

Impulse Control

(Response Inhibition)

Impulse Control – The ability to manage one's urges.

Inhibition – The process of showing restraint; stopping a word, thought or action.

Disinhibition – Showing a lack of cognitive, emotional or motor restraint.

Organization

Management of materials – The physical organization, labeling, categorizing and placement of specific materials or tools (clothing, school supplies, sporting equipment etc.)

Management of daily tasks – The strategy and approach to successful management of the daily activities of life (hygiene, eating, sleeping, household chores, schoolwork, sports etc.)

Management of long-term projects – The ability to preview, plan, allocate time and execute the components that make up a larger constellation of tasks, to one end goal.

Task Management

Planning – The act of strategizing to take action in a meaningful, purposeful and goal-directed manner.

Previewing – Using simultaneous processing to consider the entirety of all the components of a task or activity, in order to think about, plan and prepare to take action.

Prioritizing – Considering the imminence and importance of a task or a series of tasks in order to determine what to take action upon first.

Initiation – Beginning a defined task, activity or action.

Execution – Taking goal-directed action in order to effect or complete a specific task, activity or action.

Reviewing – Reflecting on the components of a task, activity, action or response in order to examine the utility, efficacy and outcome of a task, event or experience.

Revising – Using the knowledge gained from reviewing in order to revise one's future actions.

Completing – Bringing a task, activity or action to a successful ending.

Time Management

Time estimation – Predicting, imagining or estimating the time it will take to successfully complete a specific task, activity or action.

Time monitoring – Experiencing an accurate assessment of the passage of time while executing a specific task, activity or action.

Time allocation – Distributing a finite amount of time to a specific task, activity or action.

Project planning – Planning for the successful completion of components of several tasks that will contribute to the completion of a larger task, experience or event.

Motor Management

Motor Management – The ability to control the motor elements of movement, pace, speed, direction, timing, etc.

Planning – The ability to plan and carry out a specific motor action.

Pacing – The speed at which one exhibits a motor action.

Rhythm – A repeated pattern of sounds and silence in speech, sound or movement.

Timing – The ability to activate one's motor movements to coincide with an internal or external beat.

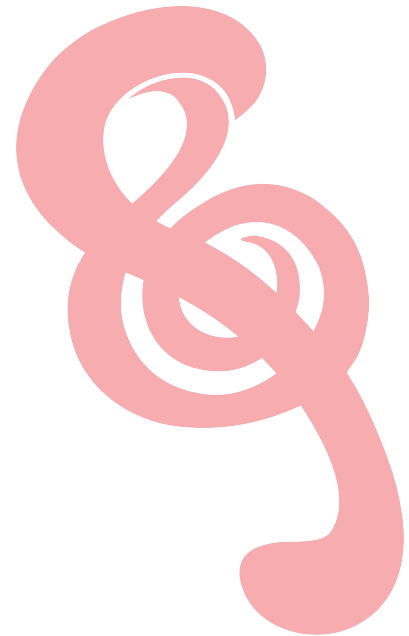
Initiating – Beginning or starting a motor movement.

Maintaining – Continuing to exhibit a motor movement over time.

Stopping – To cease a motor movement.

8 Musical Thinking Executive Function Brain Lessons

1. I am Musical
2. I am the Best Coach for My Own Brain I
3. I Move to Learn
4. Neuronal Highways
5. How My Brain is Built
6. My Attention Engine
7. My Memory Window
8. Putting Science + Education Together





I am a
Cognitive Scientist

Lesson #1

I am Musical

I am Musical

We walk to the Beat
We move to the Beat
We learn to the Beat
We regulate to the Beat

"We are all musical."



Moving in Time

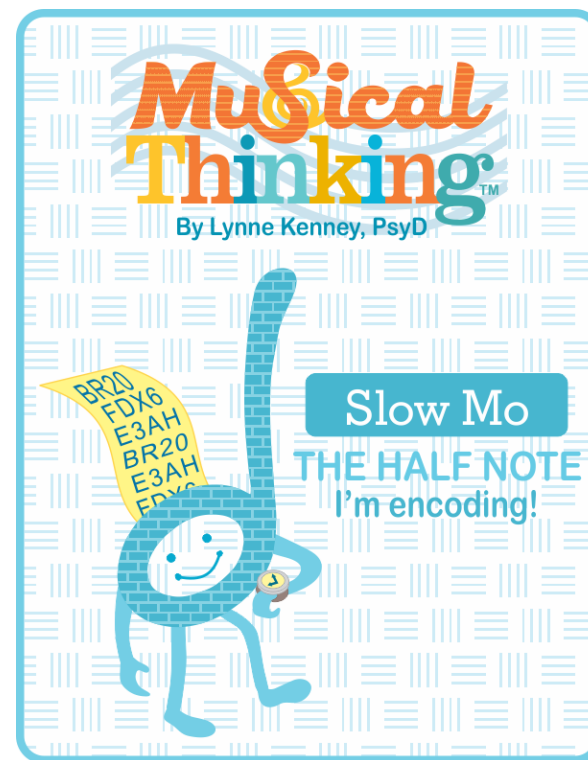
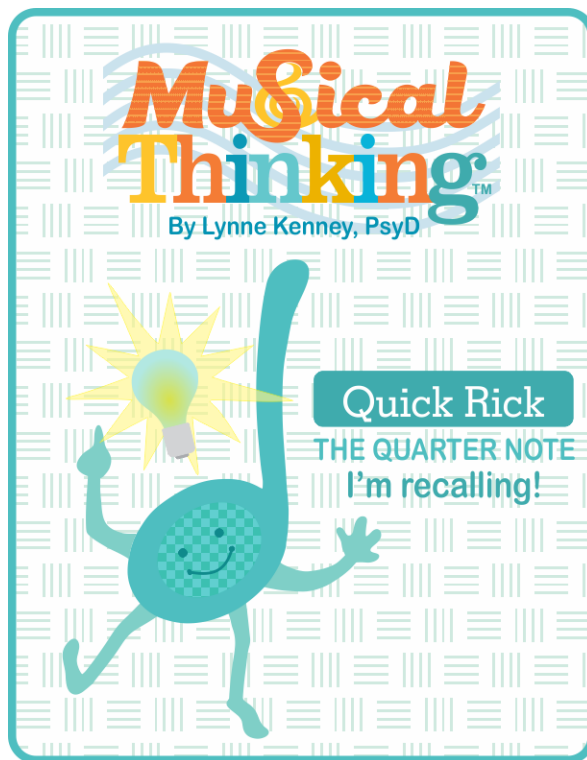
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Moving in Measures



Moving Quickly and Slowly



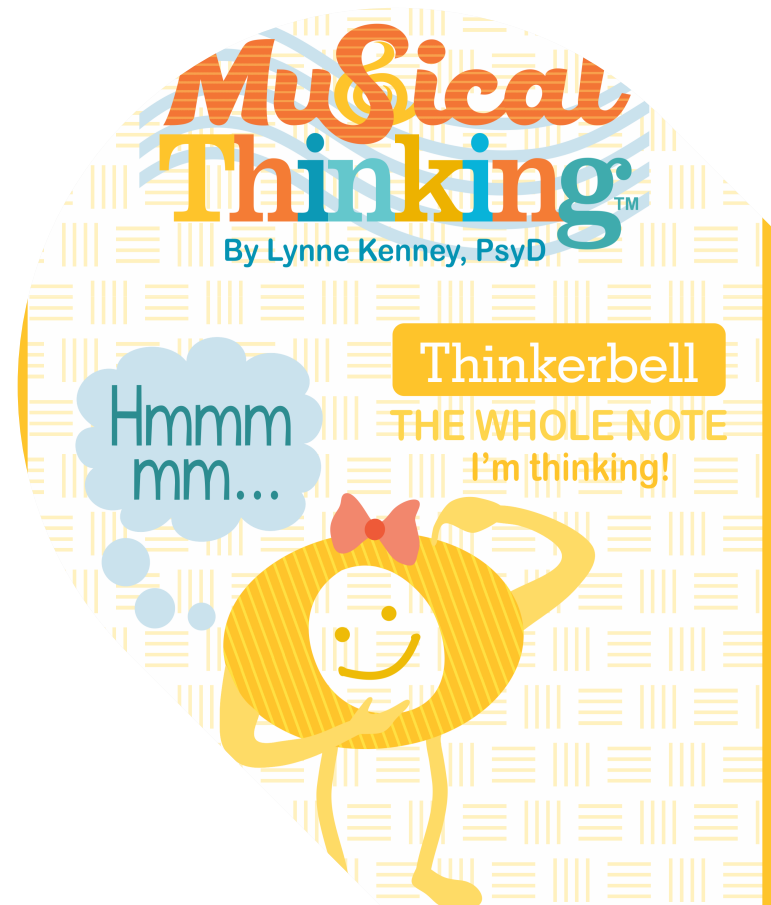
I am a Cognitive Scientist

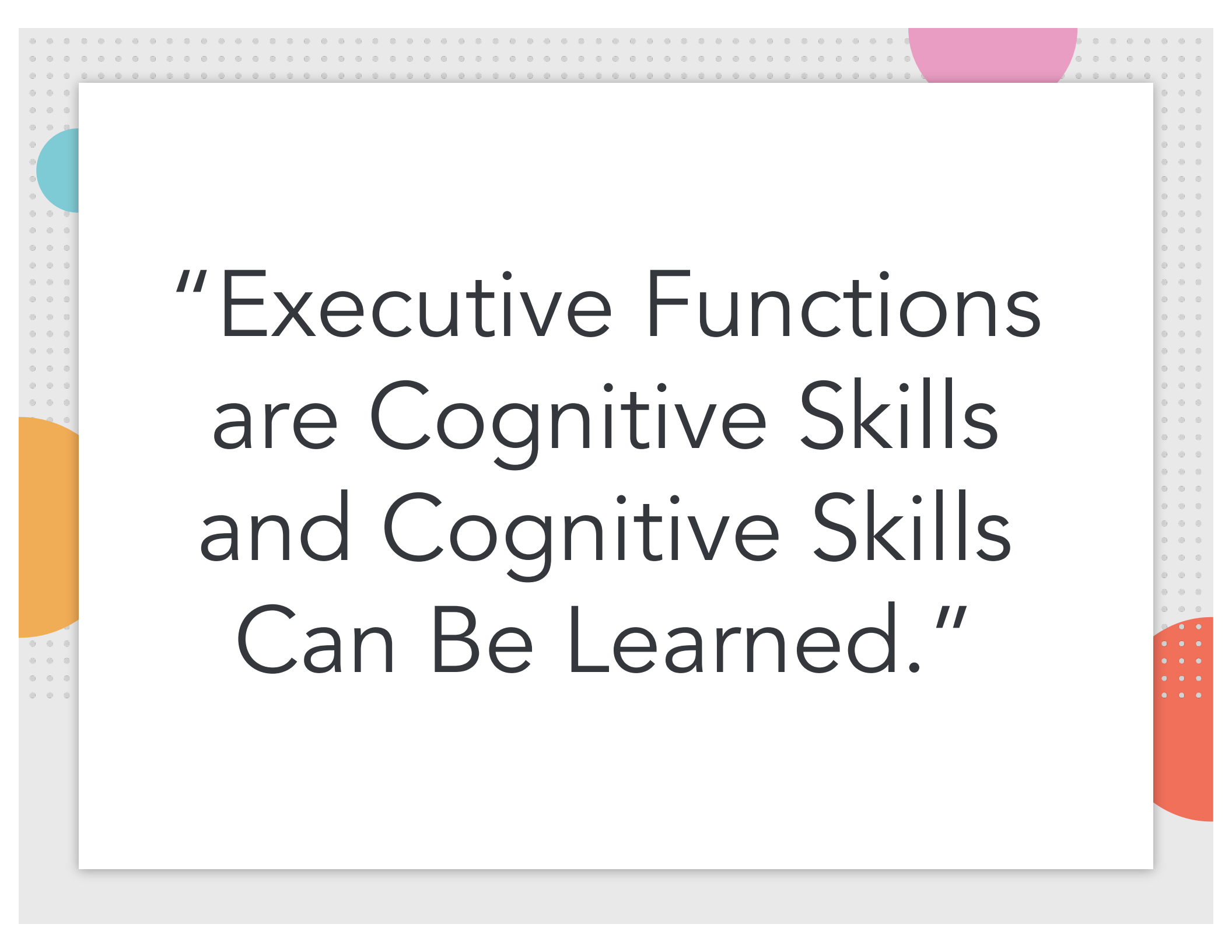
Lesson #2

I am the Best
Coach for
My Own Brain

I am the BEST COACH for My Own Brain I

"When we make the application of executive functions to learning transparent and easily understood, children gain better control over what was previously mysterious to them, that is, *the process of thinking and learning.*"





"Executive Functions
are Cognitive Skills
and Cognitive Skills
Can Be Learned."



My Attention Engine
My Memory Window
My Self-Coaching
Tools

Musical Thinking Communication Signals

Pause

Fists gently placed in front of the body next to one another palms down, waist high.

"Please wait a moment,
I'm Thinking."

Index finger gently pointing to head temple high.

"May I please get up for
some movement now?"
(mini-break)

Index finger spinning upward.

"May I please take a
moment to Bess Rest?"
(I am overwhelmed, tired
or needing to take a
breather and calm myself
for a moment.)

Upper body hug, arms crossed to shoulders.

I am a Cognitive Scientist

Lesson #3

I Move to Learn

"I Move to Learn"

- My body moves to help me concentrate
- I need to identify, monitor and respond to my energy state
- Sometimes I need to **energize** to alert
- Sometimes I need to **calm** not energize
- What's My PLAN
- What are my go-to activities?

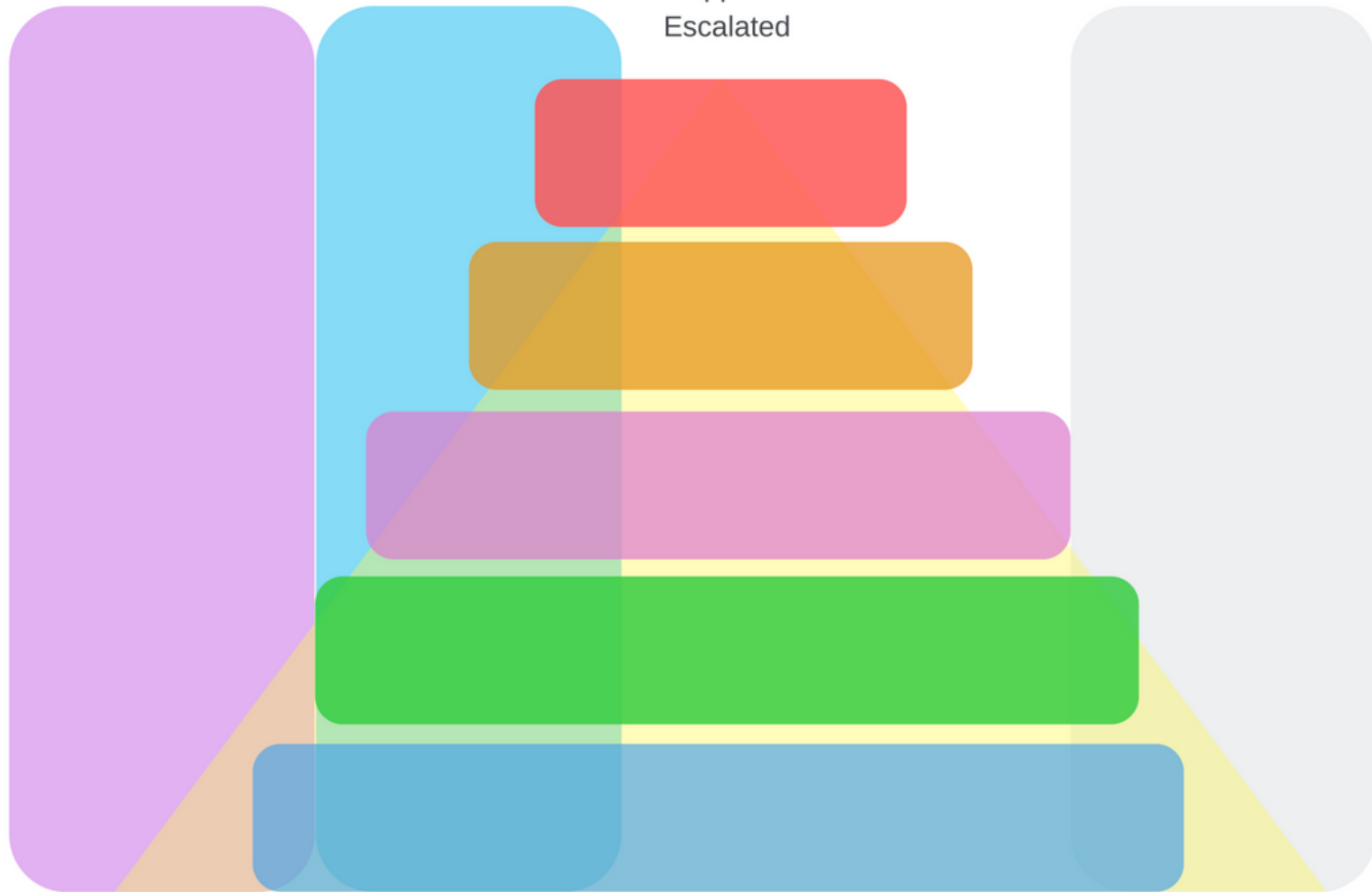
Energy Mountain

What I Thought

How I Felt

What Happened as I
Escalated

What I Did to
Calm Down



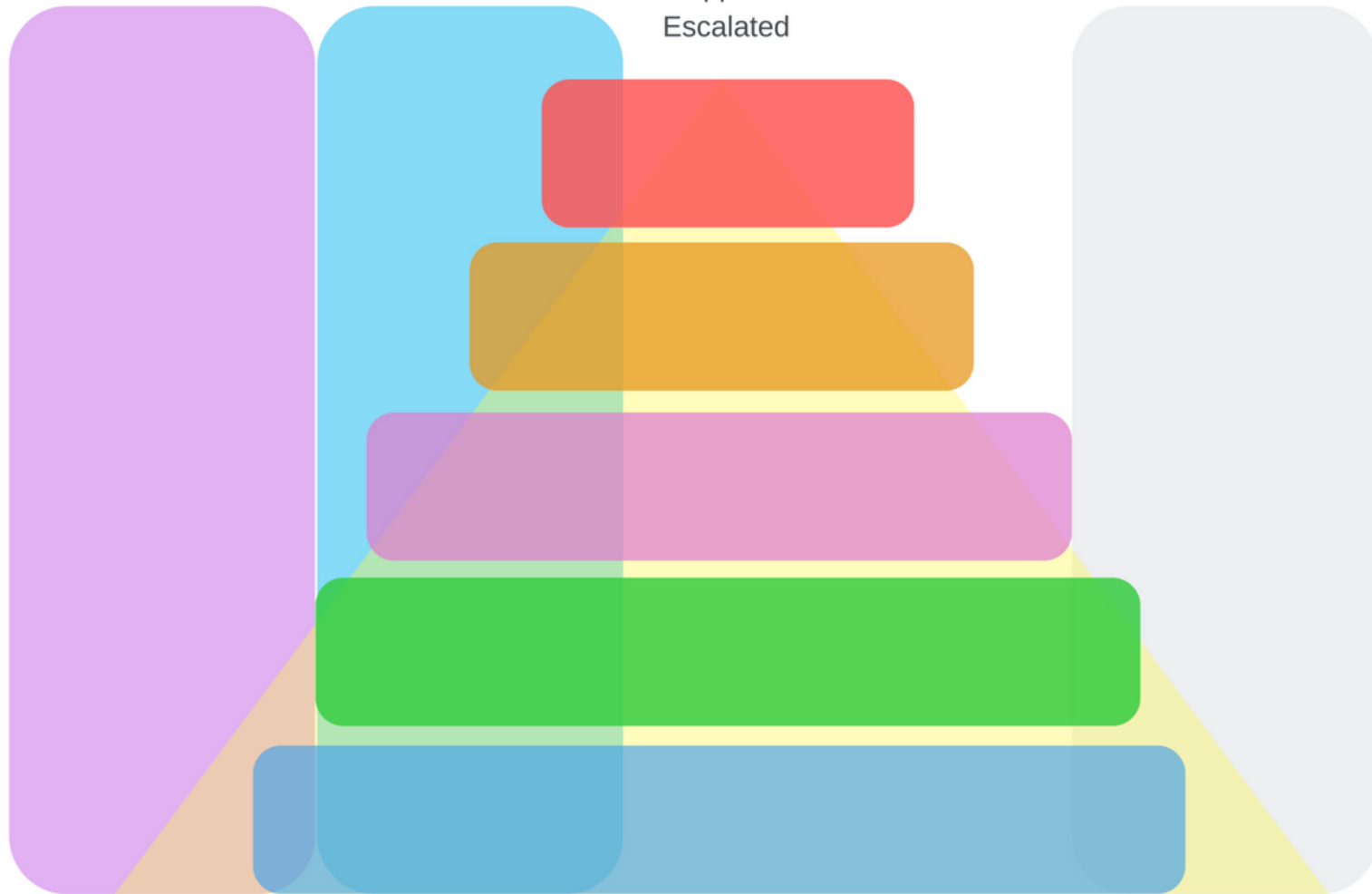
Anger Mountain

What I Thought

How I Felt

What Happened as I
Escalated

What I Did to
Calm Down



I Can Calm Down

CHOOSE AN ACTIVITY

Bouncing Balls	Painting
Bean Bags	Personalized Photo Album
Books	Picture Books
Bottle of Blowing Bubbles	Pinwheels
Bubble Wrap	Play Doh
Coloring Pages	Puzzles
Drawing	Relaxing Music
Etch-A-Sketch	Resistance Bands
Eye Mask	Rubiks Cube
Finger Paints	Scratch and Sniff Stickers
Four Square Breathing	Silk Scarves
Hour Glass	Spinning Top
Kaleidoscope	Squishy Balls
Legos	Swing
Magnadoodle	Unifix Cubes
Mandalas for Coloring	Weighted Lap Cushion
Noise Cancelling Headphones	Wobble Chair
Origami	

MY CALM DOWN BOX

I Can Rev-Up

CREATE PATTERNS & SEQUENCES

Brain Primers (Kuczala & Kenney, 2020)

Cognibags

Cognitap

Cognitap Spots

Dance Rhythmically to Music with a strong beat

Jump on a mini-trampoline

Jump rope

Rhythmic Ball Bouncing (4/4 time vary tempo and patterns)

Mixed Physical Activities (combine 2-3 in a sequence doing each action for 8 counts, repeat 2-3 times)

Burpees

High-Heels

High-Knees

Inchworms

Jumping jacks

Push-ups

Run in place

Russian twists

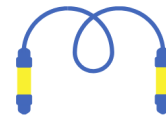
Squat-jacks

Squats

Star Jumps

Tricep Dips

Think-Ups



MY REV-UP TOOLS

I Can Calm Down Movement Activities

MOVE RHYTHMICALLY SLOWLY

Bouncy Bands

Bounce a ball off a wall

Cognibags

Cognitap

Body Percussion

Drum on a yoga ball

Drumming Patterns

Hum

Rhythmic Ball Bouncing

Repetitive movement in 3/4 time (waltz, lunge,
sway, rock)

Simple Ballet Patterns

Swaddle

Sway

Swing

Think-Ups

MY CALM-MOTION TOOLS

I am a Cognitive Scientist

Lesson #4

Neuronal Highways

The Paths Most Travelled

We begin with pathways. We travel them over and over again until they grow into roadways and then highways.

We build Neural
Connections



Make it Stick - Peter C. Brown et. al