggers the child's stress.

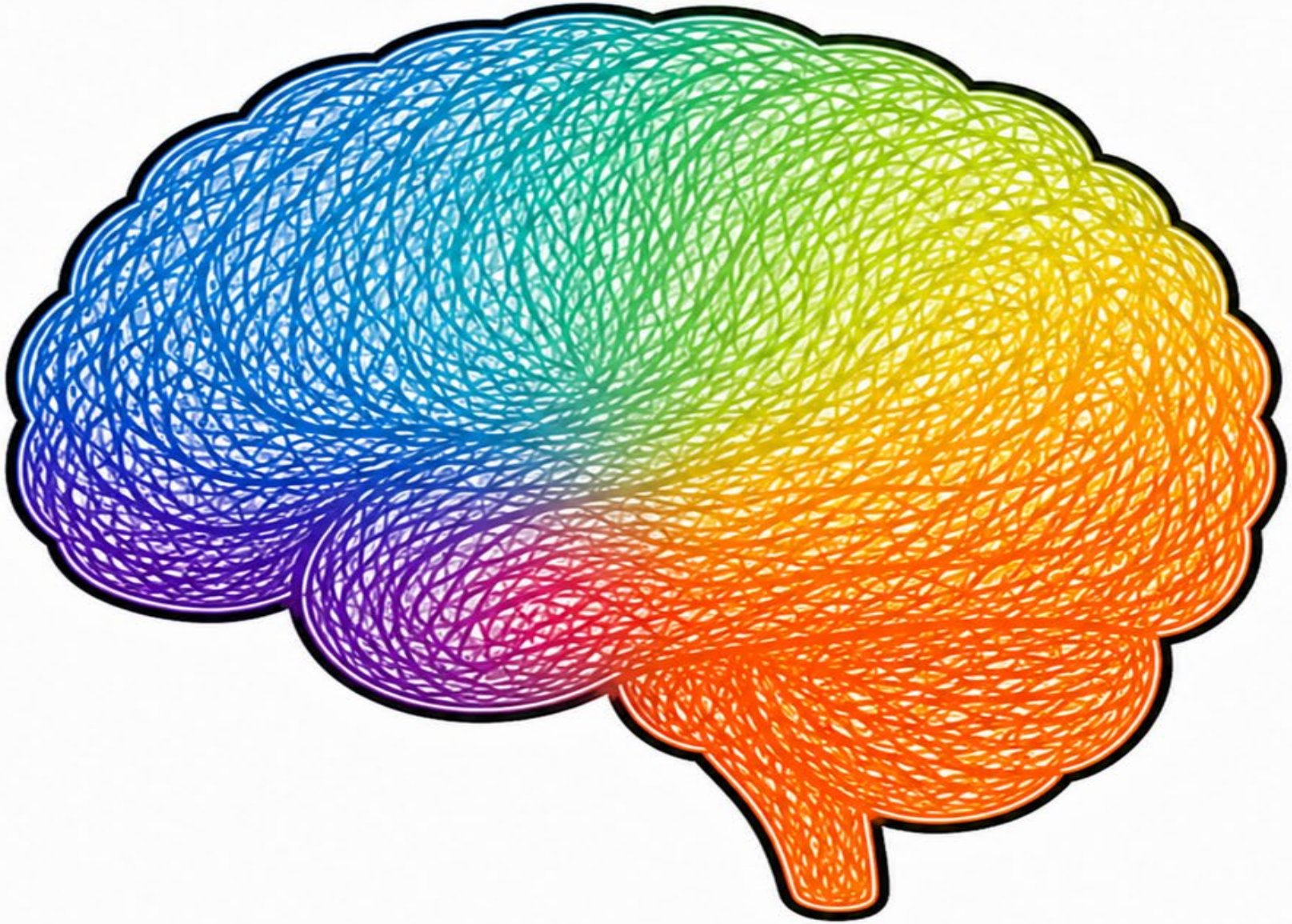
REGULATED ADULTS
DE-ESCALATE THEM
just by being present and regulated.

OVER TIME, REPEATED CO-REGULATION LITERALLY WIRES THE CHILD'S BRAIN.



THE PREFRONTAL CORTEX LEARNS,
"THIS IS HOW CALM FEELS. THIS IS HOW CONTROL WORKS."

CROSS MIDLINE ACTIVITIES

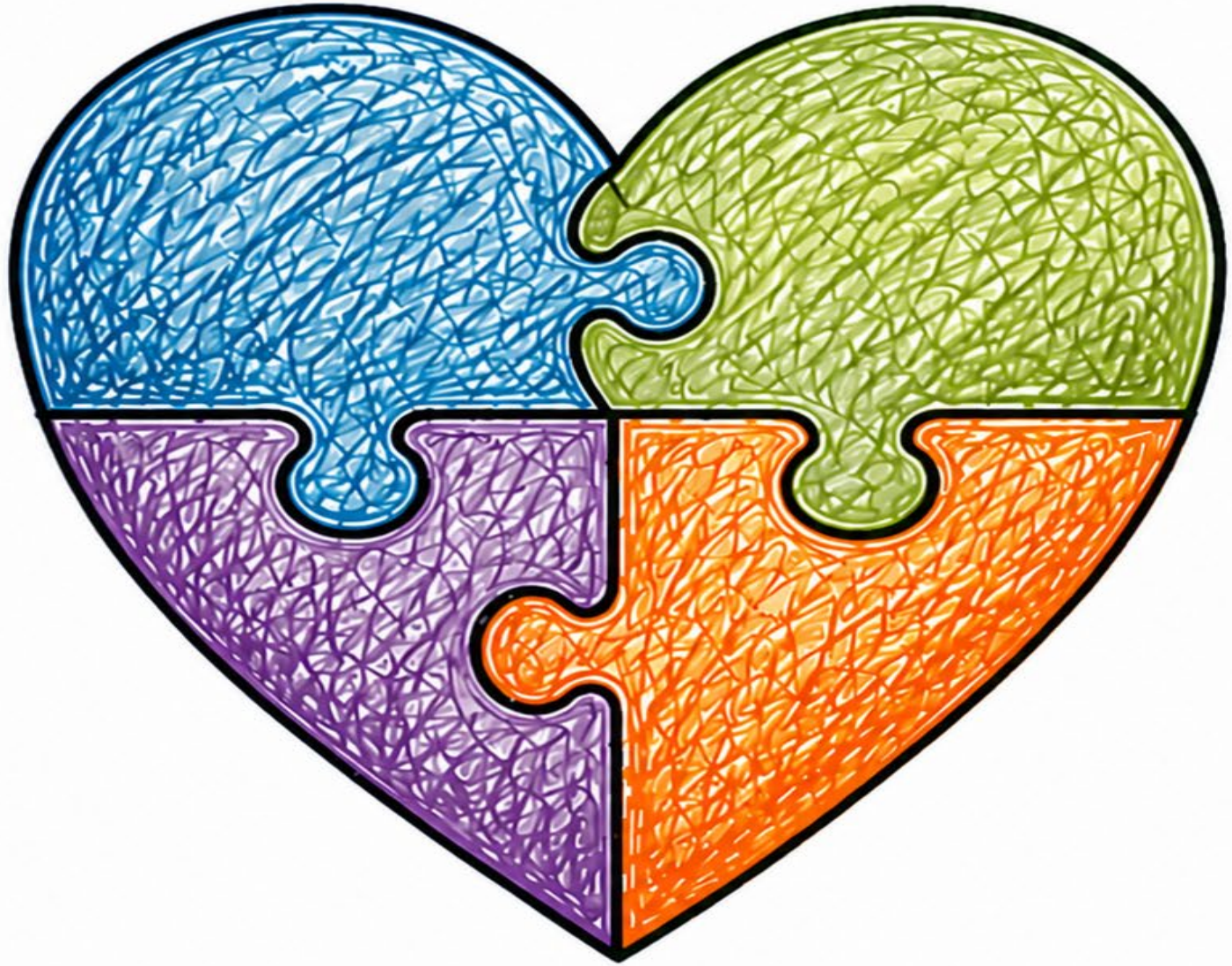


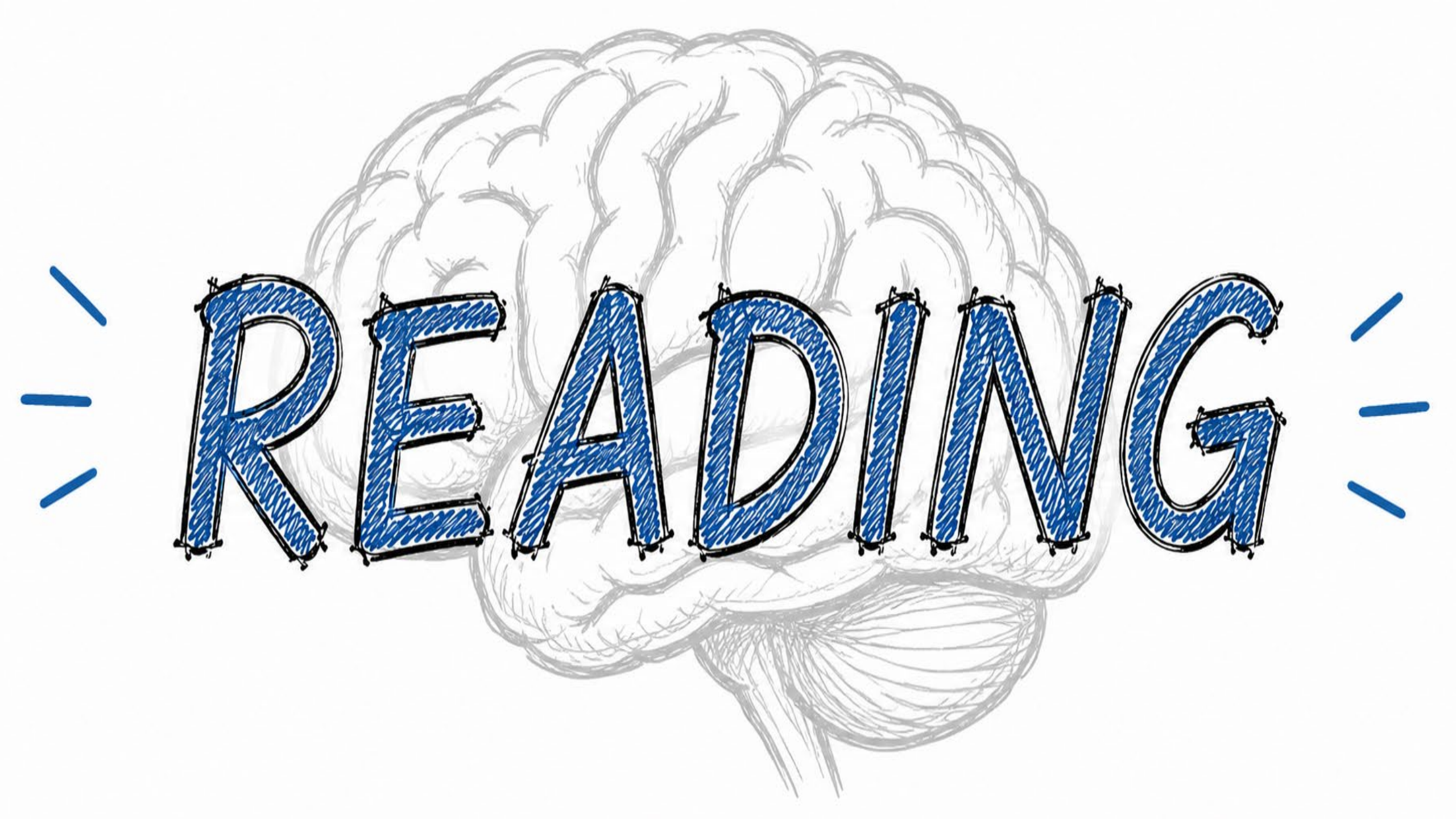
Crossing midline activities force the brain's two hemispheres to talk to each other, strengthening the neural "highway" (corpus callosum) that powers coordination, attention, and higher-level thinking.

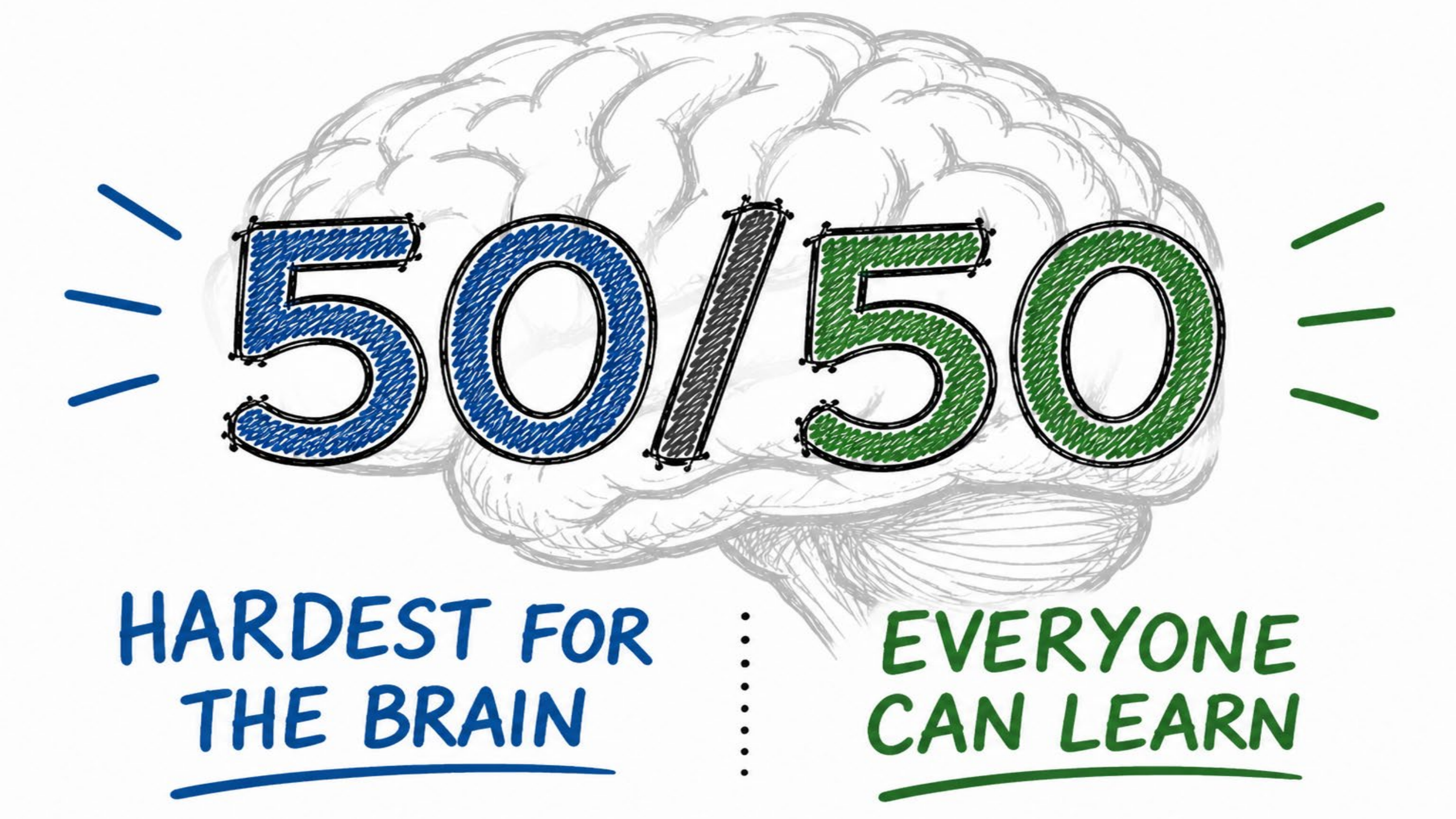
For children, this shows up as better reading and writing, smoother motor skills, improved focus, and more efficient learning because both sides of the brain are working together instead of competing.

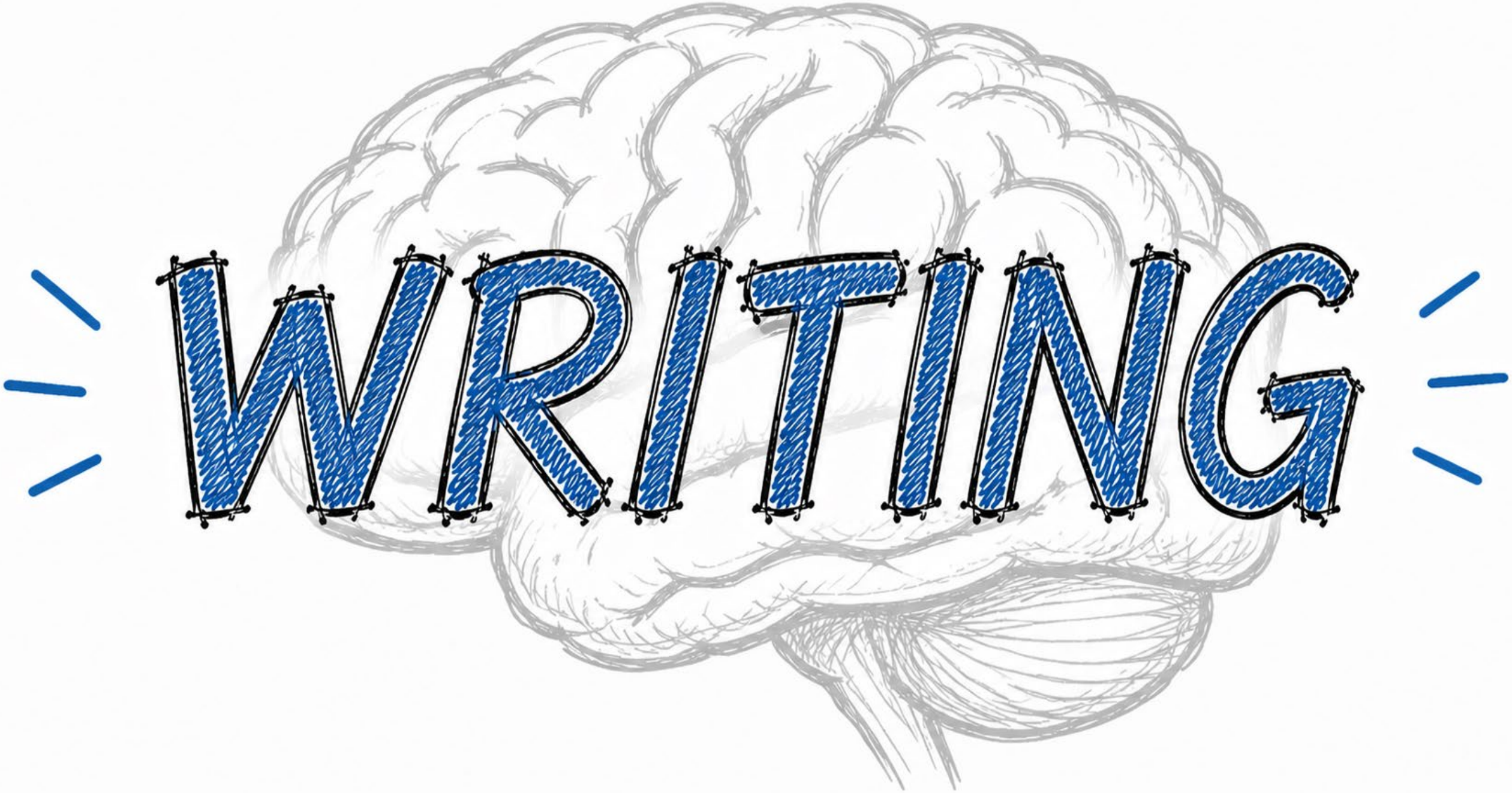
For adults, it sharpens cognitive flexibility, reaction time, and mental efficiency while supporting regulation under stress, essentially keeping the brain integrated, responsive, and less prone to overload

LITERACY




READING


50/50
HARDEST FOR THE BRAIN
EVERYONE CAN LEARN


WRITING

5 BRAIN-BOOSTING REASONS TO PRACTICING HANDWRITING

1 HANDWRITING BUILDS STRONGER BRAIN WIRING

2 SUPERCHARGES MEMORY & LEARNING

3 BOOSTS FOCUS & ATTENTION

4 IGNITES CREATIVITY & IDEA FLOW

5 STRENGTHENS FINE MOTOR SKILLS & SELF-REGULATION

Handwriting fuels memory, focus, creativity, and lifelong learning.

THINGS TO DO AT HOME

★ Play Doh

★ Coloring

★ Drawing and doodling

★ Pencil

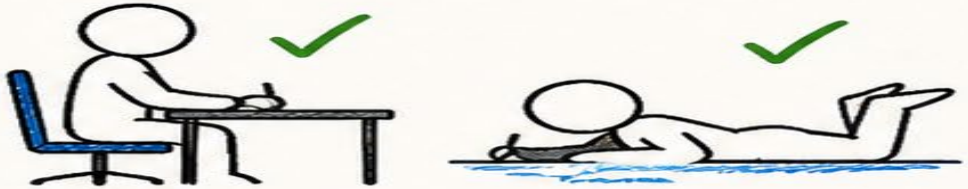
★ Pen

★ Markers

★ Crayons

★ Chalk

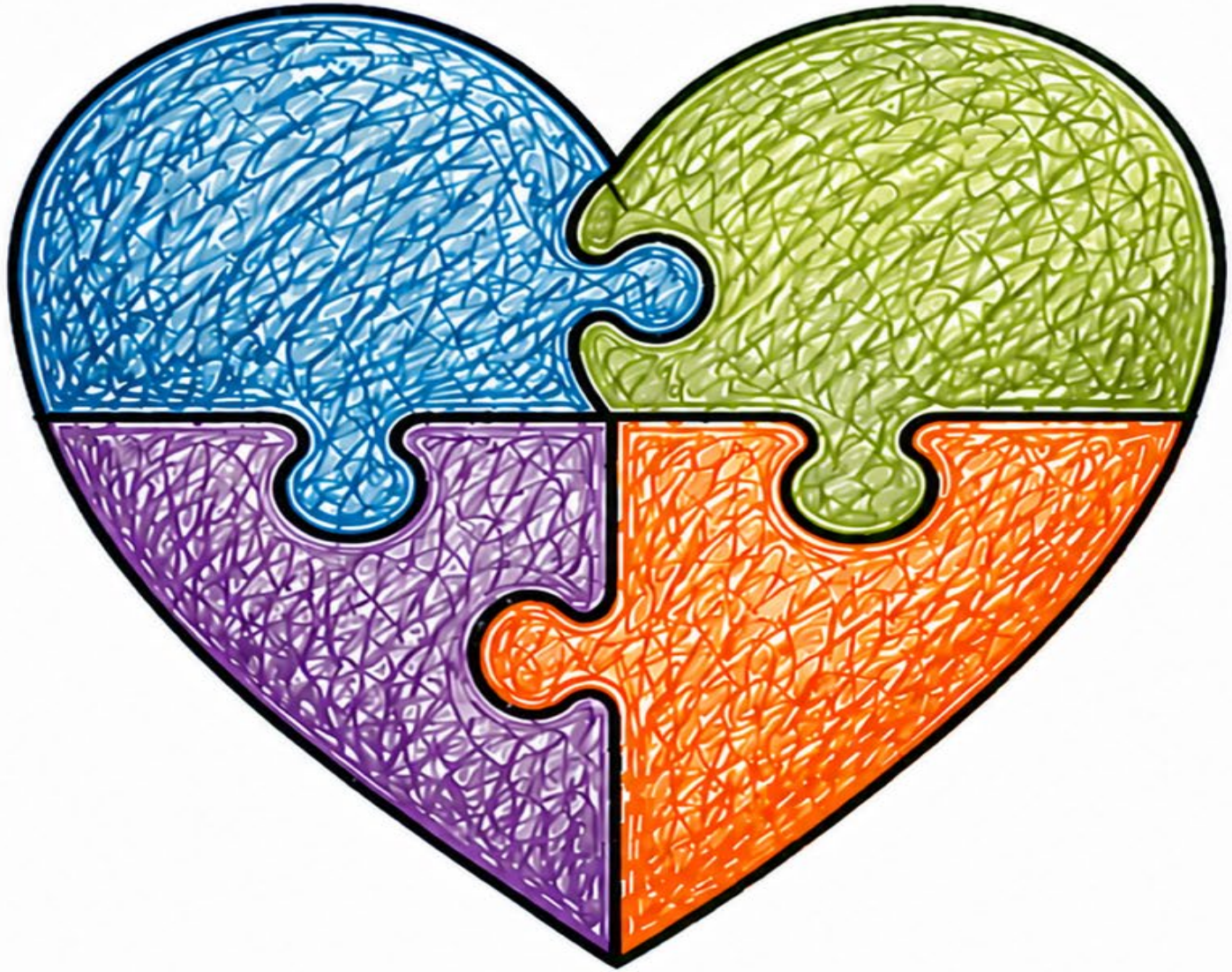
★ Paint



★ Writing positions

★ Doing dishes... YES!!!!

PLAY



STARVE THE BRAIN OF PLAY,

AND YOU CHOKE OFF THE NEURAL WIRING FOR ATTENTION, REGULATION, AND LEARNING—FULL STOP.

MORE PLAY ISN'T EXTRA...

IT'S THE BIOLOGICAL FUEL EVERY BRAIN NEEDS TO GROW, CONNECT, AND PERFORM.

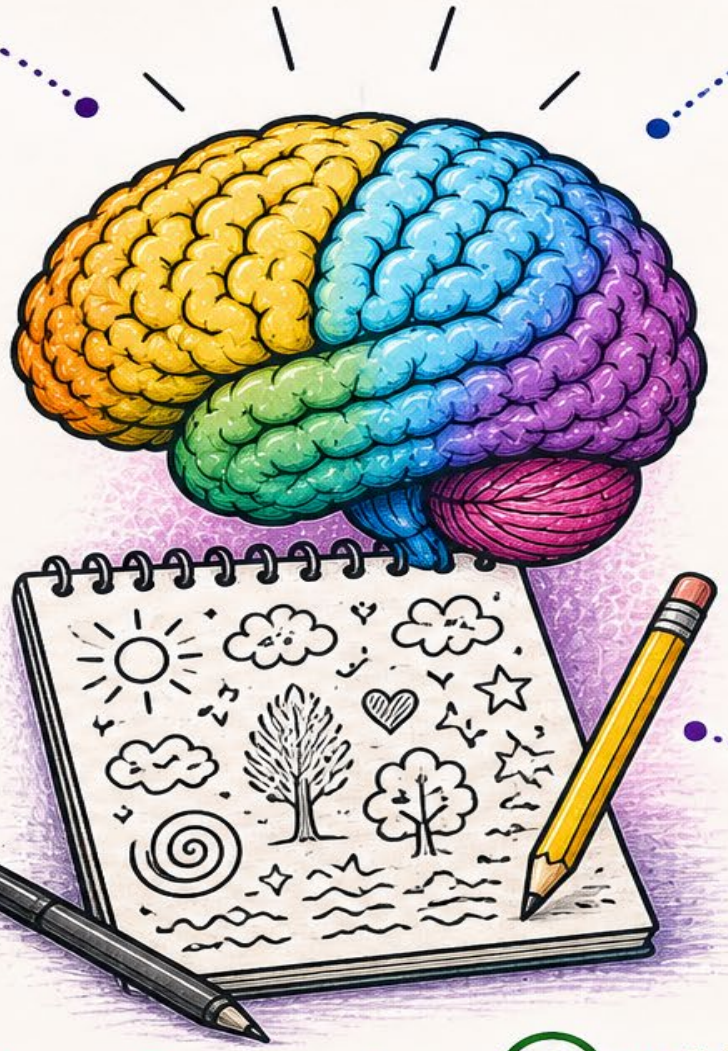
Drawing and Doodling

1 Builds the brain's "control center" (Executive Functions)

Every line drawn requires planning, holding ideas in mind, adjusting, and finishing. That's working memory, flexibility, and follow-through getting reps.

2 Strengthens attention without force

Doodling locks attention in naturally. No nagging. No "focus harder." The brain chooses to stay.

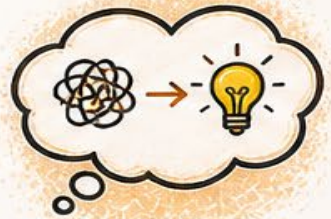


3 Regulates the nervous system

Repetitive motion calms the amygdala and steadies the system. Translation: fewer meltdowns, more regulated brains.

4 Expands working memory capacity

Turning thoughts into visuals offloads mental clutter. The brain can now think, not just hold.



5 Wires visual–motor integration

Eyes, hands, and brain syncing up like a well-rehearsed band. This is foundational for writing, reading, and coordination.

6 Boosts creativity AND problem-solving (same network, different costumes)

Drawing strengthens flexible thinking. The same brain that imagines also adapts.

7 Increases dopamine (the brain's "let's do that again" chemical)

Enjoyable, self-directed drawing builds motivation circuits. This is how effort becomes sustainable.

8 Builds frustration tolerance

Lines don't go where planned. Good. The brain learns to adjust instead of quit. That's resilience under construction.

9 Strengthens emotional expression without words

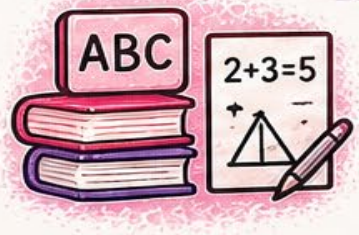
Kids can “say” things on paper their nervous system can’t yet verbalize. That’s not art... that’s access.

10 Supports language development

Drawing gives ideas structure. When kids explain their drawings, language attaches to meaning more easily.

11 Improves long-term memory encoding

Information paired with visuals sticks. The brain loves pictures more than paragraphs.



Lays groundwork for academic skills

Writing, reading comprehension, math visualization... they all lean on the same neural systems drawing strengthens.

12 Activates multiple brain regions at once

Motor cortex, visual cortex, prefrontal cortex, limbic system. This is whole-brain engagement, not passive consumption.

13 Builds independence and internal drive

No instructions needed. No external reward required. Just brain-led engagement.

14 Reduces stress hormones

Cortisol drops when the brain feels safe and engaged. Doodling quietly tells the brain, “You’re okay.”

Card Games

1 Building Working Memory (the brain's mental workspace)

Every hand requires holding rules, numbers, suits, and strategies in mind. That's not play… that's cognitive weightlifting.

2 Strengthening Attention Control

Card games demand sustained focus with shifting targets. Distractions lose. The brain learns to lock in and stay there.

3 Growing Inhibitory Control (pause before action)

You want to play that card… but shouldn't. That moment? That's executive function development in real time.

4 Training Cognitive Flexibility

Rules change. Strategies shift. Opponents surprise. The brain learns to pivot instead of panic.

5 Developing Planning and Strategy

"Play now or wait?" becomes a neurological chess match. Future thinking starts to take root.

6 Enhancing Processing Speed

Quick decisions under light pressure sharpen neural efficiency.
The brain gets faster without losing accuracy.

7 Strengthening Pattern Recognition

Sequences, suits, probabilities… the brain starts spotting patterns like a detective with a magnifying glass.

8 Building Emotional Regulation

Losing happens.
Frustration shows up.
The brain learns to handle it without flipping the table (hopefully).

9 Practicing Delayed Gratification

Winning often requires waiting. The brain learns: “Not yet” is sometimes the smartest move.

10 Increasing Social Brain Skills

Turn-taking, reading others, handling competition… this is social neuroscience in action, not just “family game night.”

Connect 4

1 Working Memory Gets a Workout

Every move forces the brain to hold multiple positions in mind.

"Where are my pieces?
Where are yours?
What's two moves ahead?"

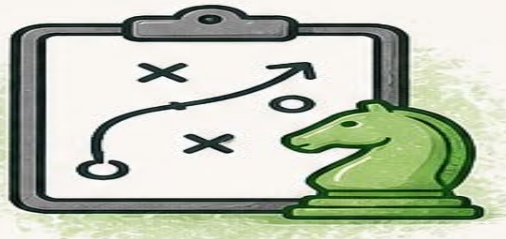
That mental juggling act? That's working memory getting stronger with every turn.

2 Planning and Foresight Fire Up

This is not a "drop and hope" game.

Kids start learning:
If I do this...then you might do that...then I'll respond with this.

That's future thinking—a core executive function that predicts outcomes before they happen.

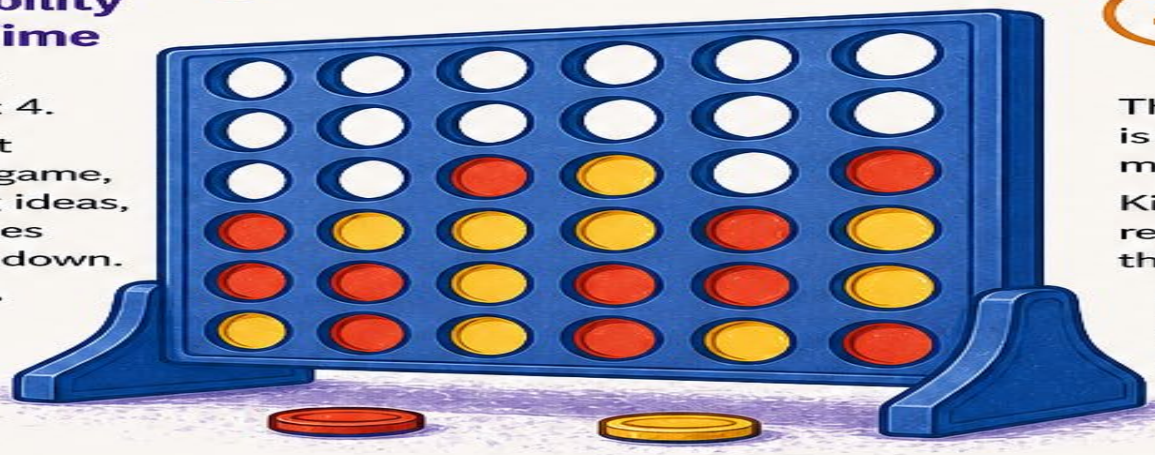


3 Cognitive Flexibility Builds in Real Time

Plans fall apart fast in Connect 4.

Kids must shift strategies mid-game, abandon losing ideas, and try new ones without melting down.

That mental pivot? That's flexibility under pressure.



4 Inhibition (Impulse Control) Strengthens

The obvious move is often the wrong move.

Kids have to pause, resist impulse, and think before acting.

That pause? That's the prefrontal cortex stepping in and saying, "Let's not wreck this."

5 Pattern Recognition Gets Sharper

Four in a row sounds simple...until you realize the brain is scanning for horizontal, vertical, and diagonal patterns simultaneously.

That's advanced visual processing and early mathematical thinking quietly leveling up.

6 Attention and Focus Lock In

Miss one move... game over.

Kids learn to sustain attention, track the board, and stay mentally engaged.

This is focused attention with real stakes—not worksheet compliance.

7 Emotional Regulation Gets Tested (and Built)

Winning feels great.
Losing feels...less great.

Connect 4 gives kids safe reps at handling frustration, disappointment, and excitement.

This is emotional fitness training disguised as fun.

8 Processing Speed Improves

As kids play more, their brains get faster at recognizing threats and opportunities on the board.

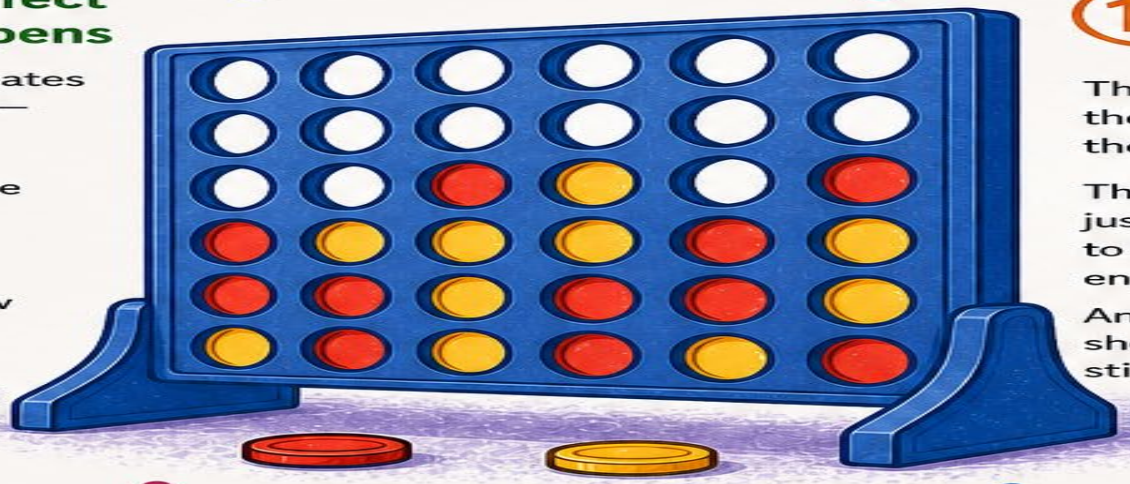
That's neural efficiency increasing—less effort, more accuracy.

9 Cause-and-Effect Thinking Deepens

Every move creates a consequence—sometimes immediately, sometimes three turns later.

Kids start to understand:
"My choices now shape what happens next."

That's real-world thinking in a plastic grid.



10 Dopamine Fuels Learning

The anticipation...
the near-win...
the comeback...

This game delivers just enough reward to keep the brain engaged.

And when dopamine shows up, learning sticks.

11 Social Brain Circuits Activate

Turn-taking, reading reactions, adjusting behavior—

This is real-time social cognition practice, not a scripted lesson.

12 It Builds Mental Endurance

Staying in the game, thinking multiple moves ahead, recovering from mistakes—

That's cognitive stamina, and it transfers directly to learning environments.

Corn Hole

1 Executive Functions Get a Full Workout

Every toss requires planning, adjusting force, monitoring outcomes, and trying again.

That's working memory, cognitive flexibility, and inhibition all firing together.

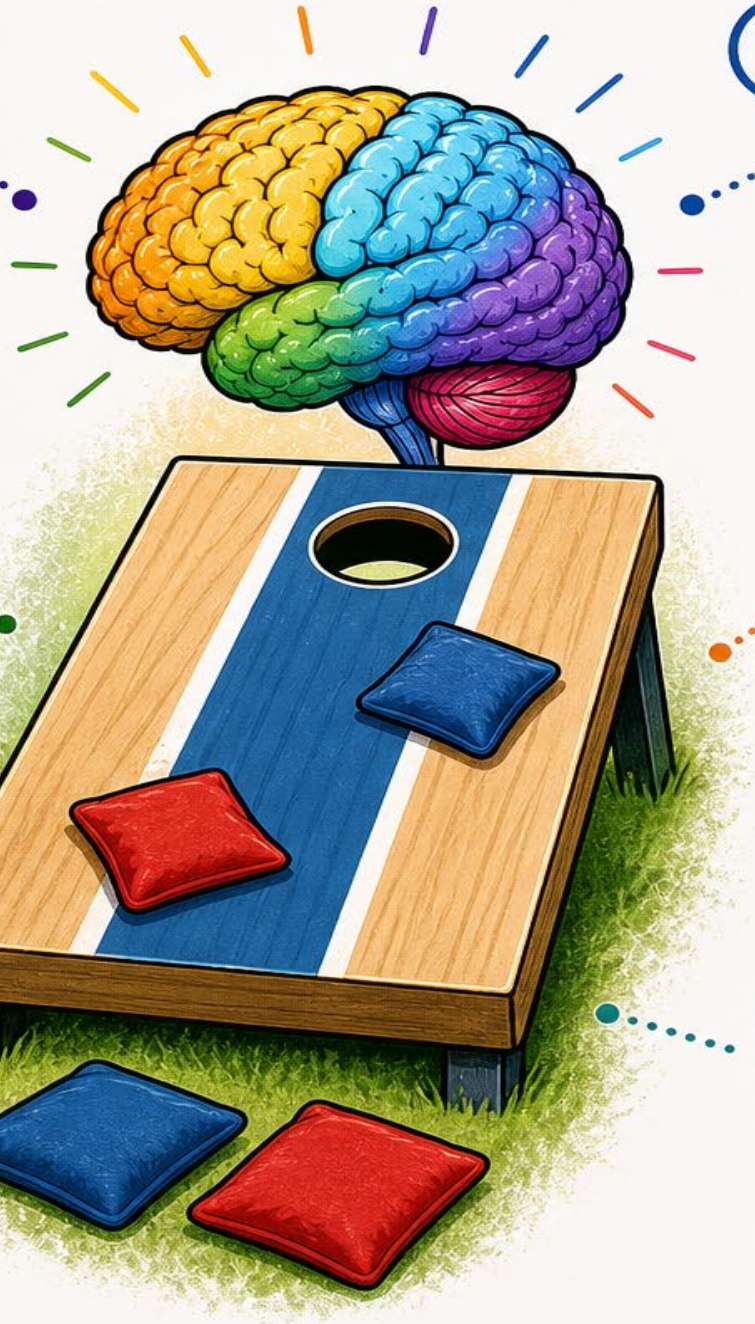
No worksheets required.

2 Precision Builds the Prefrontal Cortex

Aiming at a small hole isn't luck...

...it's sustained attention + error correction + motor planning.

Each throw strengthens the brain's ability to focus and refine.



3 Balance and Coordination Wire the Brain Faster

Standing, shifting weight, stabilizing the body...

This activates cerebellar systems that directly support attention, timing, and learning efficiency.

Movement is not a break from learning. It is learning.

4 Repetition Builds Neural Efficiency

Miss. Adjust. Try again.

That loop strengthens neural pathways for persistence, problem-solving, and skill refinement.

This is what "practice" actually does to a brain.

5 Emotional Regulation in Real Time

Missed shots, near wins, friendly competition...

Cornhole creates just enough frustration to practice staying regulated without overwhelming the system.

That's emotional control under pressure.

6 Visual Tracking and Spatial Awareness

Tracking the arc of the bag, judging distance, adjusting angle...

This strengthens visual-motor integration, a foundational skill for reading, writing, and sports.

7 The Brain Learns Cause and Effect (For Real)

Throw too hard? Overshoot.

Too soft? Short.

Immediate feedback wires decision-making systems far more effectively than delayed correction.

8 Social Brain Activation

Turn-taking, reading others' reactions, handling winning/losing...

Cornhole is a social rehearsal space for flexibility, perspective-taking, and communication.

9 Dopamine Fuels Learning

Close shots, small wins, improvement over time...

The brain releases dopamine, which strengthens attention, motivation, and memory.

Translation: the brain wants to keep learning.

10 Builds Patience and Delayed Gratification

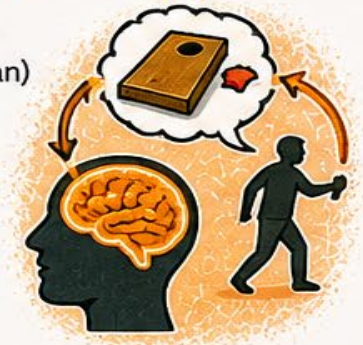
Wait your turn. Reset. Try again.

This strengthens inhibitory control, one of the strongest predictors of long-term success.

11 Connects Thinking + Doing

Cornhole forces the brain to coordinate thought (plan) with action (throw).

That integration is the backbone of real-world functioning.



12 Low Threat = High Brain Access

It's playful, predictable, and safe.

That lowers stress, which keeps the prefrontal cortex online...

...and that's where learning, behavior, and decision-making actually live.


Uno

1 Working Memory Gets a Workout (Hard)

Your child is constantly holding rules, colors, numbers, and strategy in mind while updating it every turn.

That's prefrontal cortex activation doing real-time juggling—not passive learning.

2 Inhibition Control Builds Every Turn

They want to play that card… but they can't.

UNO quietly teaches the brain to pause, suppress impulses, and make a better choice.

That's the exact skill behind self-control in school and life.

3 Cognitive Flexibility in Action

Color changes. Direction flips. Rules shift.

UNO forces the brain to pivot really fast.

This is mental agility training, not just a game.

4 Emotional Regulation Under Pressure

Draw 4. Skip. Reverse.

UNO creates small, safe moments of frustration—and gives kids a chance to regulate through it.

This is how resilience is built without a lecture.

5 Prediction & Strategic Thinking

"What might they have?"
"What should I hold onto?"

Your child is learning to anticipate, plan, and delay gratification—core executive function skills.

6 Attention & Sustained Focus

Miss one turn, and the whole game shifts.

UNO trains the brain to stay engaged, track multiple variables, and recover when attention slips.

7 Processing Speed Increases

Fast decisions, quick matching, rapid scanning.

The brain gets quicker at taking in information and responding efficiently.

8 Social Brain Development

Turn-taking, reading reactions, handling wins and losses.

This is real-world social cognition practice—without a screen buffering the experience.

9 Language & Communication Growth

Calling “UNO,” negotiating house rules, reacting to gameplay.

It’s subtle, but language circuits are firing alongside executive systems.

10 Dopamine Done Right

Winning, near-misses, anticipation…

UNO delivers healthy dopamine spikes tied to effort, strategy, and interaction—not passive scrolling.

Going for a Walk

1 Builds Executive Functions Without a Worksheet

Every step asks the brain to plan, adjust, inhibit, and shift.

Uneven ground, changing pace, navigating space...

that's real-time cognitive training.

2 Strengthens Attention Like a Reset Button

Rhythmic movement + natural environments = restored attention networks.

Walk first, focus later.

Not the other way around.

3 Expands Working Memory Capacity

Movement increases blood flow and oxygen to the prefrontal cortex, literally giving working memory more "space" to operate.

4 Regulates the Nervous System

Walking helps shift the brain out of threat mode.

A regulated brain is a learning brain.

No regulation, no access. Period.

5 Boosts Dopamine and Motivation

That "let's do something" chemical?

Walking pushes it upward, making effort feel more doable instead of overwhelming.

6 Strengthens Emotional Control

Bilateral movement (left-right stepping) supports communication across brain hemispheres, helping emotions settle instead of spill.

7 Improves Language and Conversation Skills

Side-by-side walking reduces pressure and increases verbal flow.
Some of the best conversations happen when no one is forced to "sit and talk."

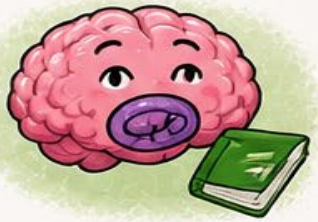
8 Builds Sensory Integration Naturally

Wind, sound, light, textures... walking organizes sensory input instead of overwhelming it.
It's therapy disguised as fresh air.

9 Enhances Creativity and Problem Solving

The brain shifts into a more flexible, idea-generating mode. Walking is where stuck thinking starts to loosen.

10 Supports Memory and Learning Retention



Movement primes the hippocampus. Translation: what they learn after a walk is more likely to stick.

11 Decreases Anxiety and Stress Hormones

Cortisol drops. The brain stops scanning for danger and starts scanning for meaning.

12 Builds Body Awareness (Proprioception)

Knowing where your body is in space supports coordination, attention, and self-regulation. Walking feeds that system constantly.

13 Strengthens Brain Connectivity

Repeated, patterned movement helps wire communication pathways between brain regions. Think: faster, smoother processing.

14 Improves Sleep Quality

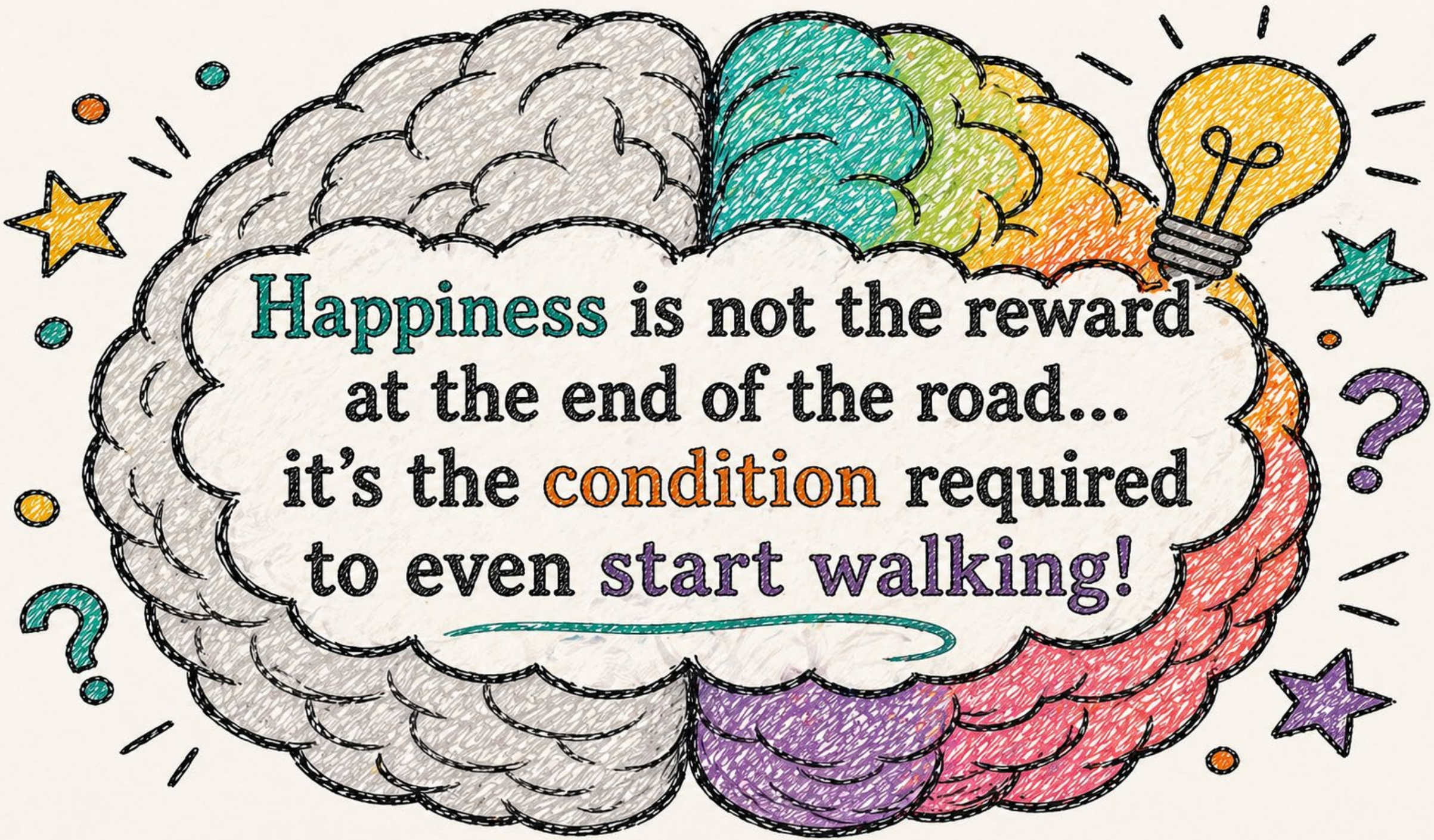
Daytime movement regulates circadian rhythms. Better sleep = better behavior, mood, and learning.

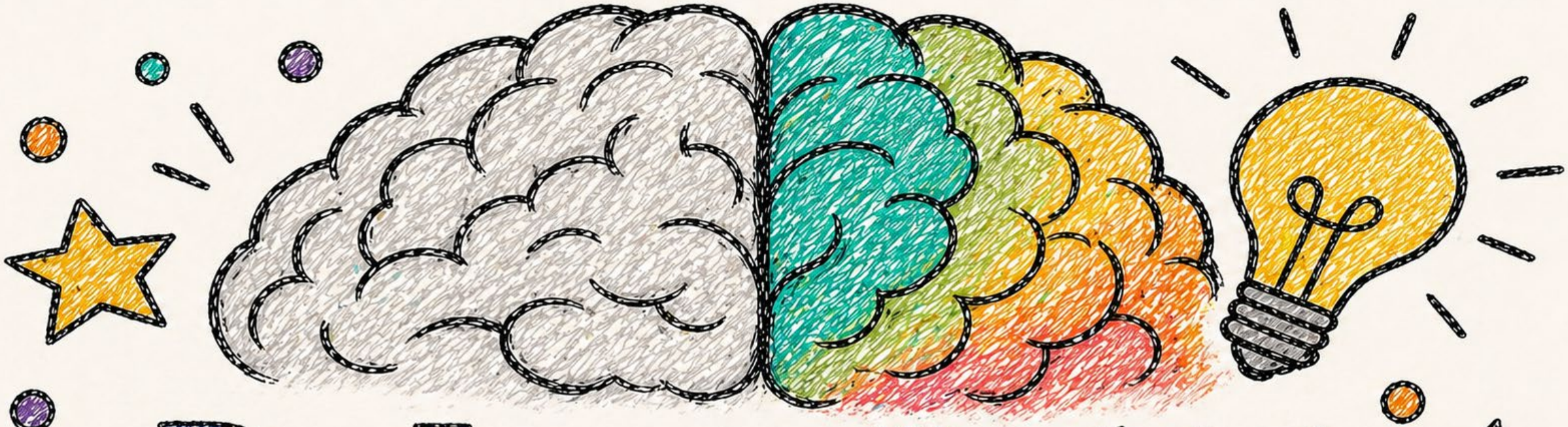
15 Increases Resilience to Frustration

A regulated, oxygenated brain handles “hard” better. Walking builds tolerance for challenge without meltdown.

16 Supports Mental Health Long-Term

Consistent movement is one of the most protective factors against anxiety and depression across development.


Happiness is not the reward
at the end of the road...
it's the condition required
to even start walking!



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