

Intervention Strategies to Improve Self Regulation and Executive Function



Kathy Morris

igivuWings

kkmorris@aol.com

www.igivu wings.com

igivuWings

kkmorris@aol.com

www.igivuwings.com



Kathy
Kaluza
Morris

Executive Functioning Disorders Knowledge Scale

- I already know . . .

1 — 3 — 5



 **This is not
a "sit and get" seminar!**

**AND...
IT WILL BE FUN
AS WELL AS
STIMULATING!**



Laughter
oxygenates
the brain



IDENTIFYING

HIGH INTEREST AREAS






High Interest Area

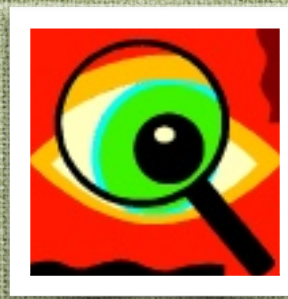
Ya think?

AGENDA



8:30ISH WELCOME/OVERVIEW
SCHEDULES
TRANSITION MARKERS
SURPRISE CARDS/CHANGE OF SCHEDULE
CAPITALIZING ON HIGH INTEREST AREAS
OVERVIEW EXECUTIVE FUNCTIONS
NEUROANATOMY
METACOGNITIVE STRATEGIES
SELF REGULATION STRATEGIES
10:00ISH BREAK
VIDEO OF MELTDOWN
LEVELS OF TALKING
POWER CARDS
KEYCHAIN RULE
EMOTIONAL REGULATION
11:45-12:45 LUNCH

Research on autism:



Studies have documented that schedules and routines influence children's emotional, cognitive, and social development.

- 📌 Predictable and consistent schedules in classrooms help students feel secure and comfortable.
- 📌 Schedules and routines help children understand the expectations of the environment and reduce the frequency of behavior problems, such as tantrums and acts of aggression.

-Ostrosky, Jung, Hemmeter,
Thomas

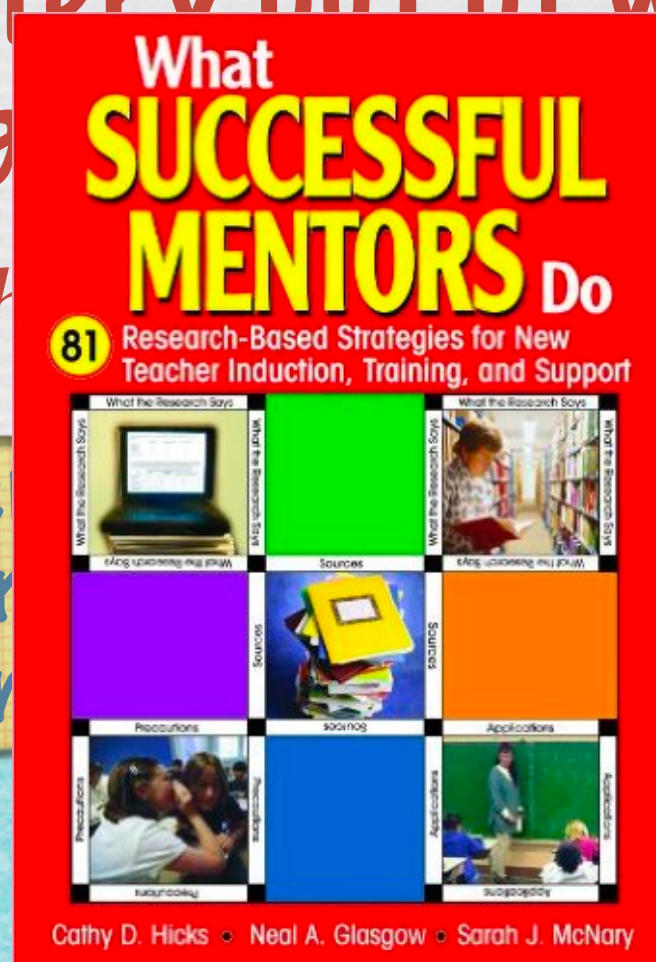
What does research say?



Using an agenda of the day's lesson makes learning more relevant to students and takes the mystery out of what is going to happen today.

NOTE: This research is for atypical individuals.

★ What Successful Mentors Do
81 Research-Based Strategies for New Teacher Induction, Training, and Support



Teacher Induction

Routines and schedules



**The Organization for Autism Research
in collaboration with
Fairfax County (VA) Public Schools
presents**



Don't take away their
schedules!

Schedule & Transition Marker



System Dependent vs Person Dependent

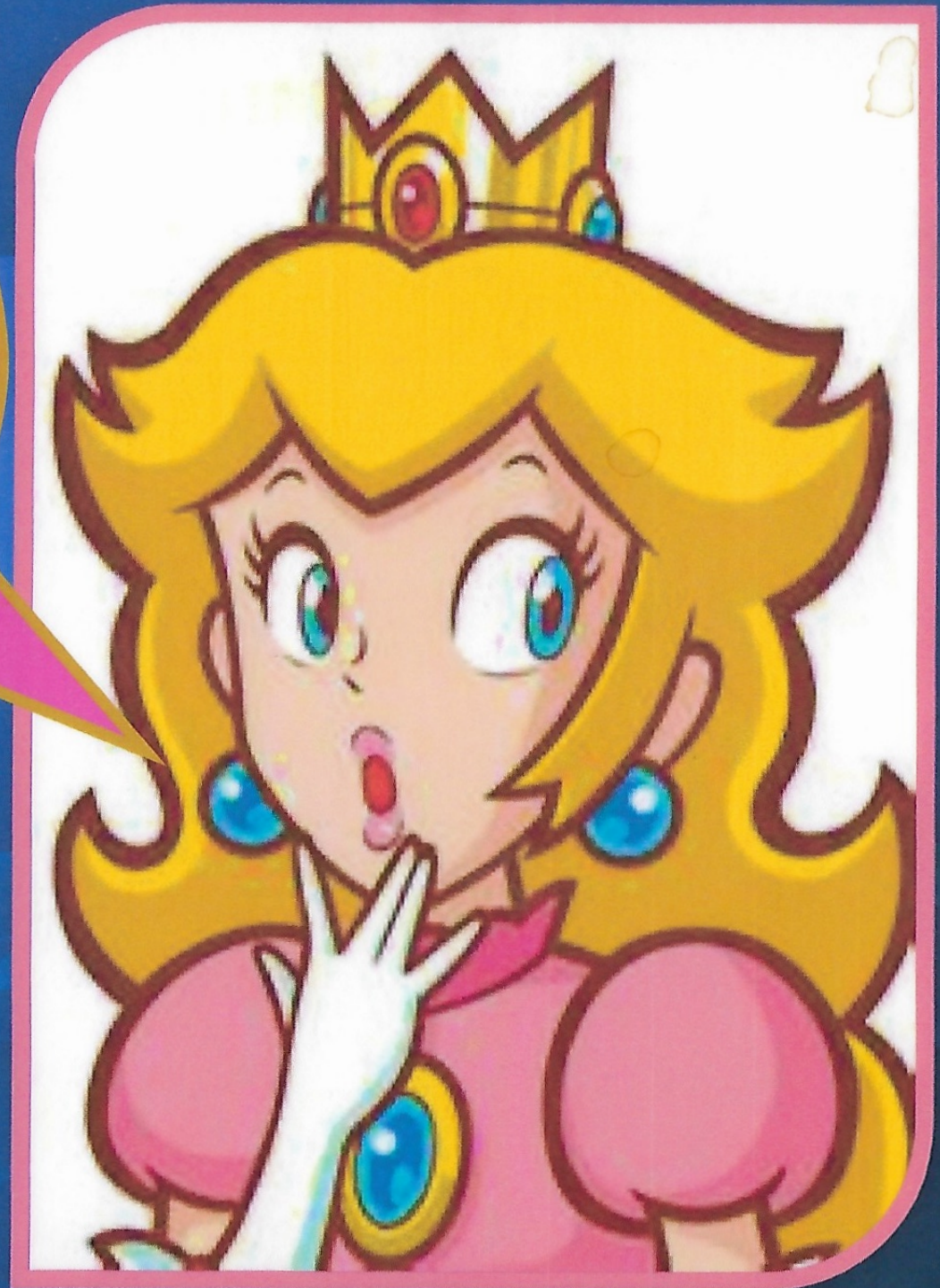
Surprise

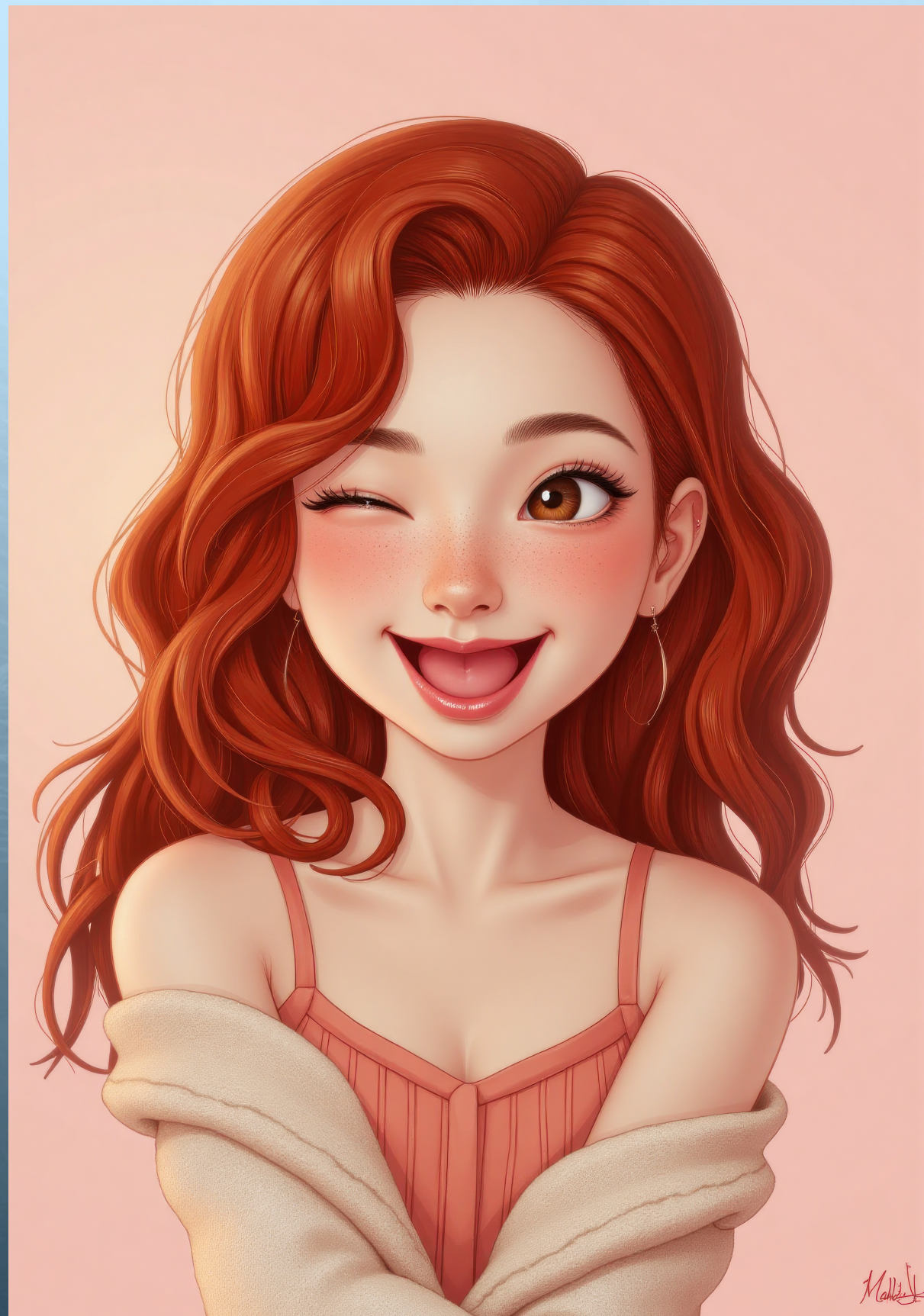


**SURPRISES ARE
OK**

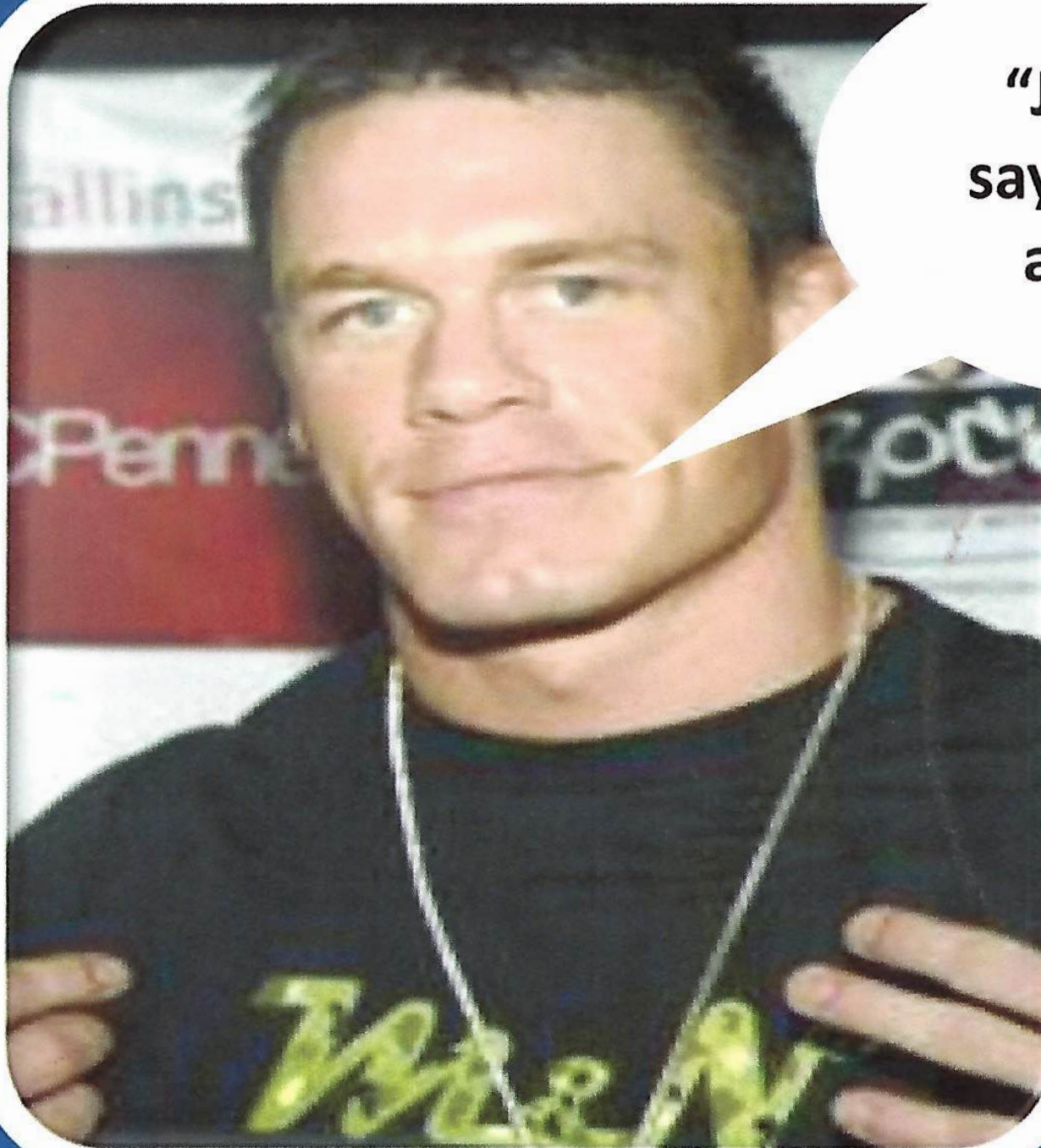
I can handle it.
I'll remember that it
may be a surprise to
others as well.

“Oops, a
surprise is
coming!”





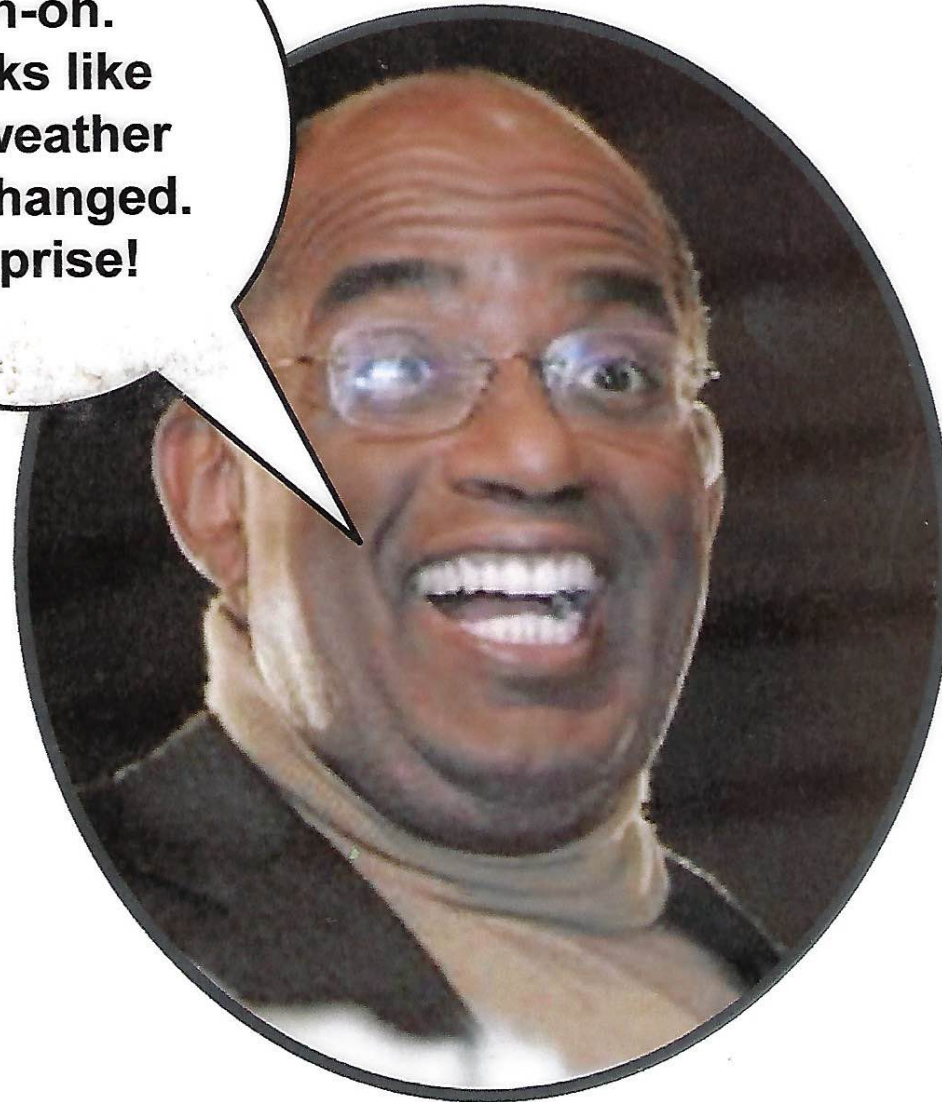
SURPRISE



**“John Cena
says surprises
are O.K.!”**

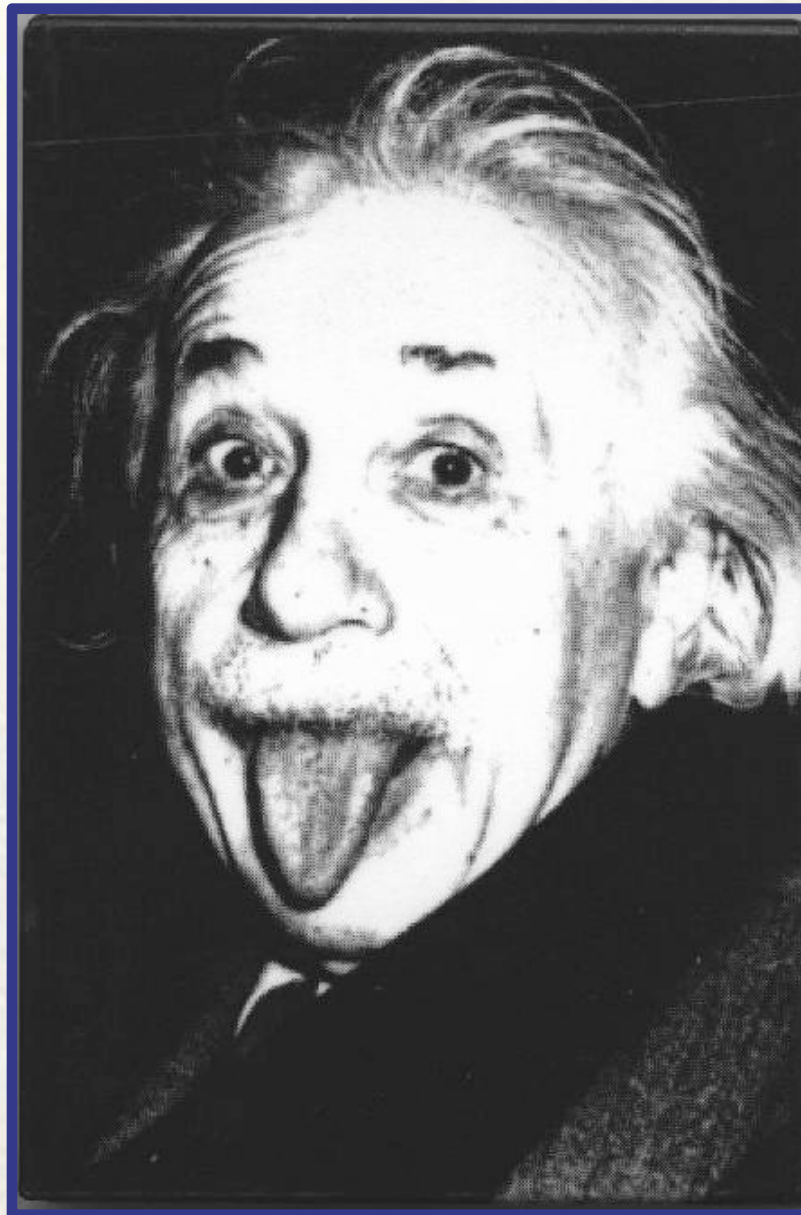
Surprise

**Uh-oh.
Looks like
the weather
has changed.
Surprise!**



Surprise Card

SURPRISE!



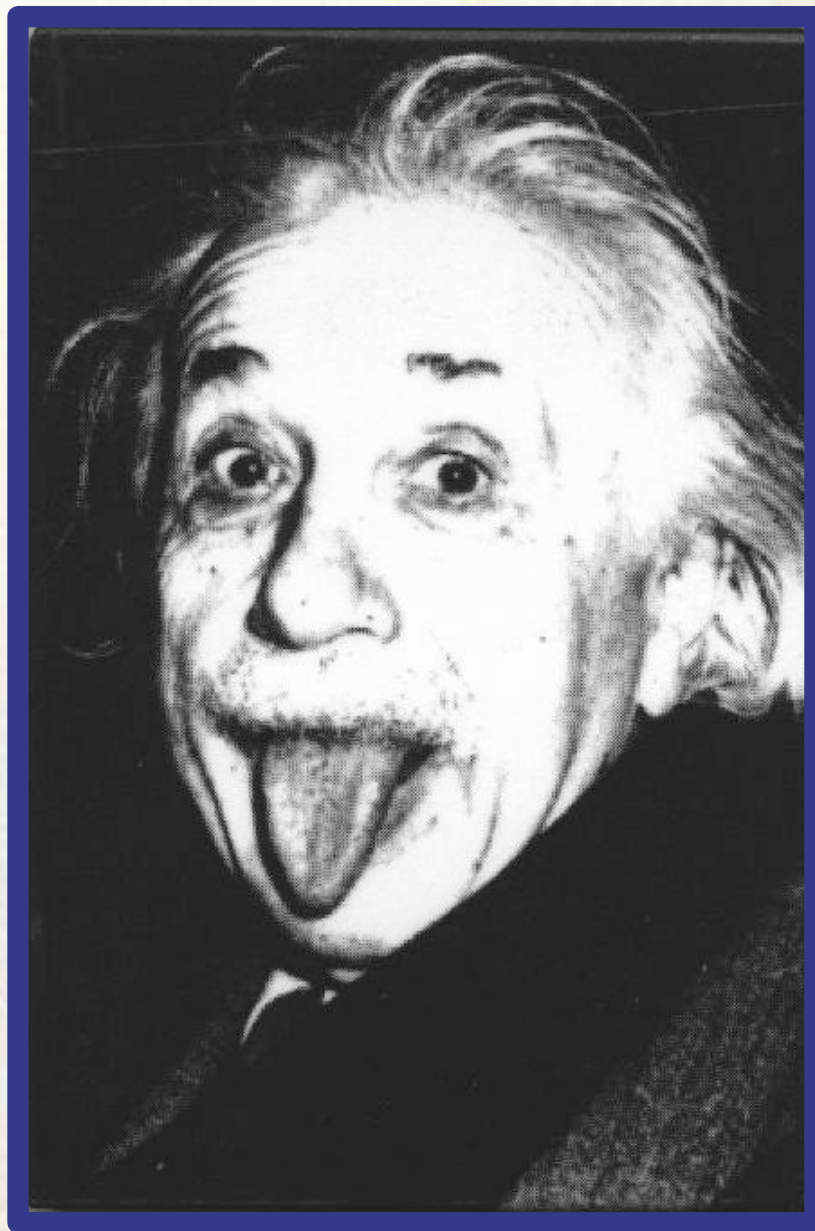
Sometimes...



- There are changes or surprises in my day.
- THAT IS

OK

**When someone gives me
this card:**



This means...

there is a
change or
surprise.

and that is OK!

Change in Schedule





Schedule
Change



Anticipating change...

Helps to respond to change!

-Lisa Rogers

Ready for a break??



WHAT ARE EXECUTIVE FUNCTIONS?

NO FORMALLY AGREED UPON DEFINITION.

The Conductor or CEO of the Brain

*This theory states that EFs
are a single, unitary
cognitive control process
that directs all thought and
behavior*

(McCloskey, Perkins, & Van Divner, 2009)



EF'S AS CO-CONDUCTORS OF THE BRAIN'S ORCHESTRA

- Set of multiple cognitive capacities that act in a coordinated manner

(McCloskey, Perkins, & Van Divner, 2009)



Multi-dimensional Construct

(McCloskey, Perkins, & Van Divner, 2009)



Overarching developmental cognitive neuropsychological construct that is used to represent a set of neural mechanisms that are responsible for cueing, directing, and coordinating multiple aspects of perception, emotion, cognition and action





Take lots of notes!

I hope you took lots of notes!



- 1. Please share in the breakout room 1 or 2 thoughts with your breakout room partners.*
- 2. Start with the one closest to Winnipeg and go from there!!!*
- 3. See you back in 3 minutes*

We prepare dinner while simultaneously helping our children with their homework and making notes about appointments we need to schedule for the week. We focus on our jobs when we need to and our families when they need us. We remember the phone number that our neighbor just gave us so we can write it down as soon as we find a pen. We take a deep breath, rather than honk, if the car in front of us fails to move immediately when the light turns green.

Executive function skills help us plan, focus attention, switch gears, and juggle multiple tasks—much like an air traffic control system at a busy airport. Acquiring the early building blocks of these skills is one of the most important and challenging tasks of the early childhood years. Their strength is critical to healthy development throughout childhood, adolescence, and early adulthood.


```
graph TD; A[Executive Functioning Components] --> B[Metacognitive Strand]; A --> C[Emotional Regulation Strand];
```

Executive
Functioning
Components

Metacognitive
Strand

Emotional
Regulation
Strand

Executive Functioning Components

Social/Emotional Regulation Strand



Self-Regulation

- ★ Working Memory (Adaptability)
- ★ Inhibitory control (Response Inhibition)
- ★ Mental Flexibility (Emotional Control)

QUESTION

At what age do you think executive functioning skills are fully developed?



Answer:

These skills are fully developed in adulthood.



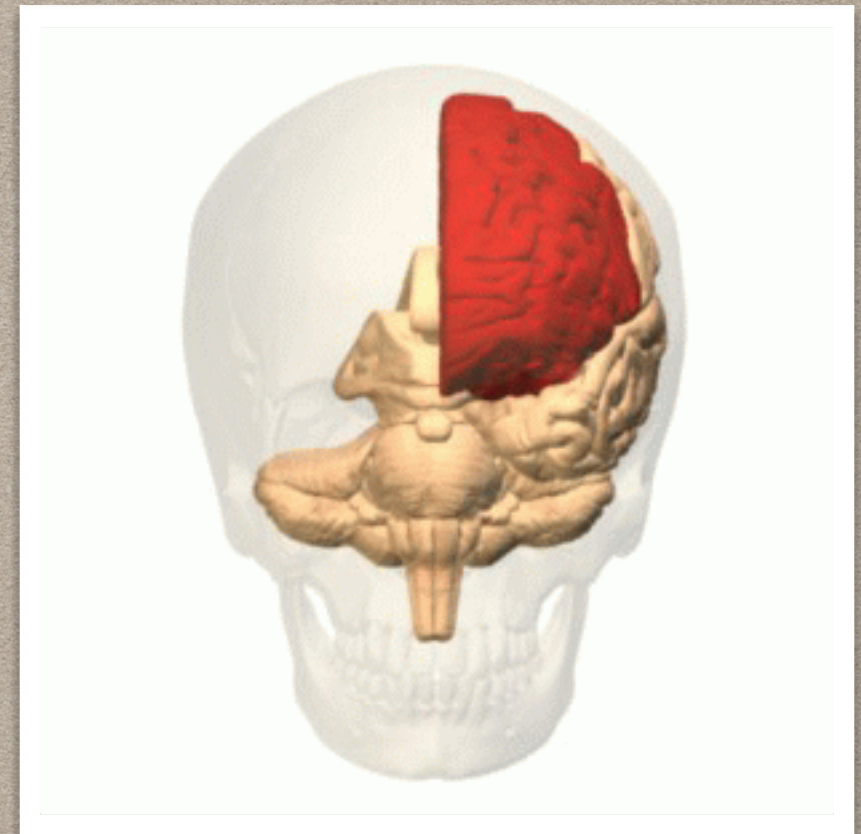
NEUROANATOMY

- frontal lobes
- prefrontal lobes (associated with behavioral and personality

changes)

The brain develops back to front
so the prefrontal cortex is not
fully mature till age 25.

Yes, Your Teen is Crazy!
Michael J. Bradley, 2002



PSYCHOLOGICAL AND DEVELOPMENTAL DISORDERS ASSOCIATED WITH EF DEFICITS

- ✱ ADHD
- ✱ Learning Disabilities
- ✱ Autism Spectrum Disorders
- ✱ Mood Disorders
- ✱ Obsessive Compulsive Disorders
- ✱ Tourette's Syndrome
- ✱ Schizophrenia
- ✱ Antisocial Personality Disorders
- ✱ Borderline Personality Disorders

Suchy, 2009

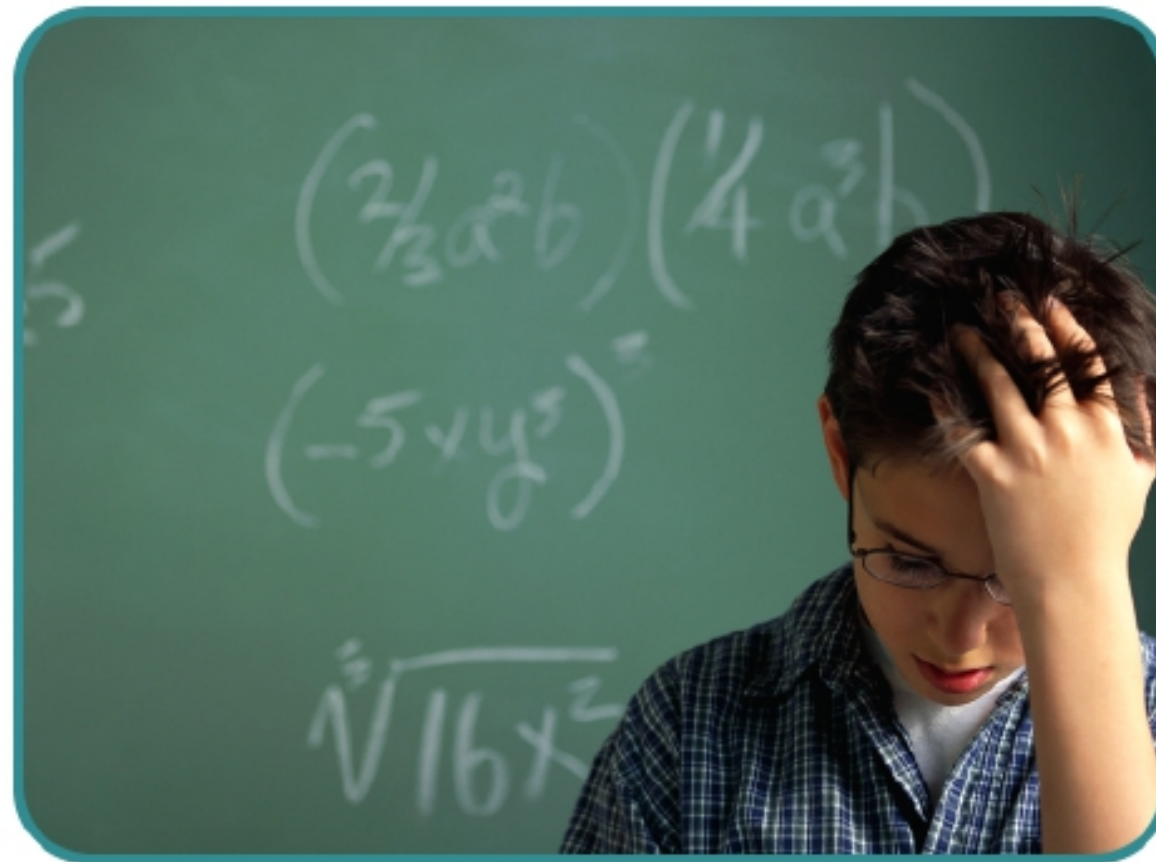
So when do we get to behavior?



Laughter
oxygenates
the brain



Practices for Challenging Behavior



Challenging Behaviors

What are they?

- ▶ Aggression
- ▶ Self-injury
- ▶ Social maladaptive behavior
- ▶ Property destruction
- ▶ Withdrawal
- ▶ Oppositional behavior
- ▶ Stereotyped behavior

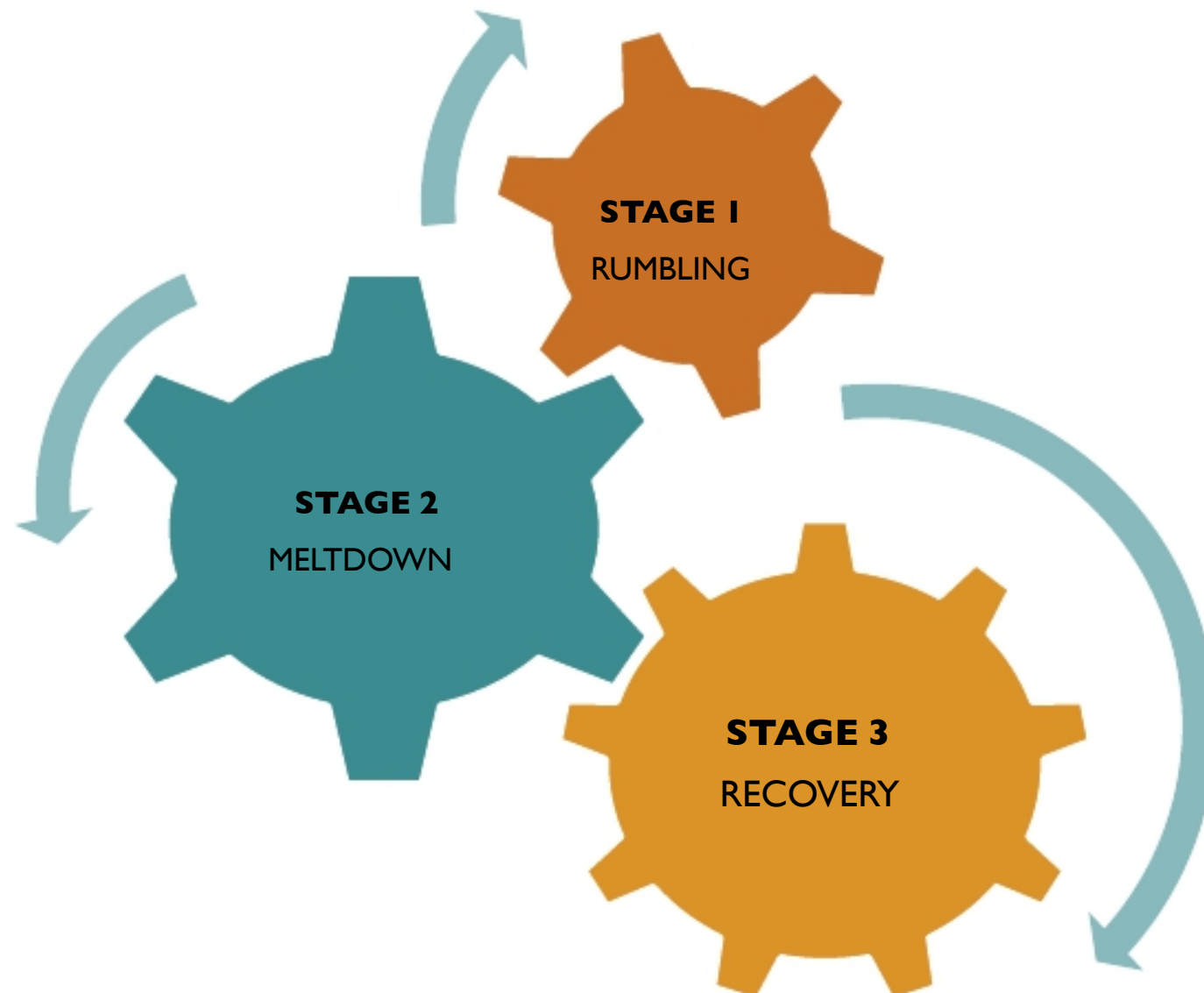


What Can Cause Challenging Behavior?

- ▶ Can result from stress and anxiety
- ▶ When needs for the following can not be met:
 - For information
 - For sameness
 - For a tangible item
 - Due to expectations (of self,others,environment) not met
 - To lower stimulation in the environment
- ▶ Appears differently in every student
- ▶ Remember:Limited communication skills can impact student's ability to express needs



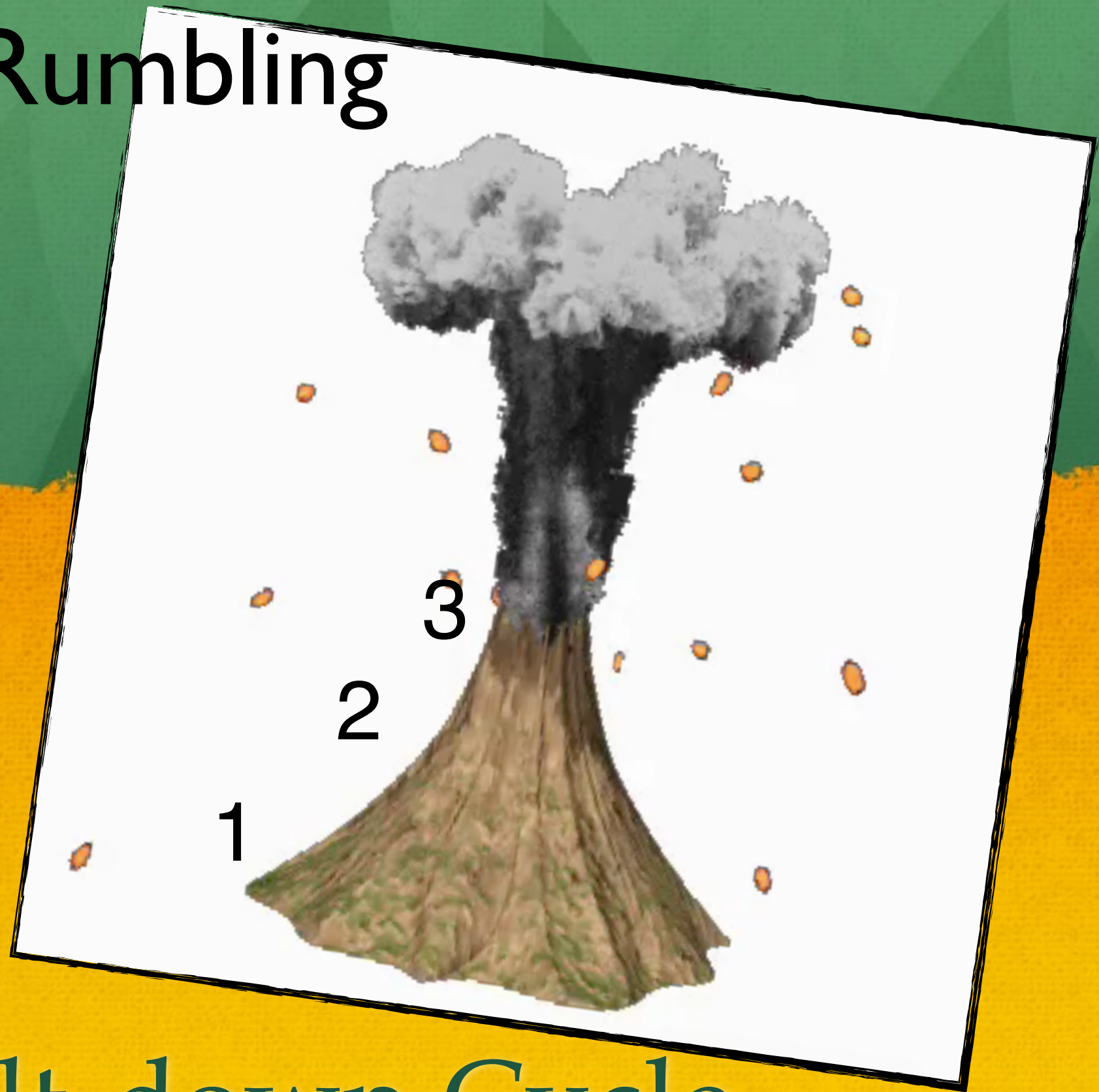
3 Stages of Challenging Behaviors



Let's look closer:



Stage I - Rumbling



The Melt-down Cycle

What to Do

The Full Meltdown



Postvention
Strategies



Intervention
Strategies

Prevention
Strategies

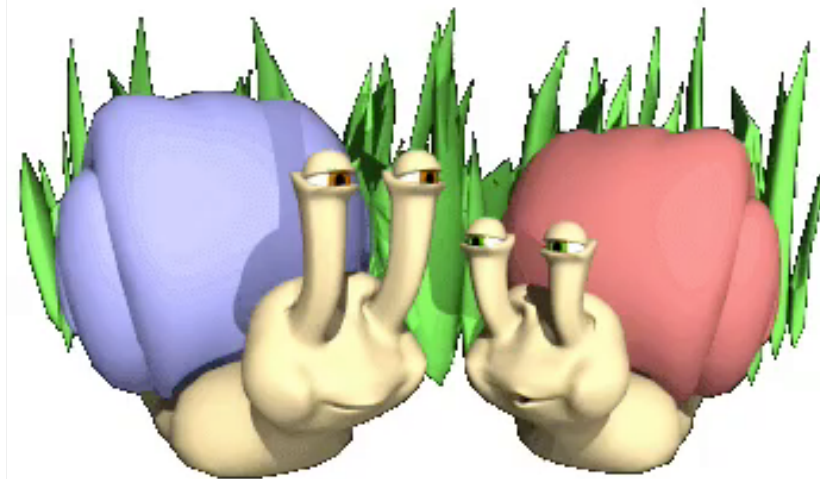


The brain learns best...

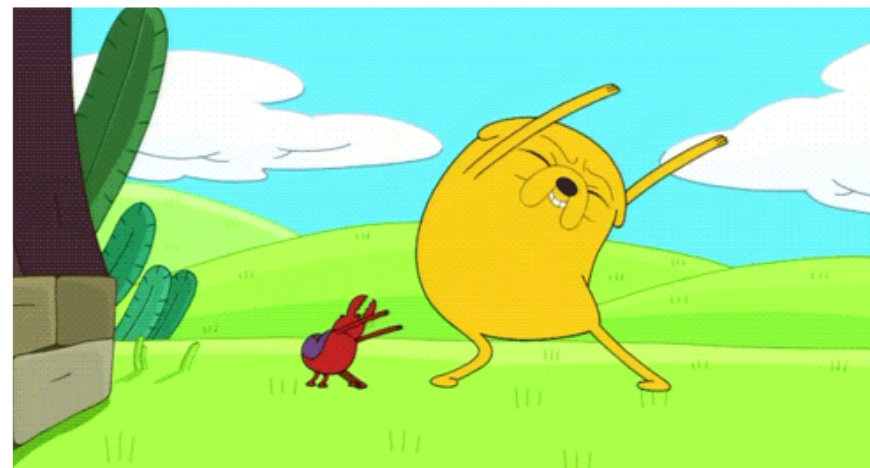
☐ Reflection



☐ Discussion



☐ Movement



Stage I – Rumbling –What Can You Do?

Out of the ordinary minor behaviors
Tell-tale signs that the student is stressed

- ▶ Identify student triggers
- ▶ Modify the classroom environment
- ▶ Provide choice, feedback, and praise
- ▶ Provide strong reinforcement
- ▶ Allow for an “antiseptic bounce” –
separate student from stressful environment

Walk, Don’t Talk

- ▶ Provide a “home base” or “cool zone”

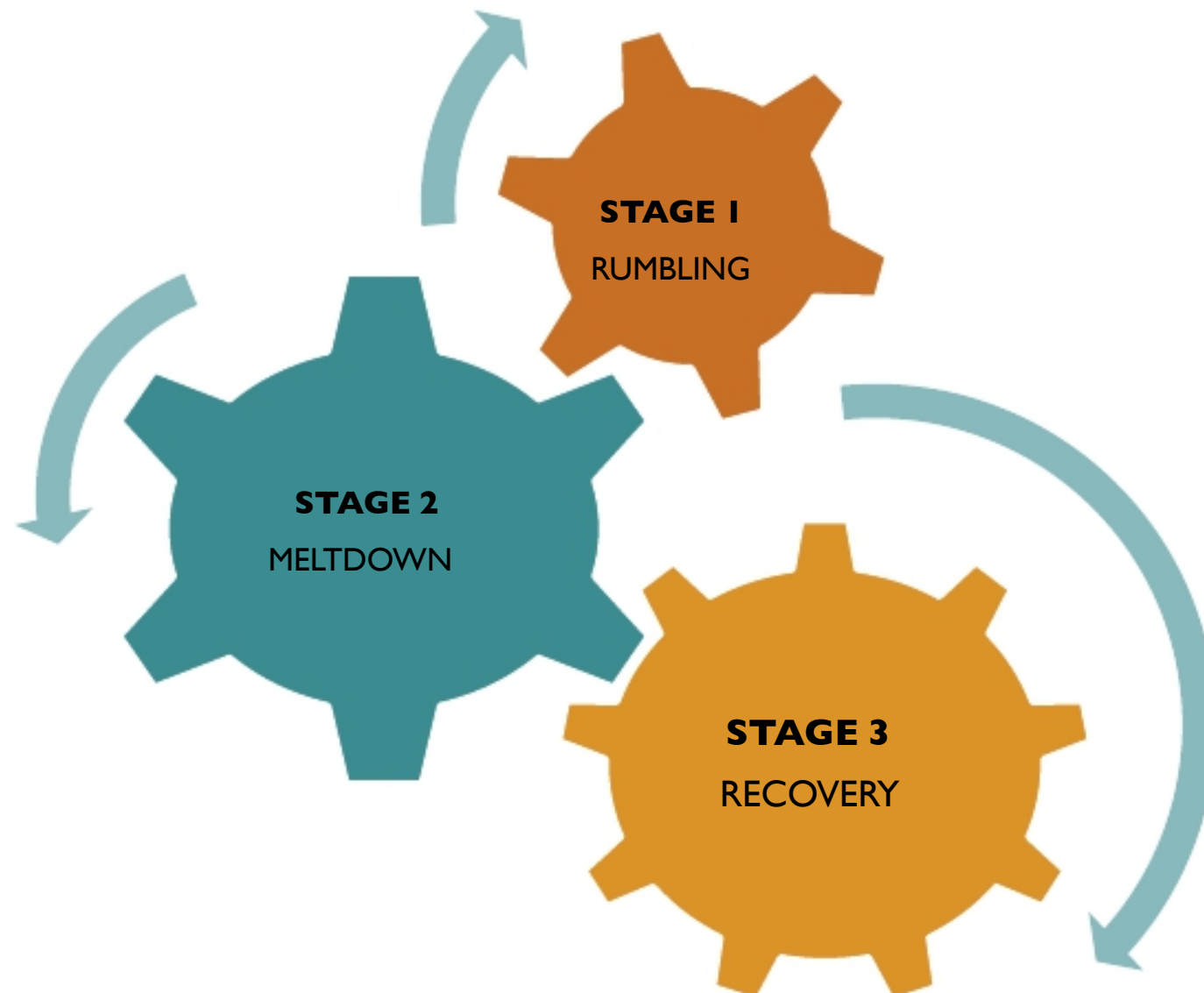


Reflect on a Student with Challenging Behaviors

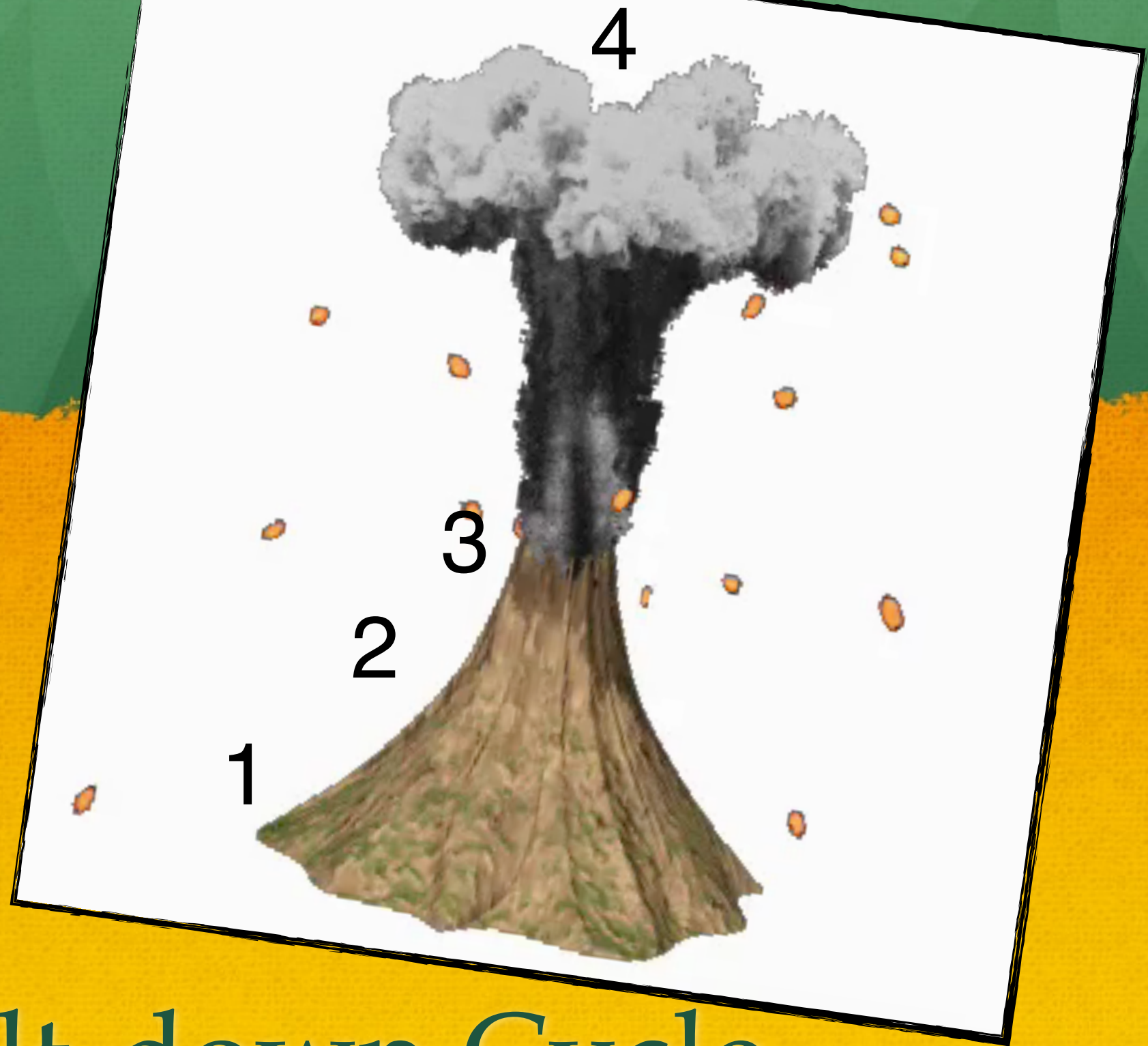
- ▶ What are his or her rumbling signs?
- ▶ What have you/are you doing when he or she starts rumbling?
- ▶ What might you do differently to help manage future situations?



3 Stages of Challenging Behaviors



Stage 2 – Meltdown



The Melt-down Cycle

Stage 2 – Meltdown – What Can You Do?

A photograph of a classroom. In the foreground, a student with long blonde hair, wearing a grey hoodie, is sitting at a wooden desk, facing away from the camera. The desk is part of a larger wooden table. In the background, there is a world map on the wall, a chalkboard, and various classroom decorations. A purple rectangular box with white text is overlaid on the center of the image.

And..don't say, "Calm down"



[CLICK HERE toView Clip – SegmentThree:Practices for Challenging Behavior](#)



P.S.



Never in the history of calming
down has anyone ever calmed
down by telling them to calm down..

Stage 2 – Meltdown – What Can You Do?

Student loses control

Externalized and/or internalized behavior

- ▶ Demonstrate empathy
- ▶ Provide space
- ▶ Provide assurances
- ▶ Maintain calm
- ▶ Maintain safety
- ▶ Implement emergency plan
- ▶ Remove others as needed

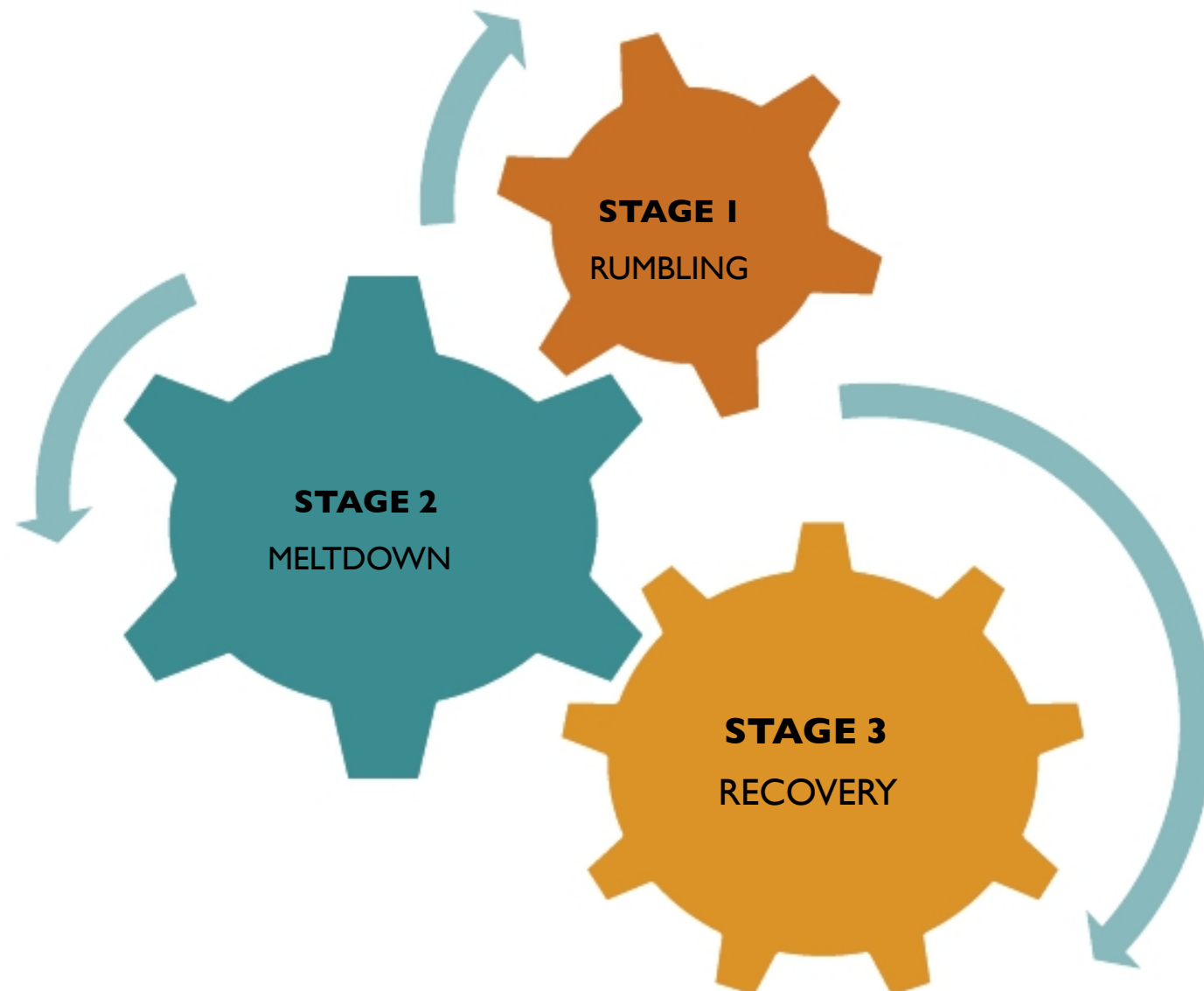


Reflect on a Student with Challenging Behaviors

- ▶ What is the current plan for managing his/her meltdowns?
- ▶ What, if anything, would you like to change about the plan?



3 Stages of Challenging Behaviors

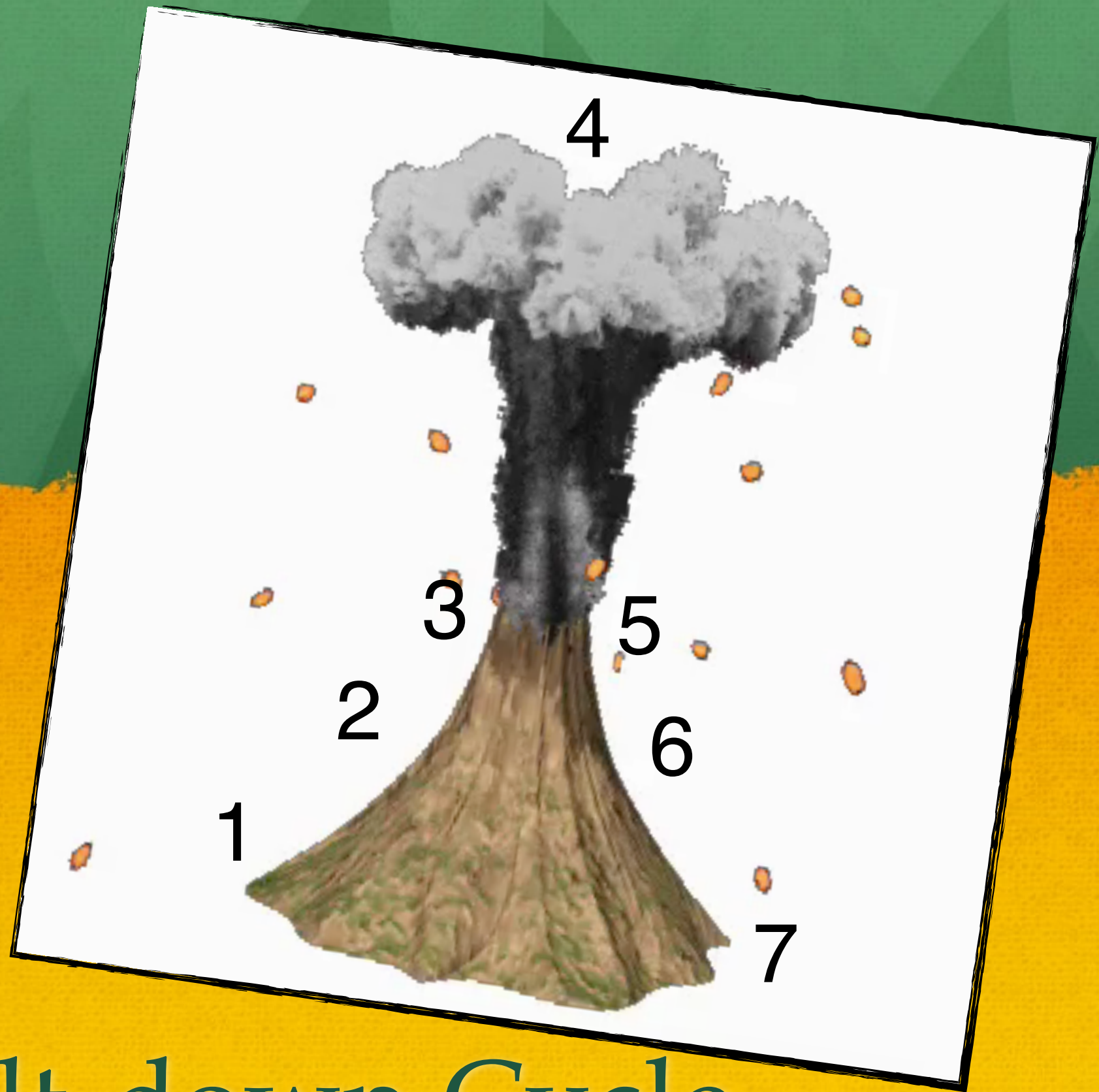


Stage 3 – Recovery



[CLICK HERE to View Video Clip – Segment Three: Practices for Challenging Behavior](#)





The Melt-down Cycle

Let's look closer:



Removal?



Stage 3 – Recovery – What Can You Do?

Not yet ready to learn
Needs help easing back in

- ▶ Direct student to a highly motivating task
- ▶ Reintegrate student into a normal routine
- ▶ Provide strong reinforcement
- ▶ Communicate support
- ▶ Build on successes



Let's look closer:



Reflect on a Student with Challenging Behavior

- ▶ What is the current plan for helping this student recover from a meltdown?
- ▶ What, if anything, would you like to change about the plan?
- ▶ Please share



After the Meltdown...

- ▶ Figure out the root cause
- ▶ Talk with others about how to deal with the student's behavior in the future
- ▶ Develop a partnership with parents/guardian
- ▶ Teach the student:
 - To recognize his own triggers
 - To ask for help
 - How to properly communicate immediate needs
 - To initiate calming routines or ask for someone to assist



Most Importantly...



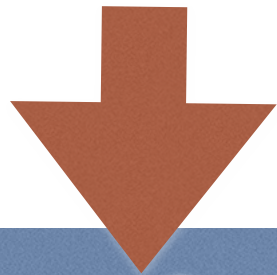
KNOW THE
WARNING
SIGNS!



HAVE A
PLAN!



Supporting frontal lobe or executive skills



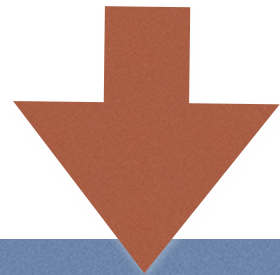
Directives, Rules, Limits:

- ☐ Surprise cards/Change of schedule
- ☐ Levels of Talking
- ☐ Power Cards
- ☐ Keychain Rules
- ☐ Reminder Cards
- ☐ Social Stories
- ☐ T-charts

Structuring the Environment:

- ☐ Physical Structure
- ☐ Visual Cueing

Supporting frontal lobe or executive skills



Directives, Rules, Limits:

- ☒ Surprise cards/Change of schedule
- ☐ Levels of Talking
- ☐ Power Cards
- ☐ Keychain Rules
- ☐ Reminder Cards
- ☐ Social Stories
- ☐ T-charts








Structuring the Environment:

- ☐ Physical Structure
- ☐ Labeling

Let's look closer:



Levels of Talking		Expected Behavior	Looks like
4	Outside voice where it is noisy	<i>So others can hear you above the noise!</i>	
3	Only people at your table can hear you	<i>Table Talk</i>	
2	Only your partner can hear you	<i>Hello!</i>	
1	Library voice	<i>Whisper....</i>	
0	Quiet voice	<i>Shhhh..</i>	

	On stage voice only	On stage so others can hear	
4	Outside voice where it is noisy	So others can hear you above the noise!	
3	Only people at your table can hear you	Table Talk	
2	Only your partner can hear you	Hello!	
1	Library voice	Whisper....	
0	Quiet voice	Shhhhh..	

Power Cards

1. A brief scenario or character sketch describing how the hero solves the problem.
2. The POWER CARD which recaps how the child can use the same strategy to solve a similar interest.



Elisa Gagnon

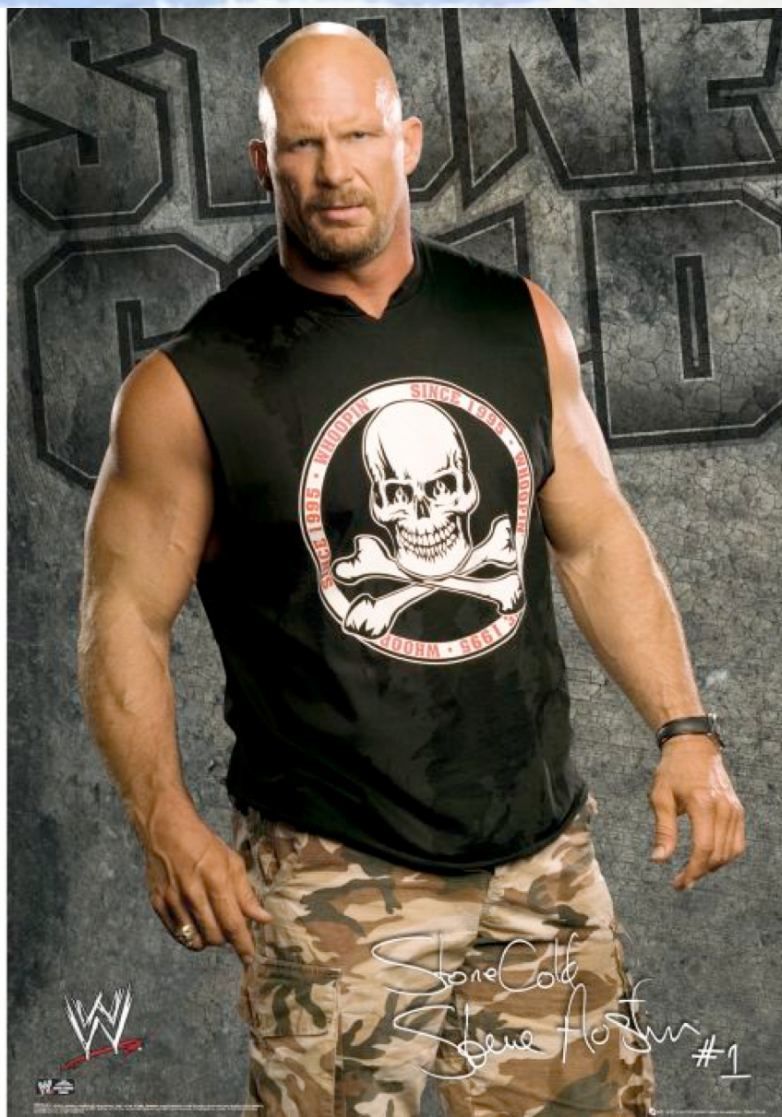
POWER CARDS

Using Special Interests to Motivate Children and Youth with Asperger Syndrome and Autism



By
Elisa Gagnon

Illustrated by
Penny Chiles



“Stone Cold” Steve Austin talks in a very loud voice on stage. He wears black boots and stomps people on stage. He uses a stranglehold on his opponents on stage.

Off stage, Steve Austin talks in a library voice to his children when he reads stories to them at night. He does not hurt his wife or children by choking them or stomping on them. He is off-stage.

Just like me. I will use my library voice or my partner voice at school and home. I will use my Stone Cold voice only on stage. Just like Steve.

Brendan's Jedi Power Card

I am Luke Skywalker and I have some great ideas to share with others. I like to raise my hand and answer the question.



The teacher needs to call on other students so that they can share their ideas, too. I want my friends to have a chance to answer.



To become a Jedi requires the deepest commitment and most serious mind. It is not a venture to be undertaken lightly. As such, Jedi instruction is rigidly structured and codified to enforce discipline and hinder transgressions.

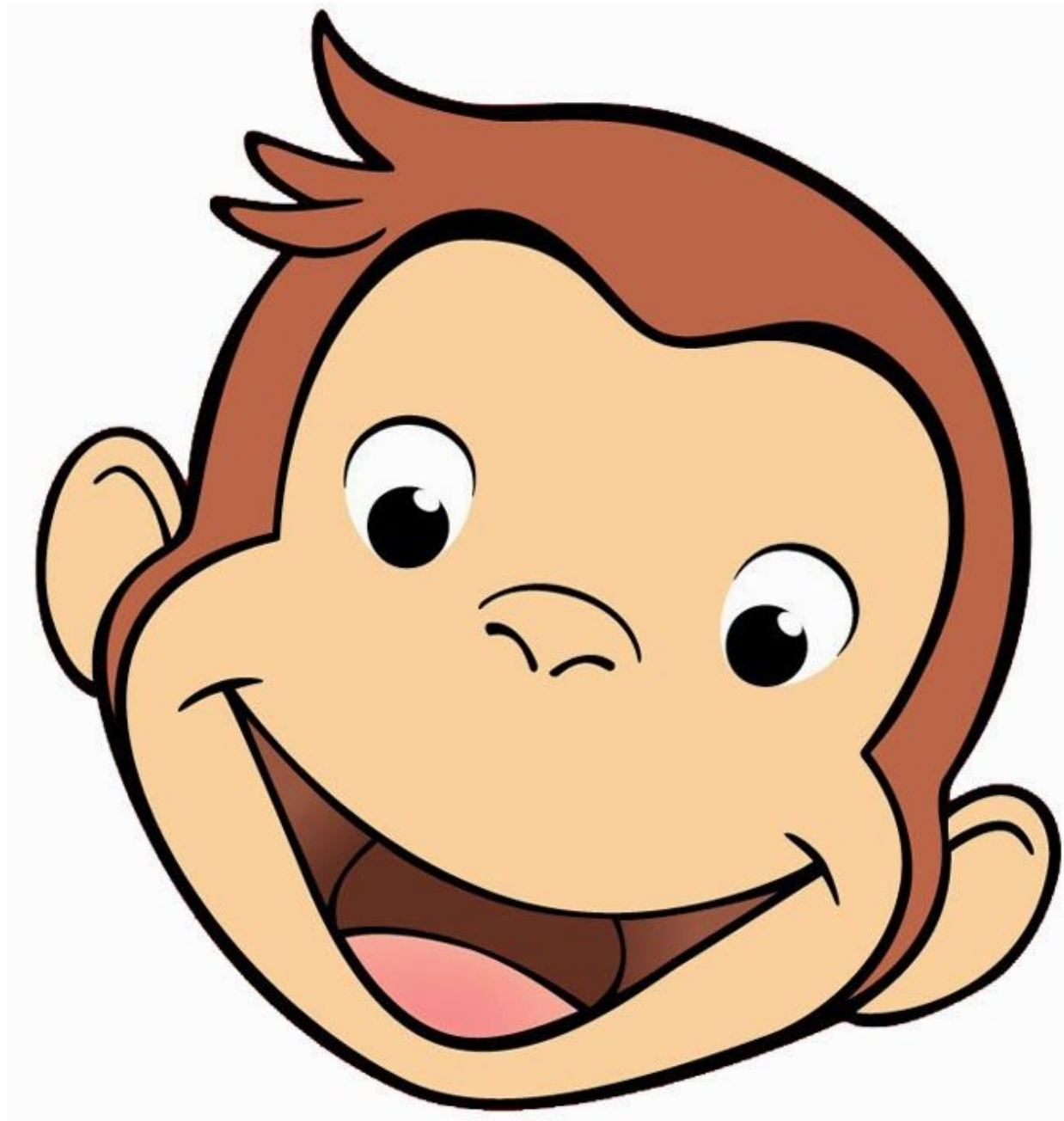
Brendan's Jedi Power Card

When the teacher calls on someone else in class, Luke Skywalker wants you to remember that you can do one of the following things:

- ☐ Wait and listen
- ☐ Take one or two deep breaths
- ☐ Write your answer down on paper
- ☐ Other: _____

May the force be with you, Brendan!





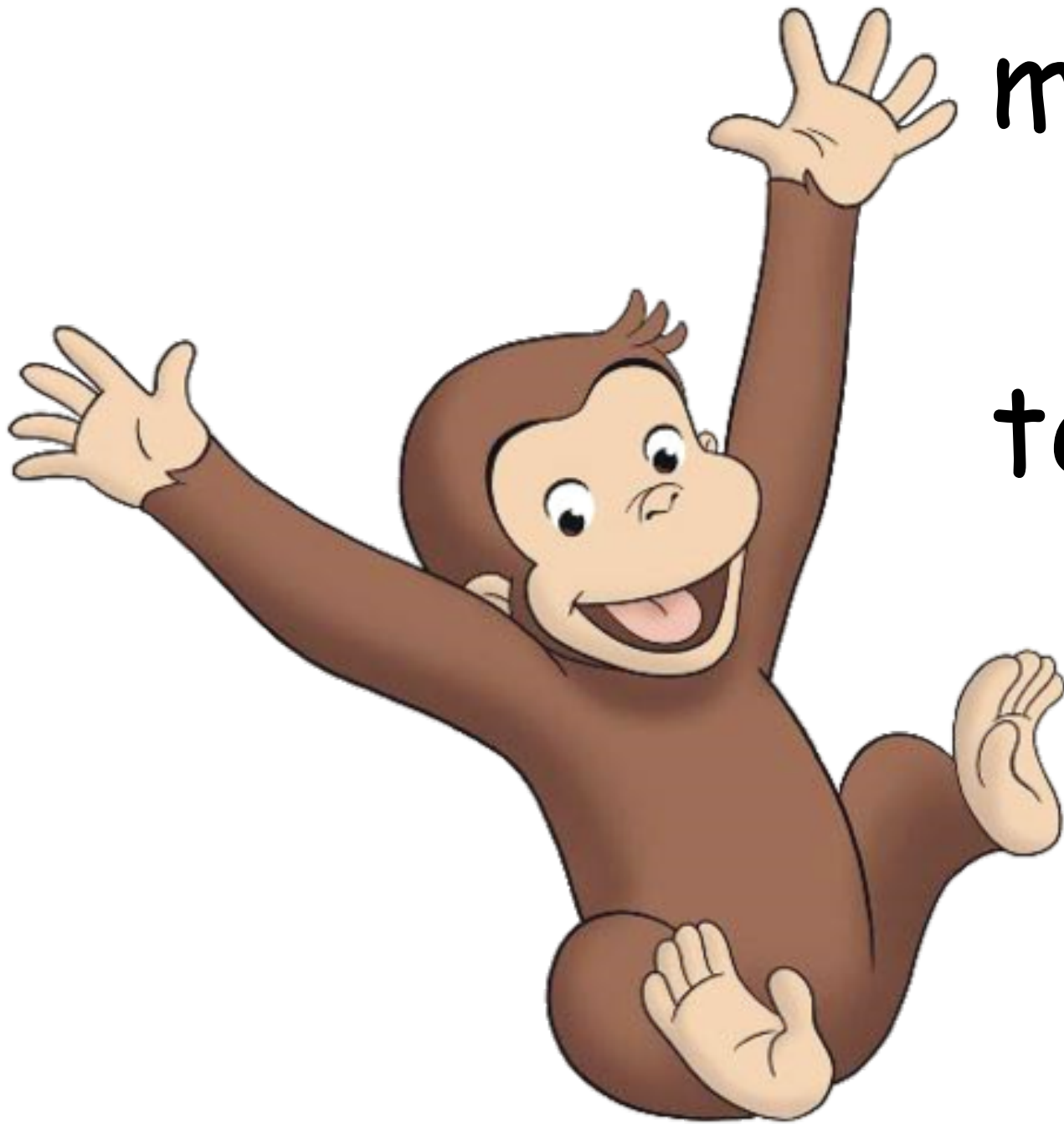
Hey friends,
my name is
George. It's
time for lunch!
I'm going to
share with you
how I eat lunch
at school.

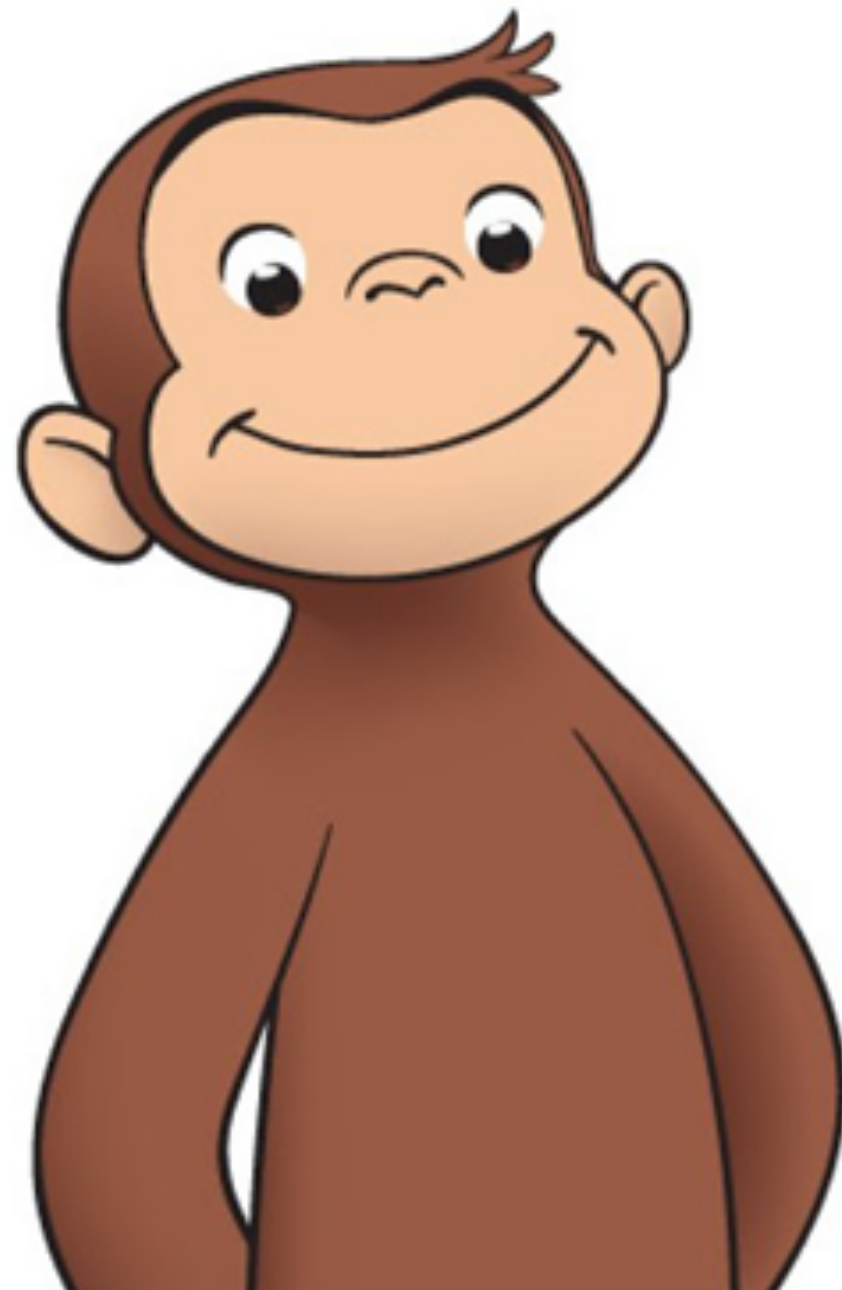


First, I wash
my hands to
get all the
germs off.



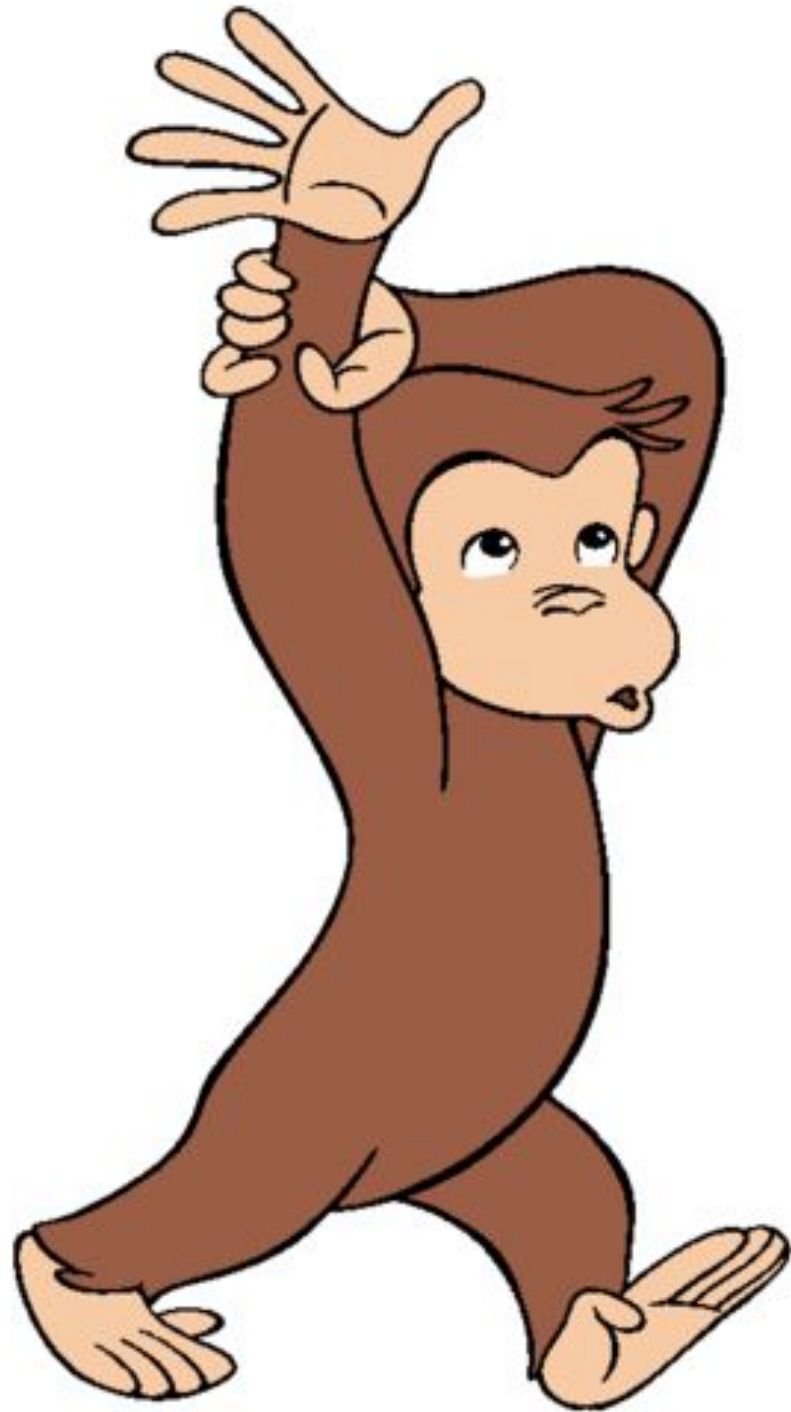
Next, I go find
my seat. The
one the
teacher puts
me in.





I wait for my
teacher to bring
me my food.





I raise my hand
and wait if I
need something
opened or if I
have a question.

I am willing to
try something
new that I
haven't eaten
before.

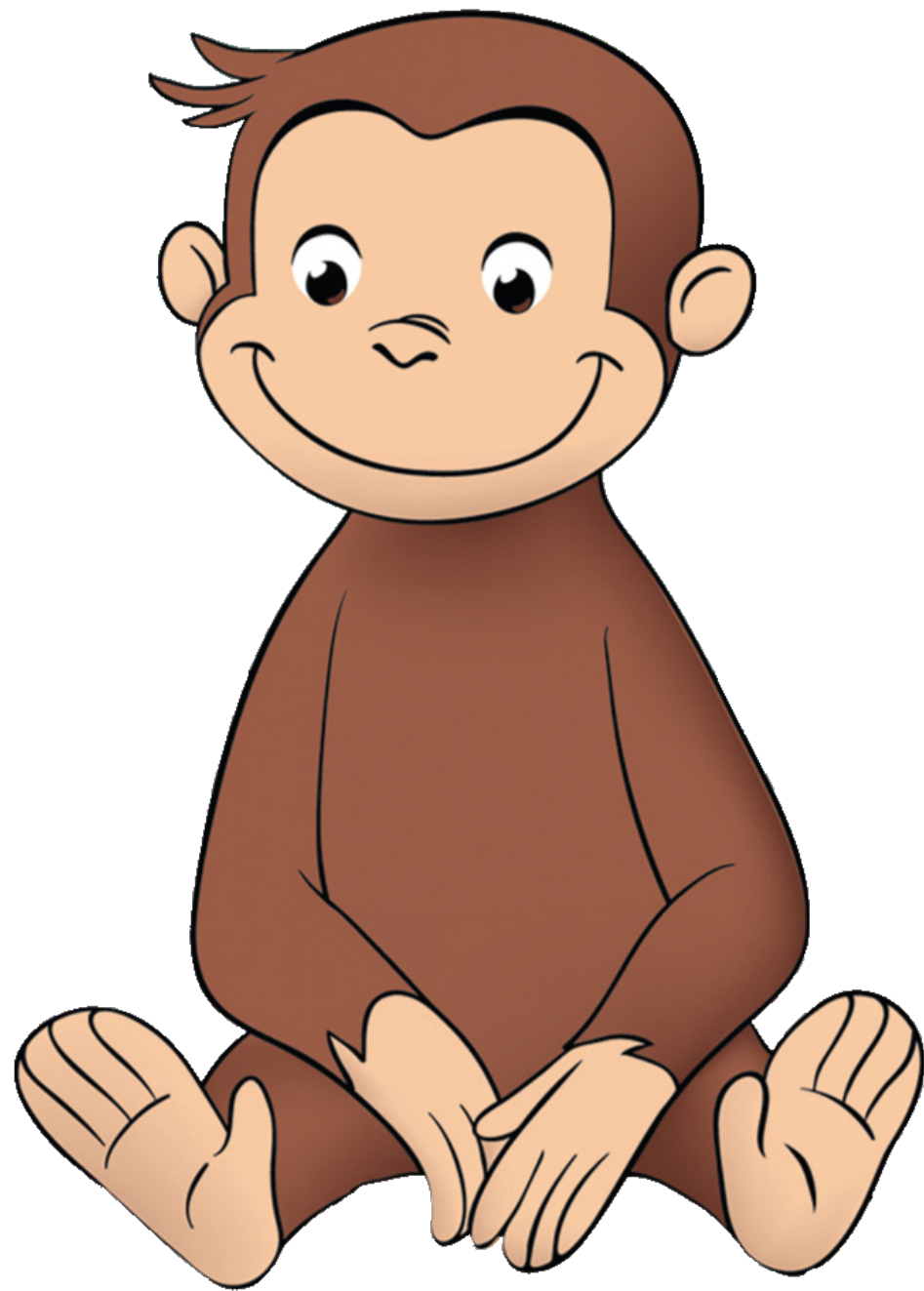




I eat and
enjoy my
food.

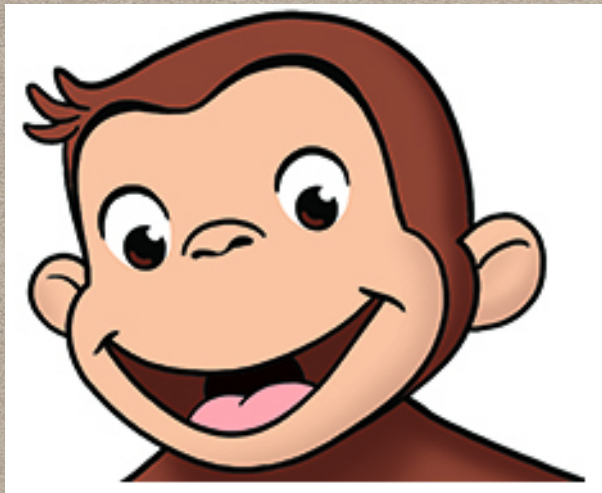


I save my
dessert for
last.



I sit and wait
for my teacher
to tell me when
to get up.

LUNCH WITH CURIOUS GEORGE



George says, "It's time for lunch! There are a few simple rules we have to follow at lunch time, Sawyer."

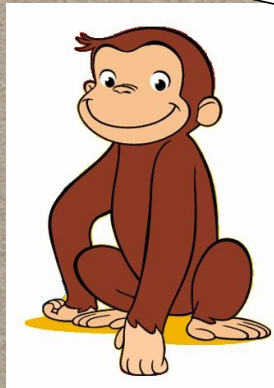
Rule 1: We have to wash our hands



Rule 2: We have to try some of our food



Rule 3: We have to stay in our seat until the teacher says to get up



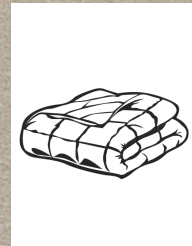
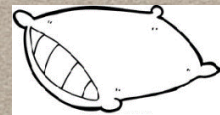
NAPS WITH CURIOUS GEORE

George says, "Sawyer, it's time for a nap." I'll show you how I take a nap at school.

First I lay down on my nap mat.



Next I get myself comfortable with my blanket and pillow.



Last I close my eyes and go to sleep.



George says
taking a nap will
make your body
feel better! Let's
take a nap
together!

Sometimes Miley
wants to do
something else
instead of working

But.. her agent
booked her.

UH-OH....





She must go to work and be
HANNAH MONTANA

When Hannah is having a bad day..

She might say, “I didn’t sign up for this!”

* But..Hannah is
a professional.

* She does her
job without
complaining...



Just Like Me.

* *I may not have
“signed up” to be a
student*

* *But, I will be like
Miley and be a
professional.*



I will:

- * Take a deep breath
- * Relax
- * Say, “I can do this.”
- * I am a professional.
- * Just like Miley



Miley says..

* You go,
Drew!

* Be your
natural,
smiling self!



The End



Success does not
Success does not
look the same for
look the same for
everyone
everyone

*It is about getting
what you need to
succeed.*



Supporting frontal lobe or executive skills



Directives, Rules, Limits:

- ☒ Surprise cards/Change of schedule
- ☒ Power Cards
- ☐ Keychain Rules
- ☐ Reminder Cards
- ☐ Social Stories
- ☐ T-charts
- ☐ SOCCSS

Structuring the Environment:

- ☐ Physical Structure
- ☐ Labeling



Keychain Rules



- Read when calm
- Read multiple times
- Refer to them when he demonstrates rules as reinforcement
- Refer to early in the escalation phase



Keychain Rules

Rule #7: Teachers can call on other students even if you know the answer. In fact, it is her job to call on a variety of students.




```
graph TD; A[Executive Functioning Components] --> B[Metacognitive Strand]; A --> C[Emotional Regulation Strand];
```

Executive
Functioning
Components

Metacognitive
Strand

Emotional
Regulation
Strand

Executive Functioning Components

Social/Emotional Regulation Strand



*When there are difficulties
sustaining attention use...*

Positive Behavior Support Booklet

Template is on my website:
[www.igivuwings.com/
resources](http://www.igivuwings.com/resources)



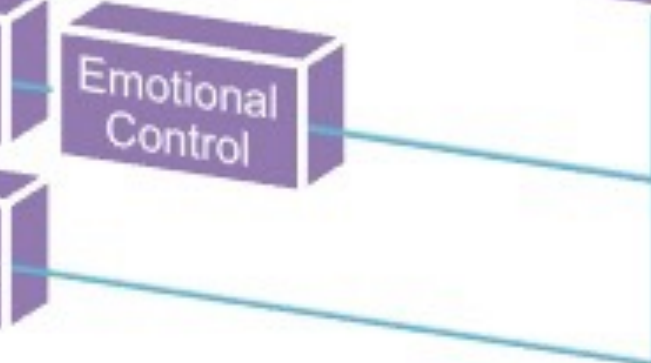
Executive Functioning Components

Social/Emotional Regulation Strand

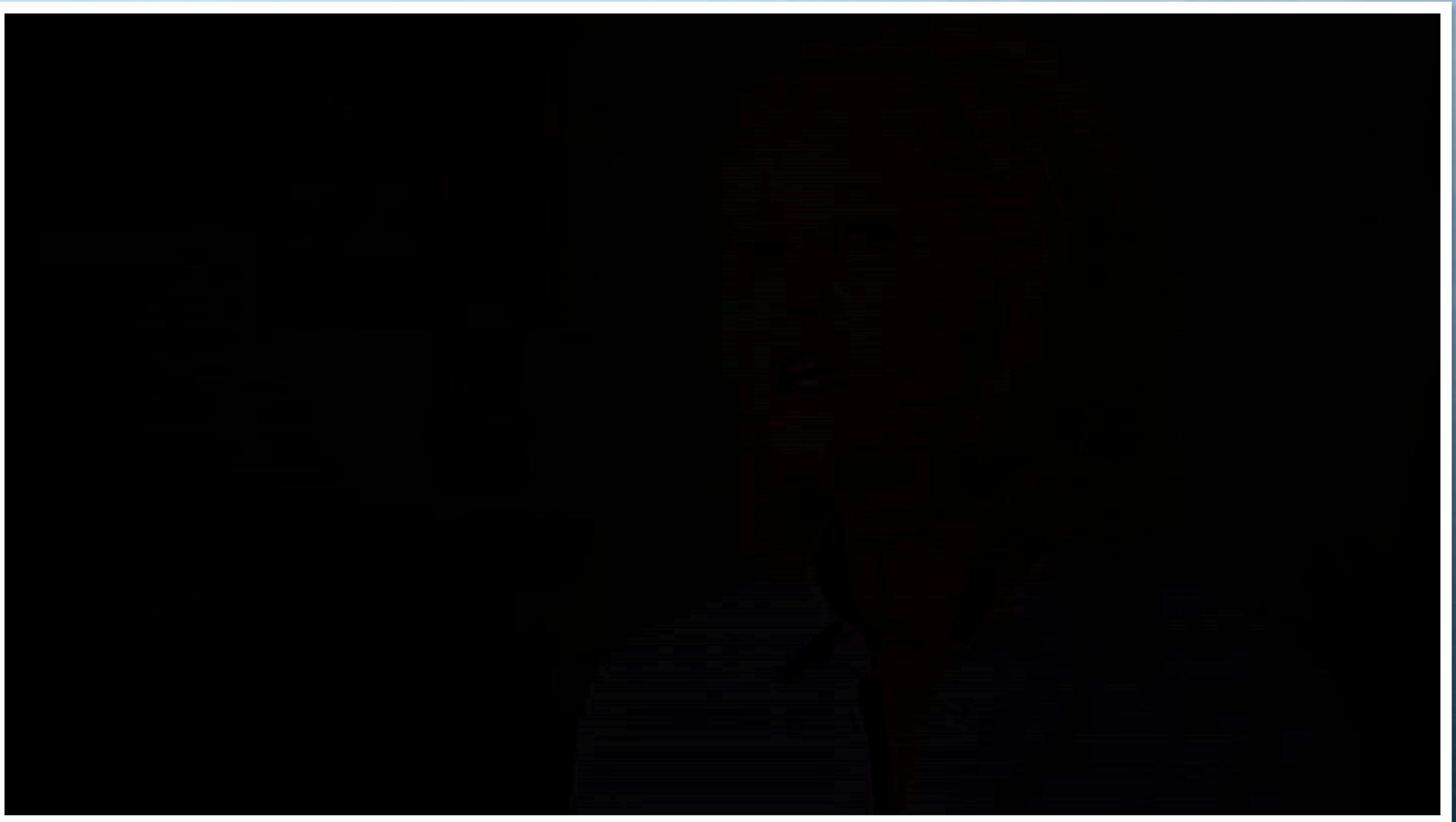
Response
Inhibition

Emotional
Control

Adaptability



Self-Regulation



EMOTIONAL REGULATION

“Ability to respond to the ongoing demands of experiences with the range of emotions in a manner that is socially tolerable and sufficiently flexible to permit spontaneous reaction as well as the ability to delay spontaneous reactions as needed.”

(Cole, Michael, and Teti, 1994)



- 
- ★ Working Memory
 - ★ Inhibitory control
 - ★ Mental Flexibility

WHY SELF REGULATION IS SO IMPORTANT

The Secret of School Success:

..."one of several findings in the growing body of research on self-regulation..people's ability to stop, think, make a plan and control their impulses..it turns out that "these are really the same skills you need to do well in school and potentially in life."

Professor Megan McClelland

Oregon State University

SELF REGULATION

- The ability to detect how you are feeling
- Match emotions to events
- Change level of behavior and emotion to match environment and cultural expectations



IT MIGHT BE A SELF REGULATION PROBLEM IF...

- You think "she is just being stubborn..."
- You really feel you need to watch your every word.
- You think, 'Here we go again..'
- You have to stop yourself from raising your voice.
- You are tempted to say, "Calm down, calm down" when you don't know what else to do..



P.S.



Never in the history of calming
down has anyone ever calmed
down by telling them to calm down..

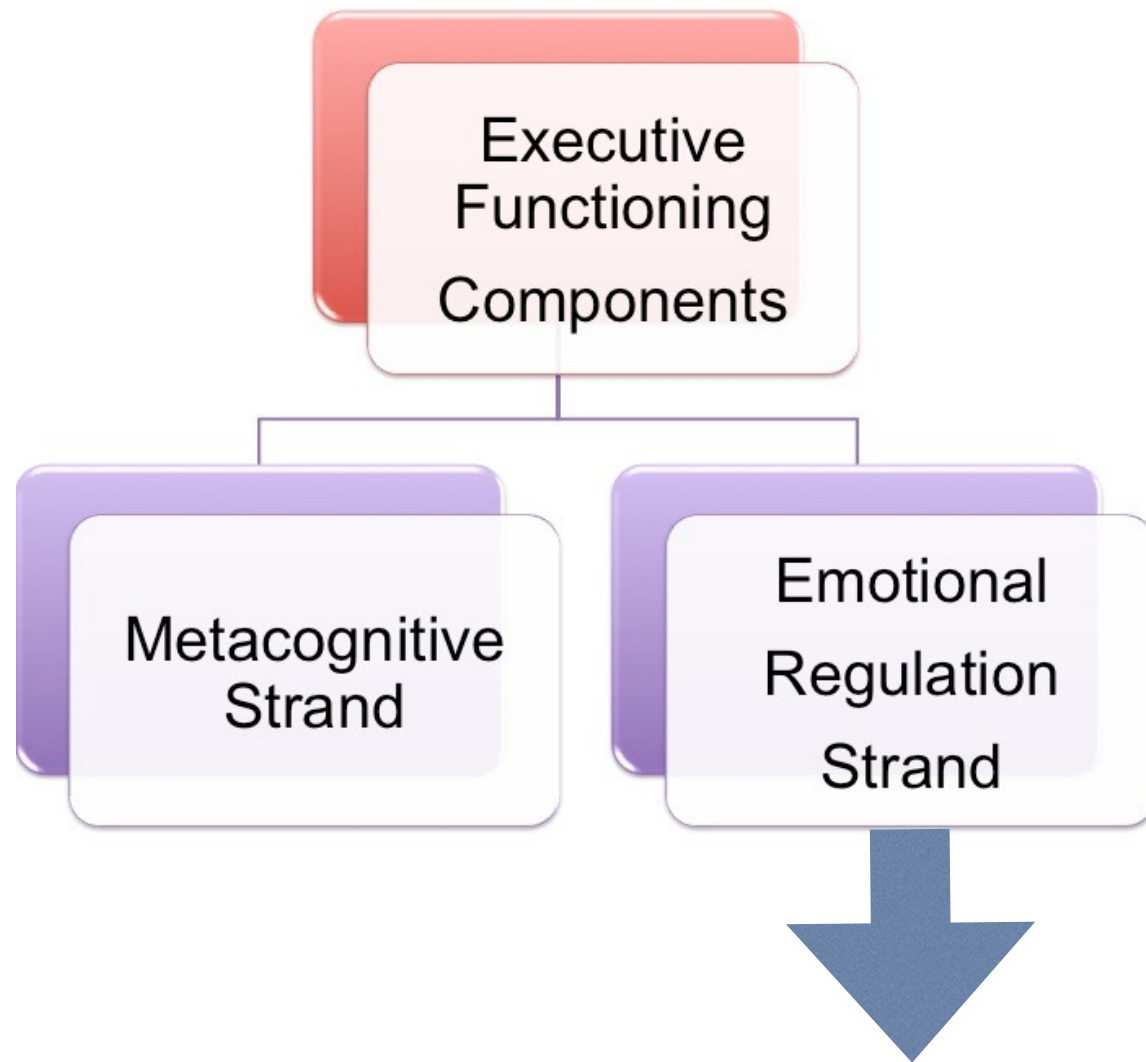
MeMoves-first patented system for self-regulation

- Stephen Porges' polyvagal theory, one of the most celebrated new developments in neurobiology.
- MeMoves' faces with eye contact and expressive features of emotion, music supporting the same frequency as the female voice, and simple gestures perfectly align with the positive social engagement elements identified by Porges.

When to do MeMoves:

- ☒ Before a test
- ☒ Before stressful event
- ☒ First period in the morning
- ☒ Prior to quiet, indoor activity

Sensory Regulation Strategies



Working Memory
Inhibitory control
Mental Flexibility



Emotional Control

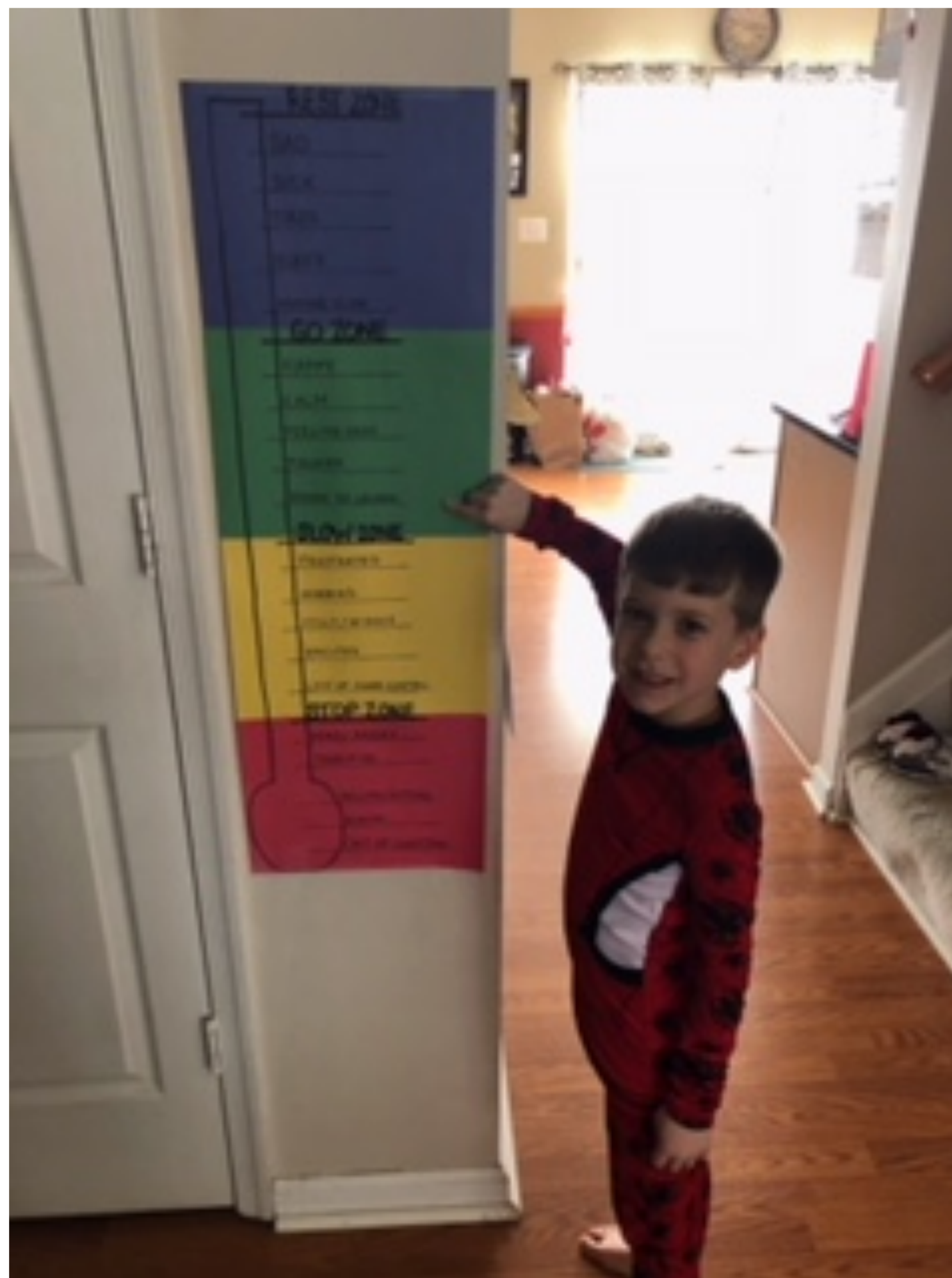
The ability to manage emotions to achieve goals, complete tasks, to control and direct behavior.

Dawson and Guare, 2012

- Exhibited behaviors:*
- ✱ *Becomes frustrated in situations where peers would not*
 - ✱ *Has a low frustration tolerance*
 - ✱ *Easily angered by behaviors of others*
 - ✱ *May be overwhelmed by positive or negative emotions*

Kaufman, 2010

Dominic



Emotions Chart

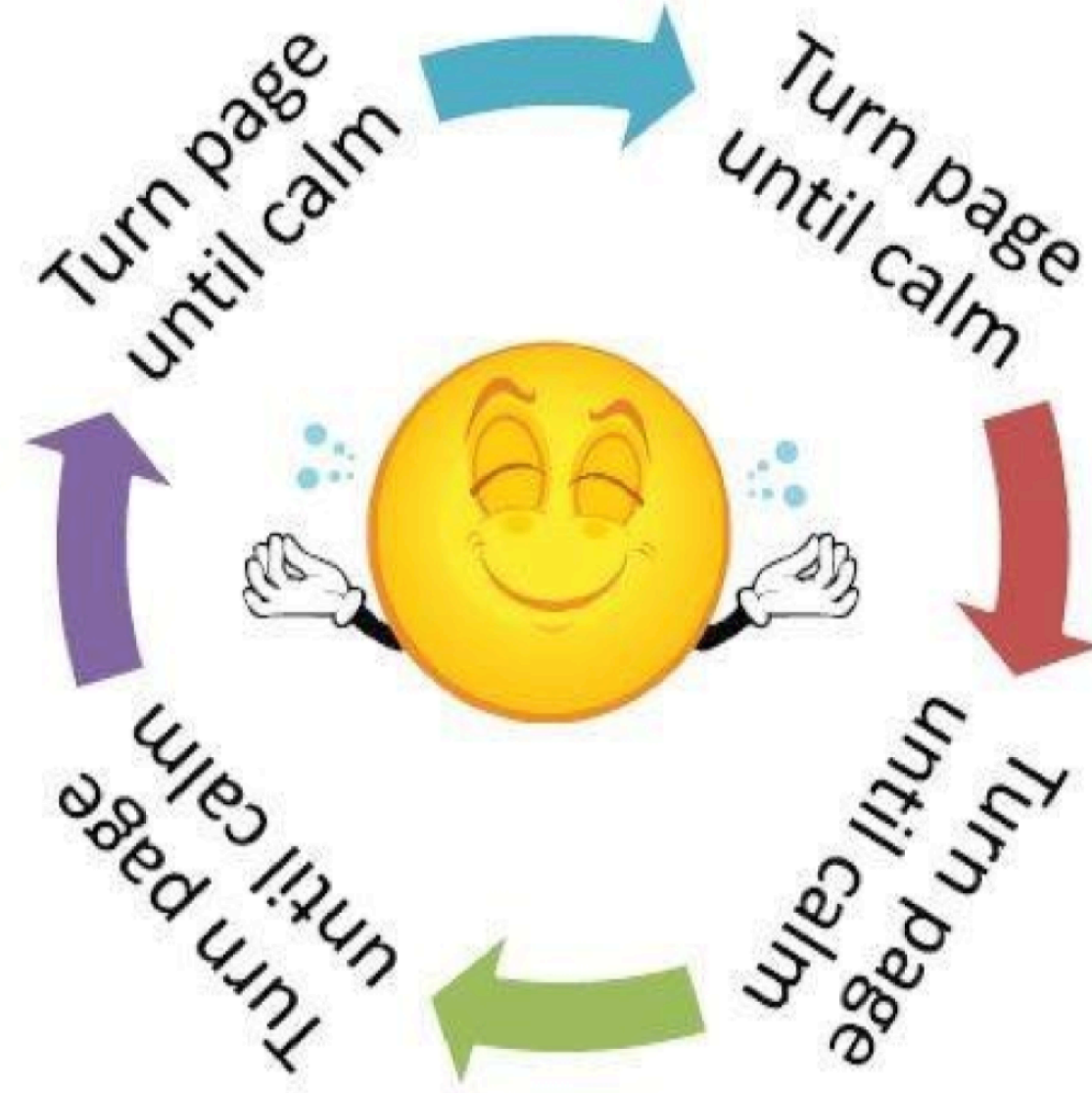
Scale	How I feel	What I can do
5	Reached my limit!! 	
4	Calling for help! 	
3	Not so cool! 	
2	Getting a bit anxious! 	
1	I'm cool! 	

Feelings Chart

	How I feel	What I can do
5	 <p>I'm about to explode!</p>	<input type="checkbox"/> Cleaning Sidewalks <input type="checkbox"/> Plastic Canvas
4	 <p>I'm really upset.</p>	<input type="checkbox"/> Taking a walk [5 min] <input type="checkbox"/> Taking a walk [10 min] <input type="checkbox"/> Taking a walk [15 min]
3	 <p>I've got a problem.</p>	<input type="checkbox"/> Soccer Moves <input type="checkbox"/> Break Area <input type="checkbox"/> Calming Music/Ocean Sounds
2	 <p>Things are pretty good.</p>	<input type="checkbox"/> Relax and do my work <input type="checkbox"/> Soccer Moves
1	 <p>Feeling Great!</p>	<input type="checkbox"/> Enjoy the day!

Breathe in – Breathe out – Breathe in-Breathe out

Count 1, 2, 3, 4, 5, 6, 7, 8, 9, 10



Count 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

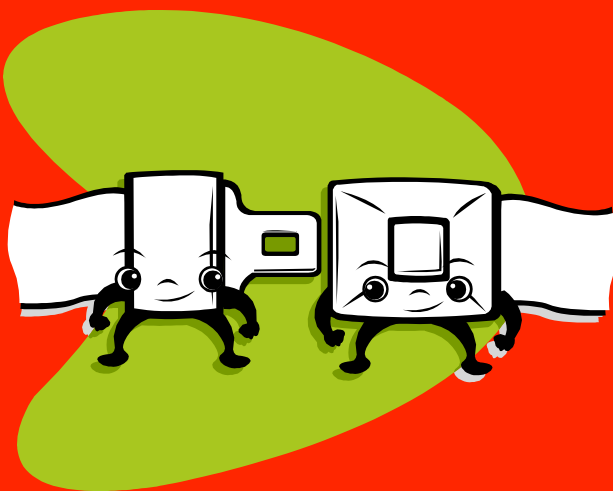
Breathe in – Breathe out – Breathe in-Breathe out



Jacob in Kindergarten



Safety
First!



Buckle your Seatbelt!



Keep it Buckled



**Listen for Mom or Dad to say,
"Time to unbuckle!"**

Center Board



Mini-schedule at Centers



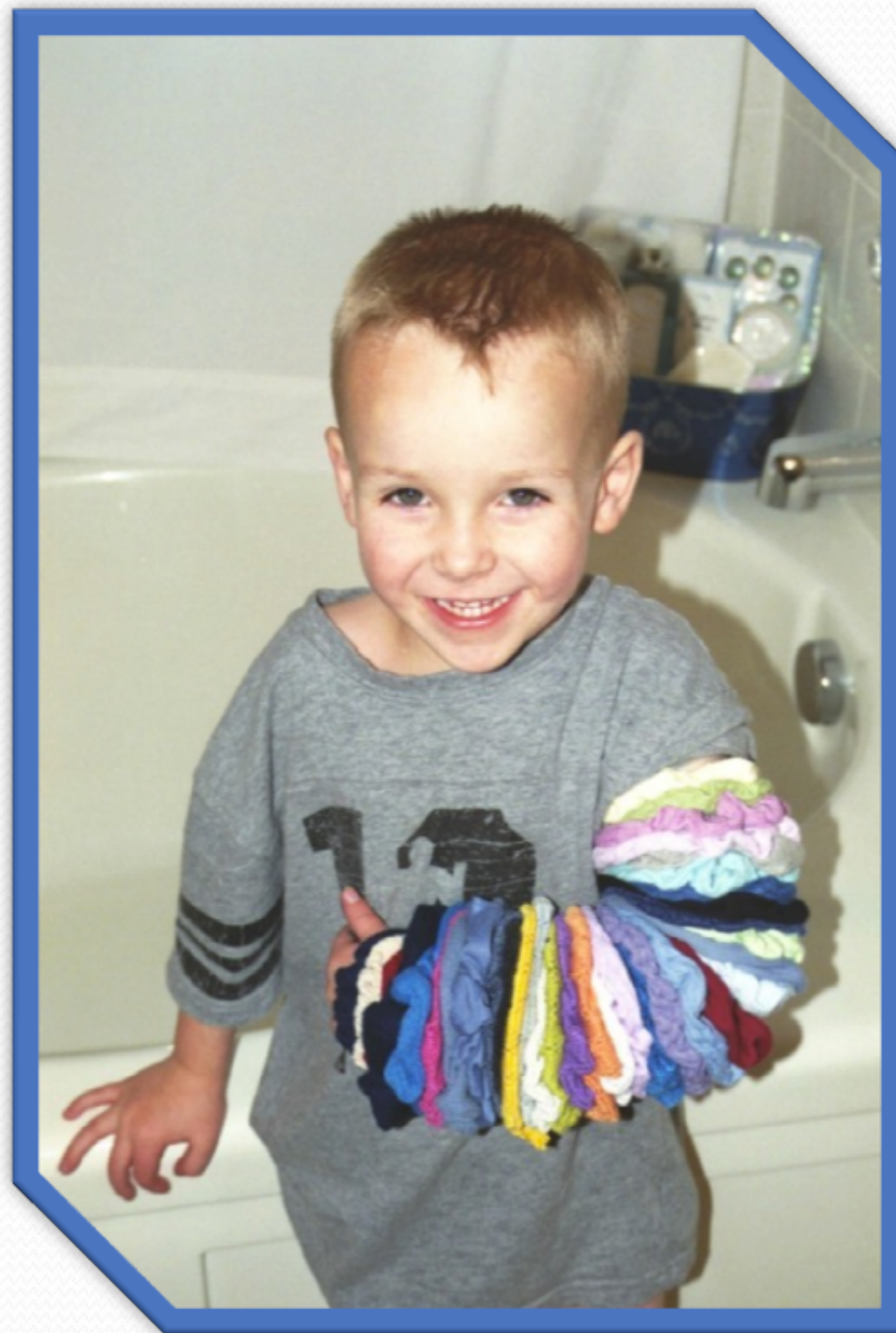
Large Group Structure



Positive Behavior Flip Book



Jacob at Home



Structure at Home: Schedule



Positive Behavior Flip Book: “Wait” at restaurants!



Now/Next



Friendships





Keymakers

**Some people see a closed door,
and turn away.**

**Others see a closed door, try the knob
if it doesn't open . . .
they turn away.**

**Still others see a closed door,
try the knob,**

**If it doesn't open, they find a key,
if the key doesn't fit . . .
they turn away.**

**A rare few see a closed door,
try the knob, if it doesn't open,
they find a key,
if the key doesn't fit . . .
they make one.**





Please keep in touch!

Kathy Kaluza Morris

kkmorris@aol.com

www.igivuings.com

409-338-5040