



Monarch Center for Autism

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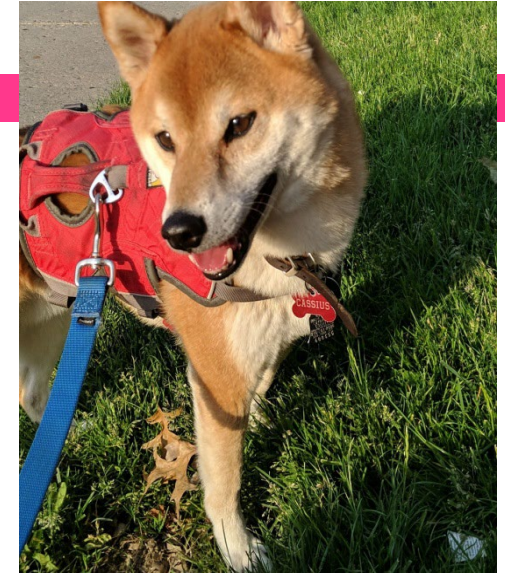
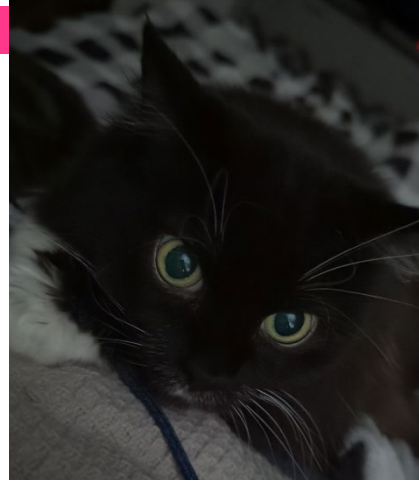
OUT-OF-THE-BOX EMOTIONAL REGULATION FOR AUTISTIC STUDENTS IN GRADES K-12

Abbey Rich, OTR/L

About Me

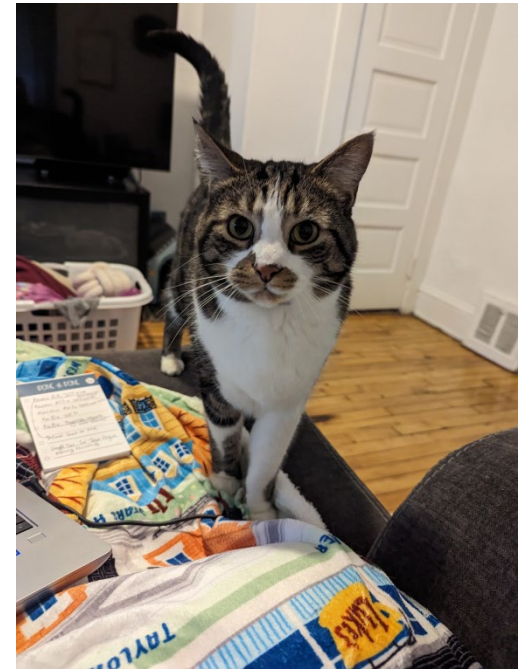


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REMINDERS FOR THERAPY

- BUILDING A RELATIONSHIP TAKES TIME
- I AM ALLOWED TO MAKE MISTAKES
- I KNOW THAT PROGRESS ISN'T LINEAR
- IT'S OKAY TO HAVE BAD DAYS
- I AM DOING MY BEST
- I SEE THE STRENGTHS IN MY CLIENT
- I AM FOLLOWING THEIR LEAD



Disclosures

- Financial: Abbey is the director of the Occupational Therapy department at Monarch Center for Autism and receives compensation for her work.
- Non-Financial: Abbey has friends and family who are neurodivergent.



Learning Objectives

- Describe traditional methods of teaching emotions and coping strategies/regulation, and provide evidence as to why they may not always work for Autistic individuals (and are likely not neurodiversity-affirming).
- Define key terms: Sensory processing, the 8 senses, co- and self-regulation, Interoception, Alexithymia, strengths-based practice, affective and homeostatic emotions.
- Identify and understand how to implement at least 2 alternative strategies for teaching Autistic individuals to recognize how they feel and learn how to regulate.



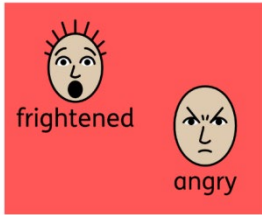
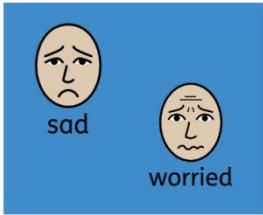
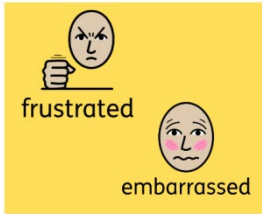
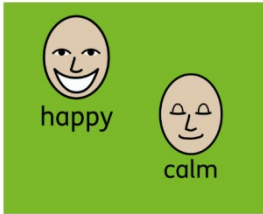
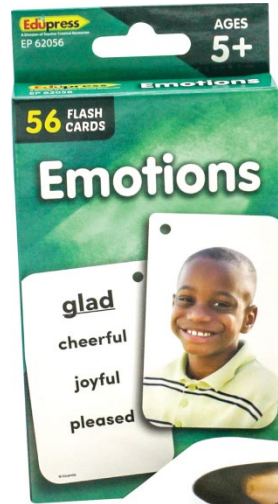
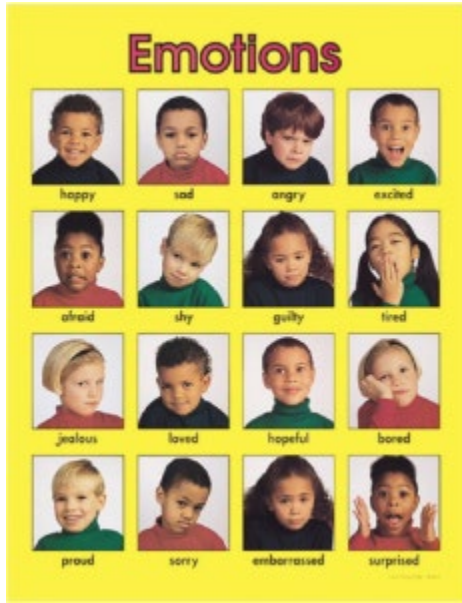
Teaching Emotions – Traditional Methods

Might look something like this...



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What Zone Are You In?



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Blue Zone	Green Zone	Orange Zone	Red Zone
SAD HURT SICK TIRED	HAPPY FOCUSED CALM EXCITED	SURPRISED CONFUSED WORRIED SILLY	ANGRY RAGING TERRIFIED ANNOYED
What can I do?	What can I do?	What can I do?	What can I do?
REST	GO	SLOW DOWN	STOP
Take a break Ask for help Talk to someone Jump up and down 5 x I can also.....?	Think happy thoughts Finish my work Help others Share ideas I can also.....?	Take deep breaths Talk to someone Go for a short walk Count to ten I can also.....?	Take a time out Run a lap Squeeze a stress ball Drink water I can also.....?



zones of REGULATION

	BLUE	GREEN	YELLOW	RED
WHEN I AM:	tired bored sad	happy calm focused	excited frustrated anxious	out of control angry overwhelmed
I CAN:	drink water, have a snack, go for a walk, take a nap	keep up the good work! 😊	take a break, 3 deep breaths, play with a fidget, ask for help	go for a walk, drink cold water, relax my muscles, 10 deep breaths, grounding



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BLUE ZONE

WHEN I FEEL:



I CAN:

- Talk to someone
- Stretch
- Take a brain break
- Close my eyes
- Cuddle a soft toy

GREEN ZONE

WHEN I FEEL:



I CAN:

- Play and learn new things
- Help a friend
- Read a book or draw
- Do something I enjoy
- Enjoy this moment!

How are you feeling today?



YELLOW ZONE

WHEN I FEEL:



I CAN:

- Talk to someone
- Count to 20
- Use a fidget or calm down toy
- Take 5 deep breaths
- Draw a picture

RED ZONE

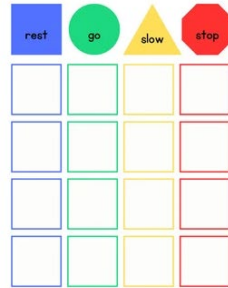
WHEN I FEEL:



I CAN:

- Stop what I am doing
- Make sensible choices
- Take 5 deep breaths
- Ask for help
- Find a safe space

Which zone are you in?



What zone am I in?



Use tools to get in the green zone.



What do these methods have in common?

- They focus on the outward appearance of the individual
- Often involve making assumptions about how someone is feeling
- Use traditional emotion words that may not resonate with neurodivergent individuals
- May imply some emotions are better or more desirable to feel than others
- Do not consider the unique internal experience of neurodivergent individuals



Research Suggests

- Autistic individuals tend to focus on different areas of faces (Boraston & Blakemore, 2007; Kliemann et. al., 2010)
- Autistic brains demonstrate decreased activation in the areas responsible for Interoception, emotional processing, and social cognition (Silani et. al, 2008)
- Autistic individuals often experience impaired interoceptive accuracy (Barrett et. al., 2004; Fiene & Brownlow, 2015; Palser et. al., 2018)

So, what?

We need to alter our approach when working with autistic individuals on emotional regulation!

Strengths-Based Practice is KEY!

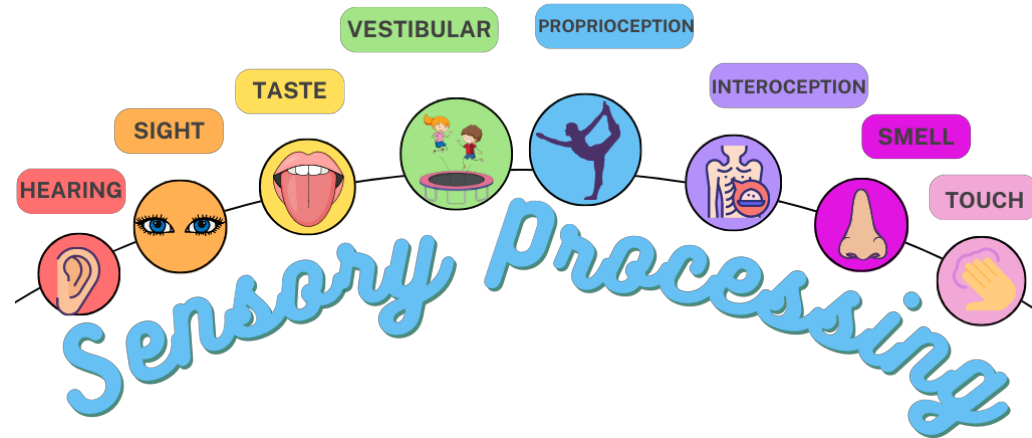
The philosophy of striking a balance between asking an autistic child to learn new skills and asking for the change to come from elsewhere, such as changing the environment, the teaching style, or the activity itself.

Rooted in self-determination theory, including:

- ❖ Autonomy
- ❖ Competence
- ❖ Relatedness

Important Terms:

- Sensory processing is a person's ability to receive, manage, and interpret messages from each sensory system.
- Sensory Integration is the brain's "ability to orchestrate all of the sensations into meaningful behavioral and motor responses without becoming too overwhelmed, distracted, or disengaged".



The **EIGHT** Sensory Systems

- **Vestibular input** is “how we detect movement, understand our relationship to gravity, and regulate our attention level”- this system plays a critical role in how a student understands their body and environment
- **Proprioceptive input** is our body awareness communicated via our muscles and joints– it helps us understand where our body is in space and how to move our bodies through our environment
- **Oral input** is a combination of what we taste, smell, and feel in our mouths
- **Gustatory input** is what we taste
- **Tactile input** is what we feel when we touch something or when something touches us– it gives us an understanding about the texture and temperature of objects, as well as information about pain
- **Visual input** is what we see– and our world provides a **HUGE** amount of visual input throughout the day!
- **Auditory input** is what we hear– and our world is **FILLED** with it- from the cars outside, the hum of the air conditioner, conversations with peers, echoes in the gross motor room....
- **Interoception** is our ability to detect our internal needs- things like using the bathroom, identifying hunger, taking a break when overheated, or putting on a jacket when we feel cold

“Sensory” is happening

ALL the time!



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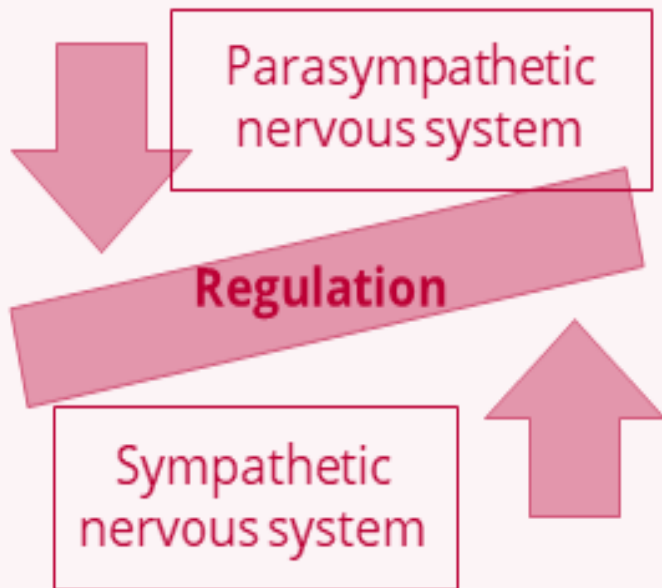
All humans experience near constant sensory input, from both outside and internal sources. Unconsciously, all the time, your brain and body are reacting to that input. Each of us has a unique brain with unique preferences for sensory experiences.

Time to think about your own sensory preferences!

- ❑ Which sensory experiences (visual, auditory, touch, smell, taste, movement) cause you to be *more dysregulated*?
- ❑ Which sensory experiences (visual, auditory, touch, smell, taste, movement) cause you to achieve a *better state of regulation*?
- ❑ How are these responses similar or different to students in your class?
- ❑ How do these responses change depending on other stressors: lack of sleep, hunger, family dynamics, financial state?

Regulation

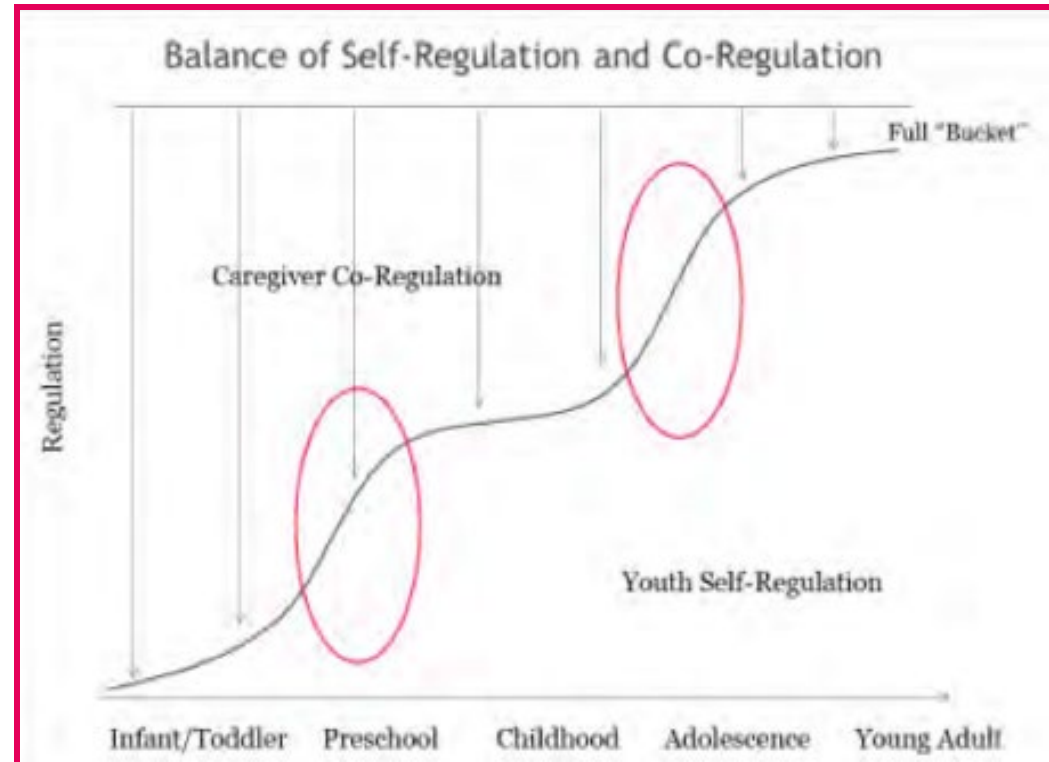
Regulation is an “individual’s ability to manage his or her internal emotional and physical state in order to stay calm and engaged”.



- Emotional Regulation is the ability to control your emotional state, including monitoring and responding to stimuli, stressors, or other wide ranges of emotions.

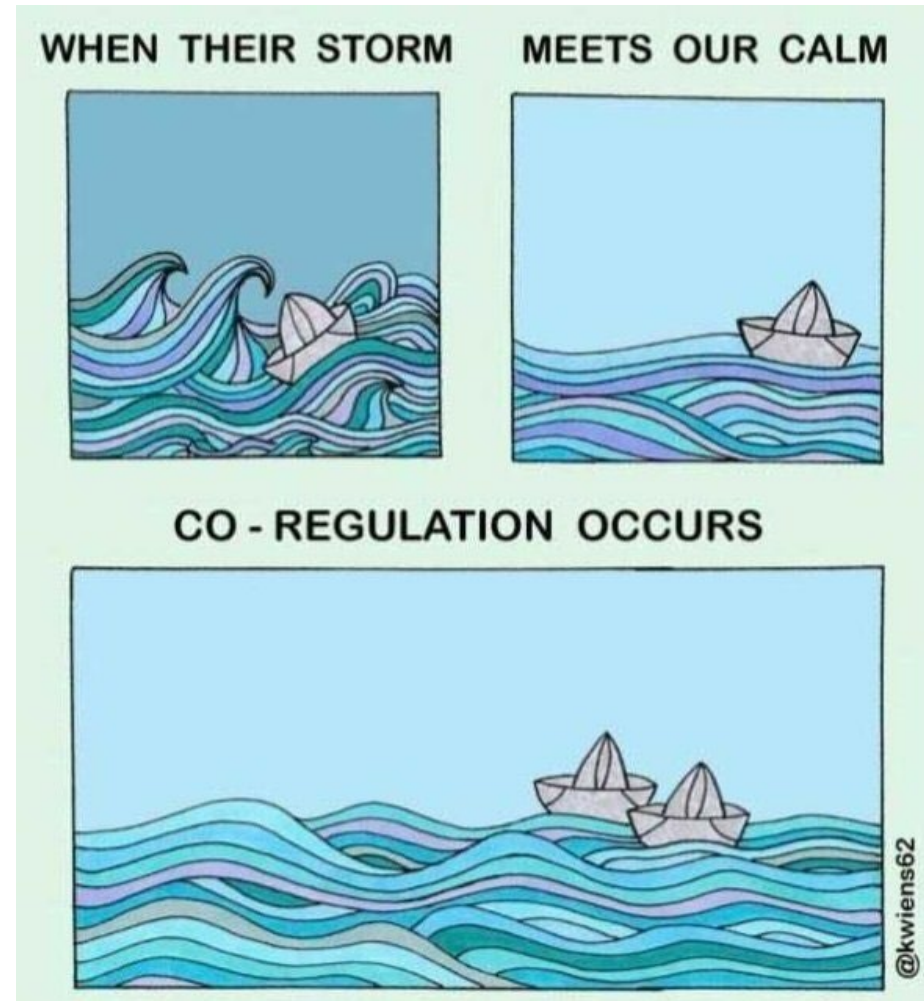
Some Perspective on Self-Regulation

- ❑ Self-Regulation is the ability to manage, monitor, and react through behavior, emotions, thoughts, and energy in a way that is effective for ourselves
- ❑ Learning to Self-regulate is an important developmental skill that continues to improve across the lifespan (yes, even into young adulthood!!).
- ❑ Red circles indicate large jumps in *typical* development in which changes in brain development can correspond to big increases in self-regulation skills.



Co-Regulation

- ❑ Co-regulation is the “attuned and responsive interactions between a child (student) and adult (teacher) that allows them to reach a state of regulation together”.
 - ❑ Build supportive, safe relationships to provide improved co-regulation
 - ❑ Adequate sensory environments- “just right” input- promotes regulation
 - ❑ Predictable environments contribute to successful co-regulation
- ❑ Forming safe, trusting relationships in sensory-attuned environments can influence the development, growth, and integration of a student’s brain.



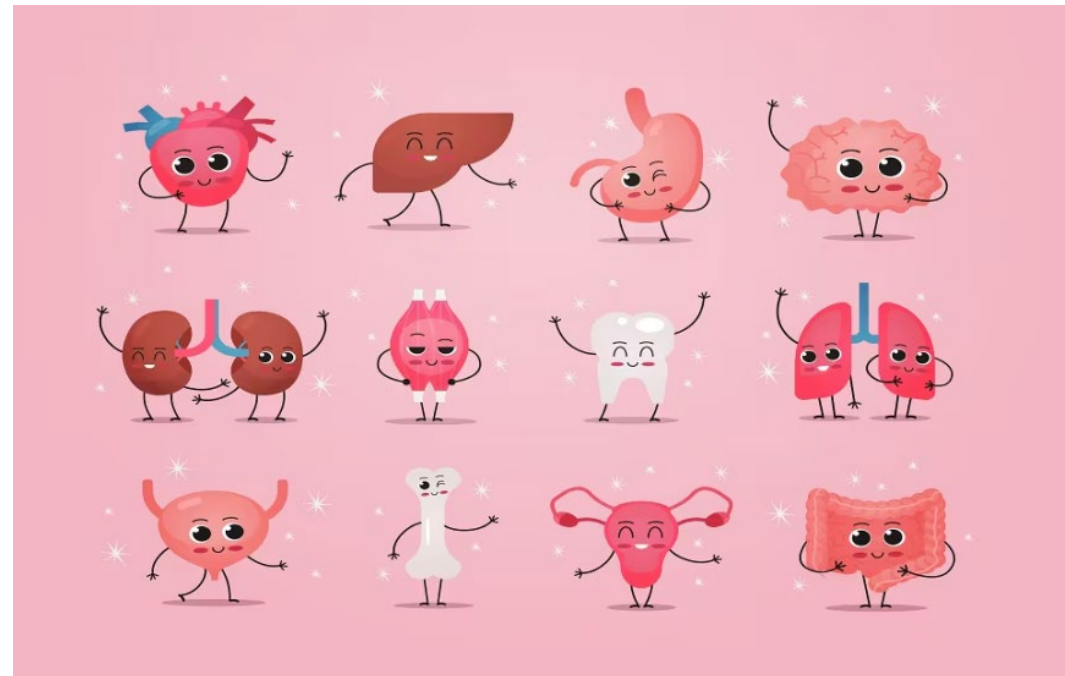
How to be a good Co-Regulator

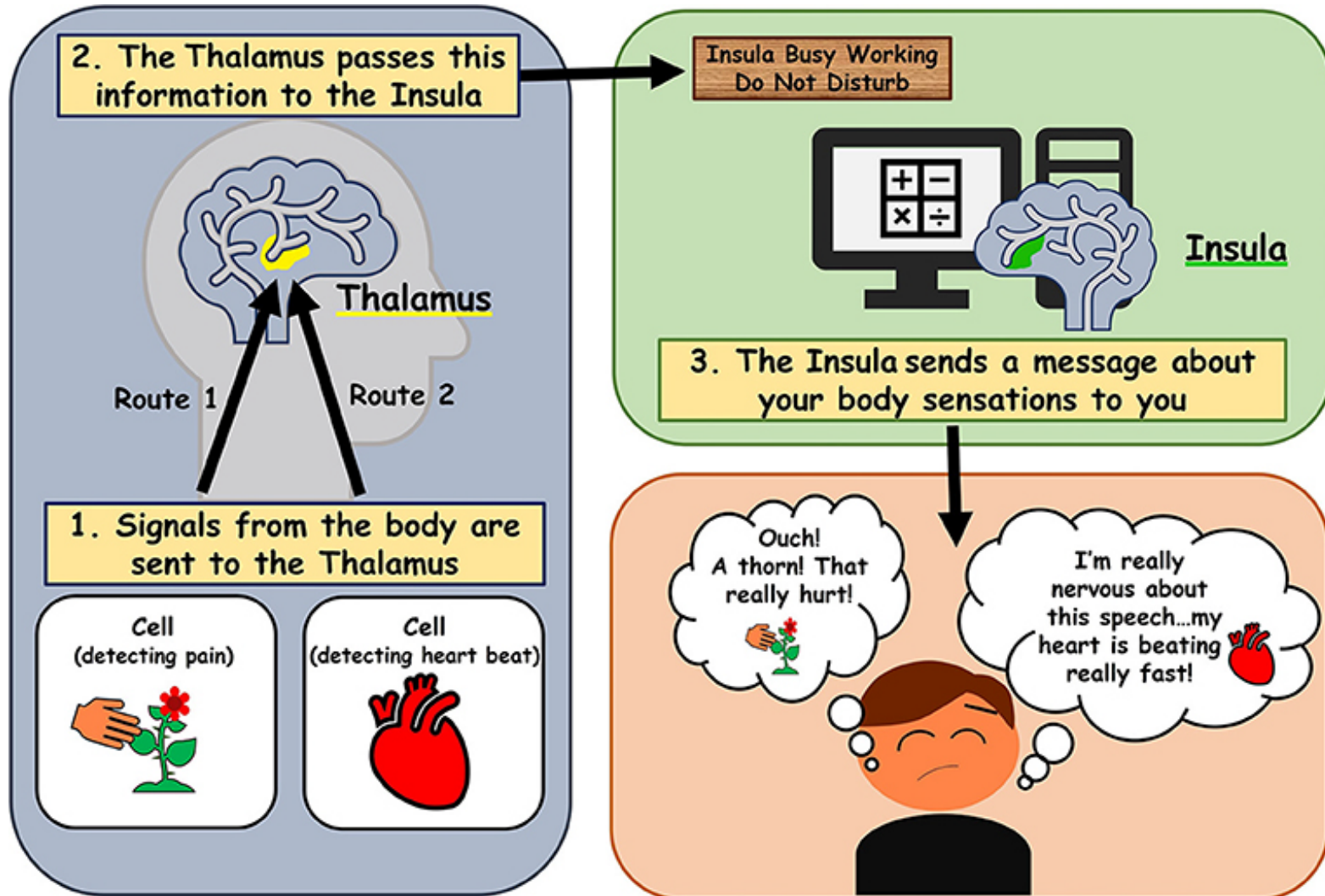


- ❑ Provide a warm, responsive relationship by displaying care and affection, recognizing and responding to cues that signal needs and wants, and providing caring support in times of stress.
- ❑ Structure the environment to make regulation manageable – providing a buffer against environmental variables and creating consistent, predictable routines and expectations.
- ❑ Teach and coach self-regulation skills through modeling, instruction, opportunities for practice, prompts to use skills, and reinforcement of each step along the way.

What is Interoceptive Awareness?

- Interoception is the sensory system which allows us to experience internal physiological sensations
- Interoceptive Awareness is the degree to which we are able to notice and connect our body signals





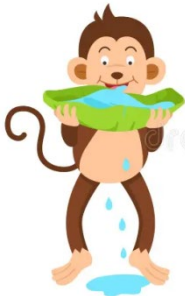


Emotion Wheel I



- Alexithymia inability or reduced ability to notice and describe emotions
- Affective emotions involve mood and reactions to the world around us
- Homeostatic emotions drive us to fill our basic body needs

thirsty



hungry



A different approach: Interoception

Created
by Kelly
Mahler
OTD,
OTR/L



WWW.KELLY-MAHLER.COM













Case Example 1



Case Example 2



BODY CHECK RING

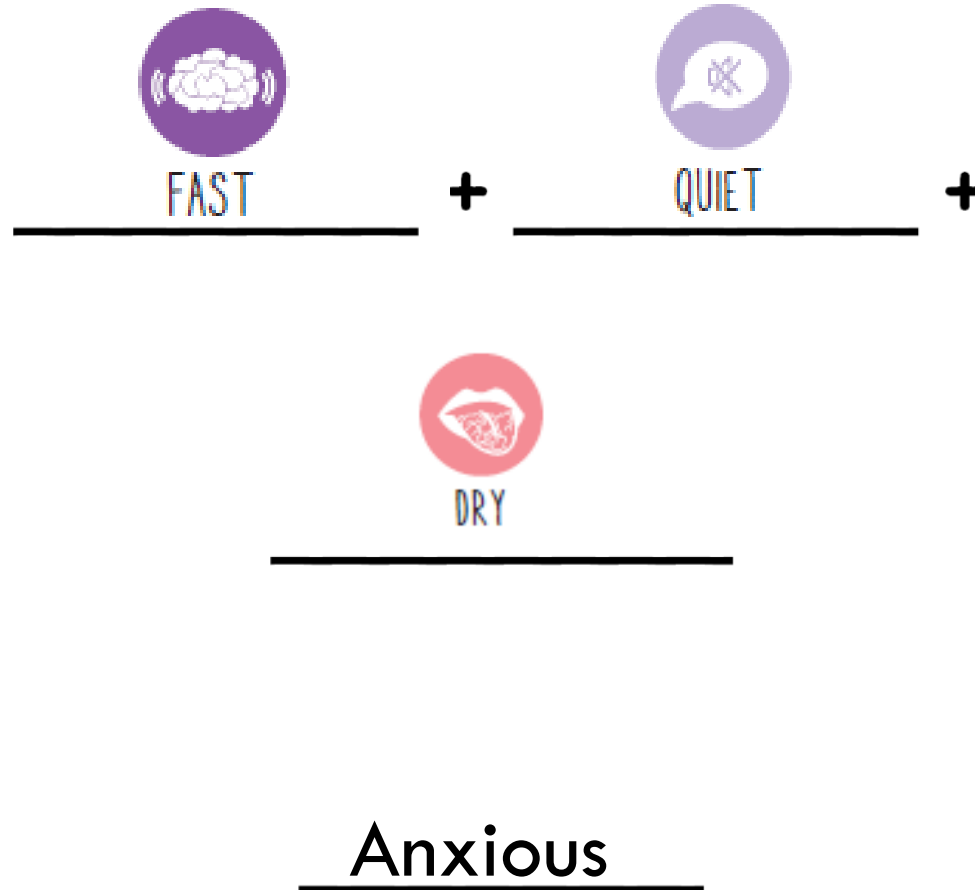
MY EYES CAN FEEL			
 FOCUSED	 Distracted	 TIGHT	 LOOSE
 WET	 DRY	 ITCHY	 WIDE
 HEAVY	 CRYING	 SORE	 TOO MUCH

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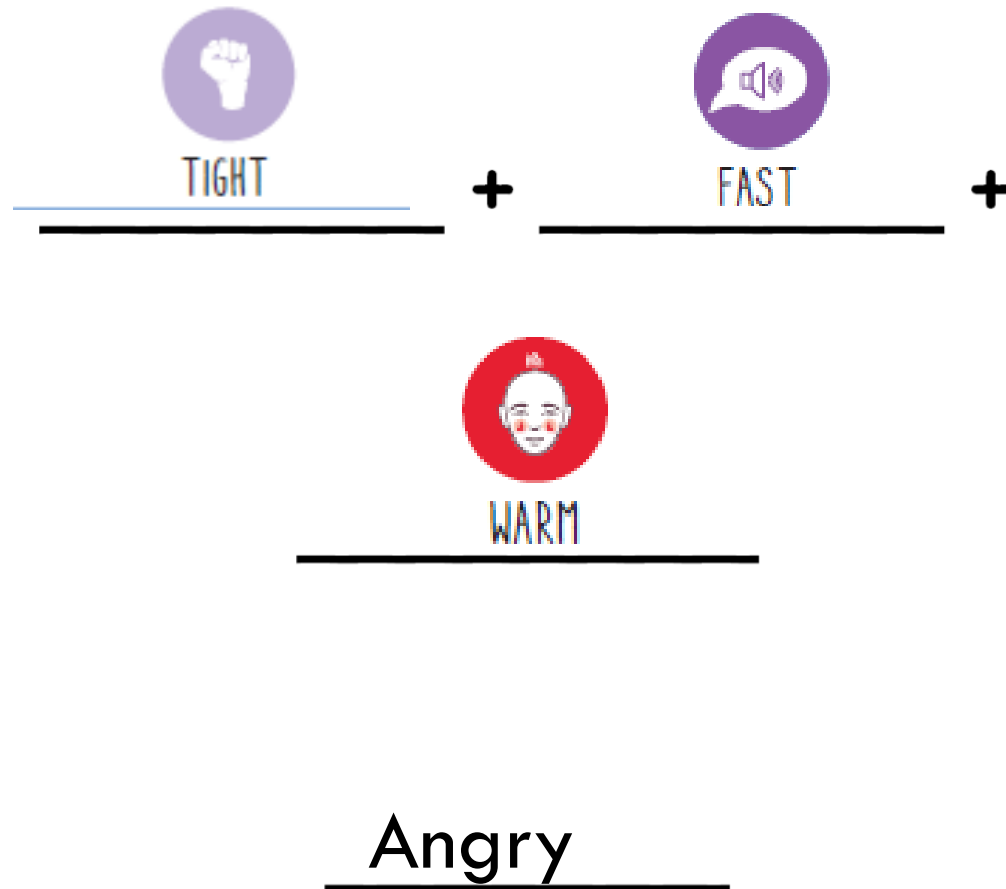
I know I feel
Happy
because

my _____





Case Example 2



Case Example 2



Case Example 2

Signal	Emotion	Action
 	Angry – because the classroom was loud and he could not hear the video	Raised hand and asked teacher to turn up the video
 	Anxious – because he was worried the printer was broken	Went into quiet break space and listened to preferred music

Case Example 3

How does my body feel?



Stomach



GROWLING



EMPTY



FULL

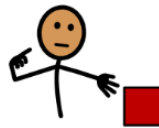


Case Example 3

My body is full of CLUES



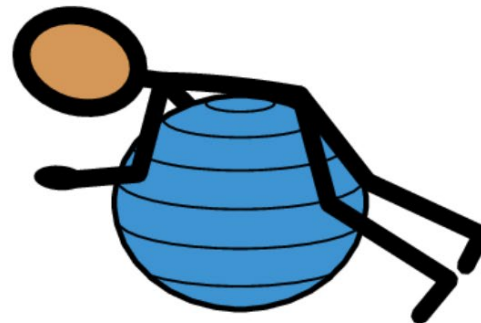
Those CLUES tell me what I might need to be comfortable.



CLUES in my body can also tell me how I feel.



Let's try an experiment!



Lay on the yoga ball, roll 10 times.

How does your stomach feel?

A different approach: Energy Regulation

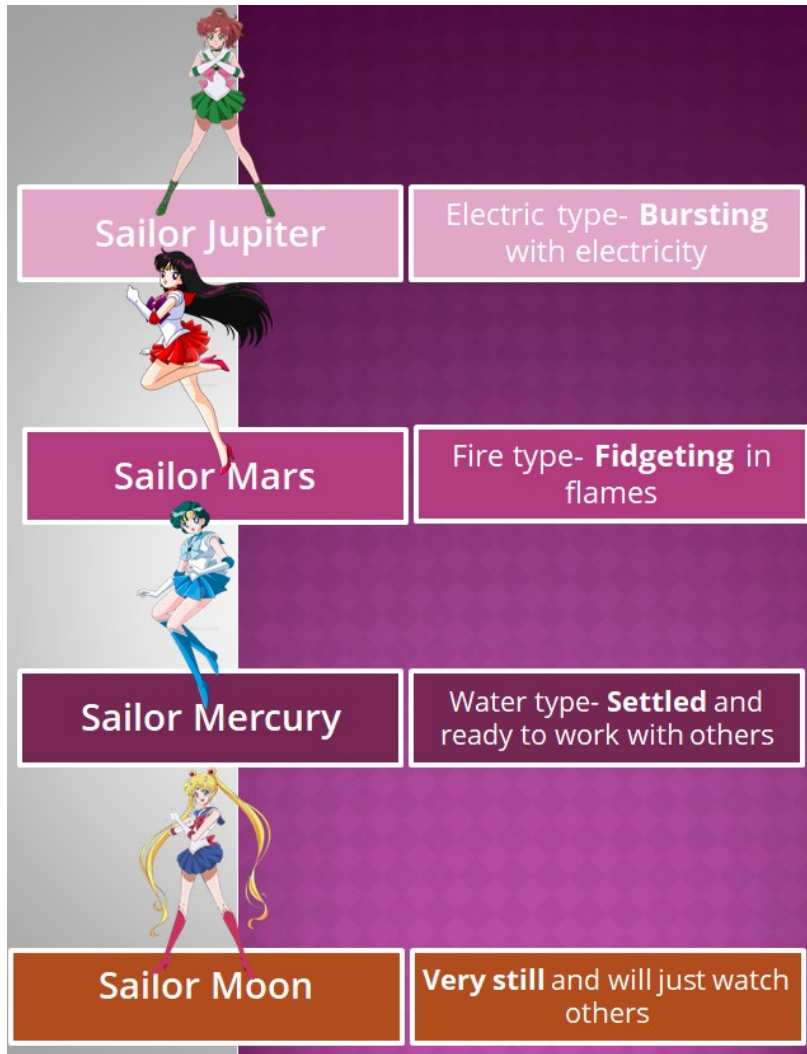


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Created
by Autism
Level UP!



Case Example 1



When my energy level is

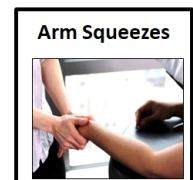
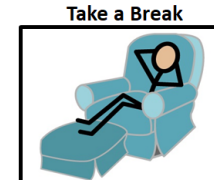
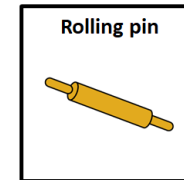


Sailor Jupiter

I am

Bursting with electricity

I can choose an activity from my board or take a break to power **DOWN** my energy



When my energy level is

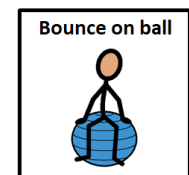


Sailor Moon

I feel

Very still and will just watch others

I can choose an activity from my board to power **UP** my energy to be focused for work

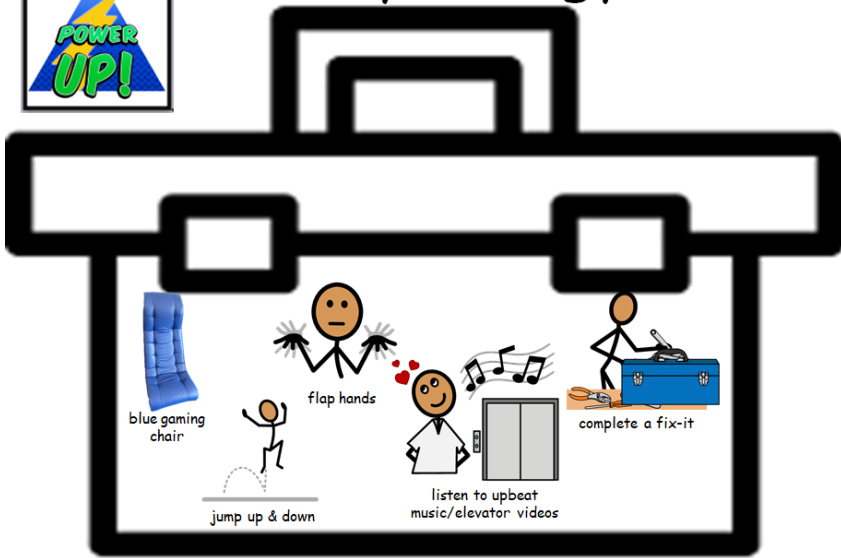


Case Example 2



Case Example 2

Power UP strategies increase my energy!



blue gaming chair

jump up & down

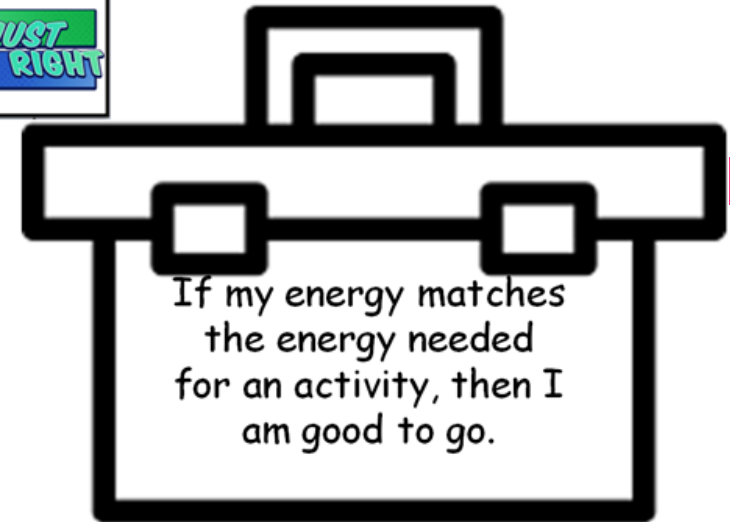
flap hands

listen to upbeat music/elevator videos

complete a fix-it



Energy Toolbox

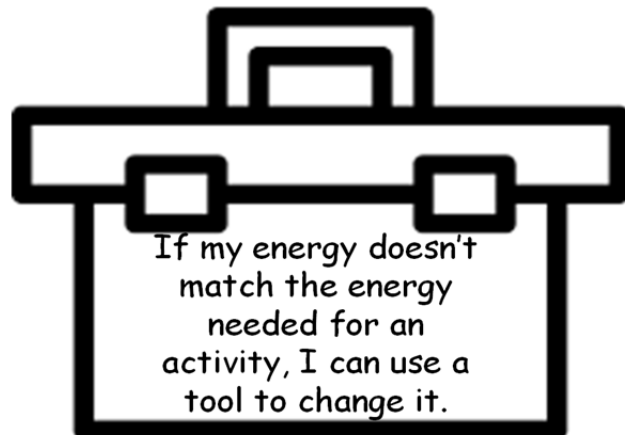


If my energy matches the energy needed for an activity, then I am good to go.

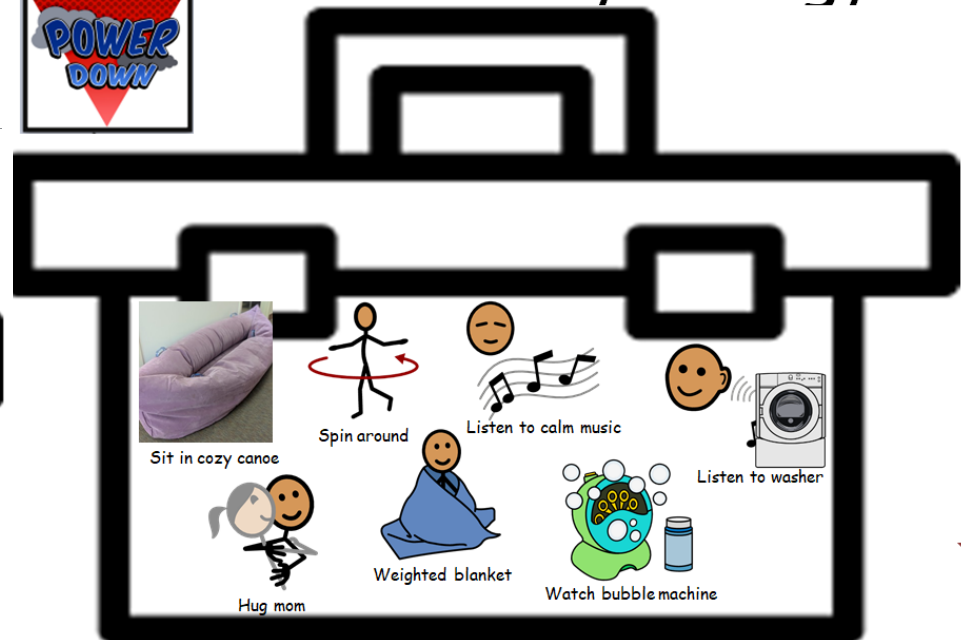
Power DOWN strategies decrease my energy!



Energy Toolbox



If my energy doesn't match the energy needed for an activity, I can use a tool to change it.



Sit in cozy canoe

Spin around

Listen to calm music

Listen to washer






Hug mom

Weighted blanket

Watch bubble machine





My Energy	What others see, hear, and observe	What I feel or experience	Where or when is it the best fit?
<p>Dolphin - lots of energy for jumps and playing</p> 	<ul style="list-style-type: none"> • Hands flapping faster • Hands in a fist • Voice is shouting • Body moving faster <p>OR</p> <ul style="list-style-type: none"> • Big smile • Giggling loudly (happy) 	<ul style="list-style-type: none"> • Feel out of control • Brain/head feel like they are spinning fast • Do name calling • Uncomfortable <p>OR</p> <ul style="list-style-type: none"> • Excited when having fun, happy 	<p>If having a hard time, ask to go to quiet space with trusted adult</p> <ul style="list-style-type: none"> • Bedroom • Quiet room • Sensory room <p>OR</p> <ul style="list-style-type: none"> • At school dance, doing new fix-it (smoke machine)
<p>Crab - amped up and fidgety</p> 	<ul style="list-style-type: none"> • Hands flapping • Voice is louder and repeating • Jumping up and down • Head shaking or moving fast 	<ul style="list-style-type: none"> • Feel silly • Thinking about name calling (but able to not do it) • Feel the need to move hands and body 	<ul style="list-style-type: none"> • Making deliveries • Campus walks • Playing on playground or in gross motor room • During music, when dancing
<p>Shark - focused and ready</p> 	<ul style="list-style-type: none"> • Sitting up, looking at materials • Talking at even pace with steady tone • Ready to participate • Ready to try something new 	<ul style="list-style-type: none"> • Feel good • Feel happy • Feel ready to learn 	<ul style="list-style-type: none"> • During OT and Speech • During classroom groups • During 1:1 sessions with teachers - life skills, on outings, etc.
<p>Octopus - slow but steady</p> 	<ul style="list-style-type: none"> • Laying on beanbag • Eyes open, but heavy or slow • Using blankets • Staying in 1:1 room • Hear quiet voice or fewer words 	<ul style="list-style-type: none"> • Feel tired or sleepy • Not ready to participate • Not ready to try new things • Prefer talking over "doing" 	<ul style="list-style-type: none"> • At bedtime or relaxing after school • During reading or music groups, because can just listen • Leisure time
<p>Angler fish - I need some space</p> 	<ul style="list-style-type: none"> • Laying down on beanbag • Eyes closed • Using blankets pulled up to neck • Might be asleep? 	<ul style="list-style-type: none"> • Feels very sleepy • Maybe asleep • Body feels heavy • Not a lot of energy 	<ul style="list-style-type: none"> • Leisure time • After school, resting at home • At night when it's time for bed


Case Example 3



My body feels
too fast



My body feels
calm and
focused



My body feels
too slow

■ is too slow.....

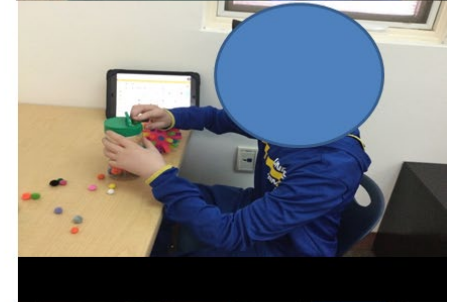
■ needs to power up!

■ is calm.....

■ is ready to work!

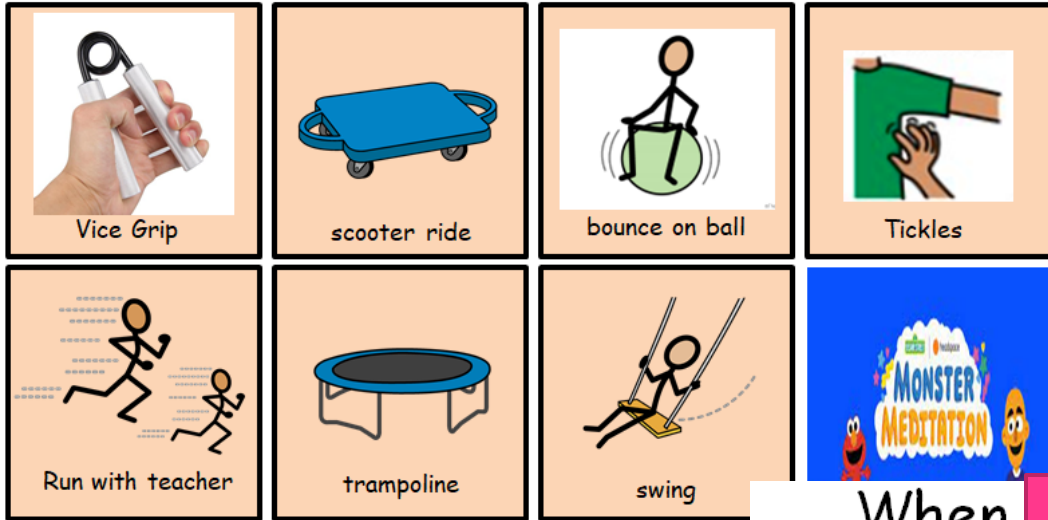
■ is too fast.....

■ needs to power down!

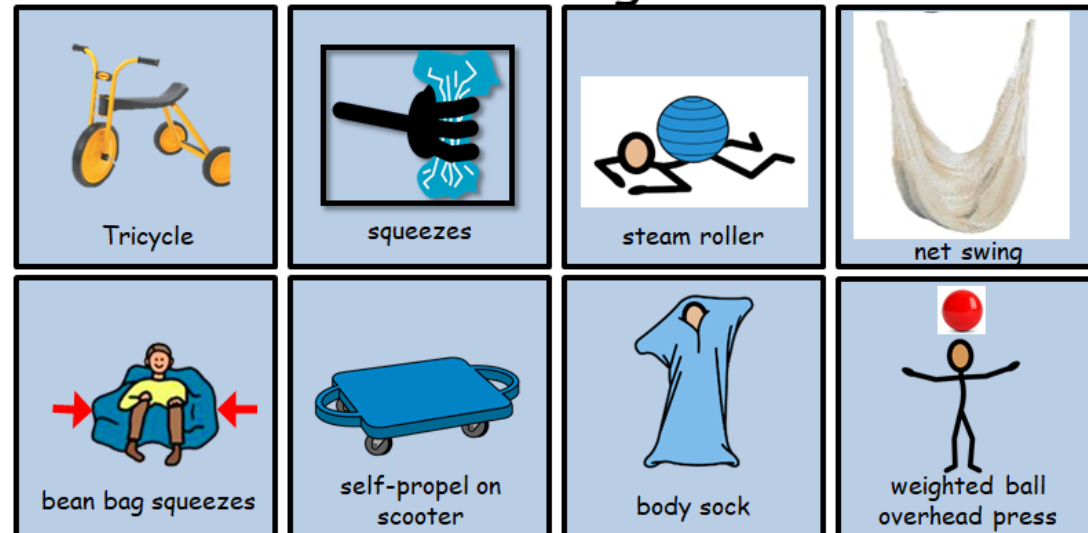


Case Example 3

When [] is feeling too Slow....



When [] is feeling too fast.....



A note about coping strategies



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