



Pure Community

# Thank you for joining us!

**Session:** The Neuroscience of Stress and  
Educator Self-Care  
**Trainer:** Gill McClean

## Getting Started:

1. If you have any questions, please type them into the Q&A box.
2. Place a pen/pencil/paper nearby to jot down your thoughts.
3. At the end of this session, when you leave the meeting, there will be a link that will pop-up asking you to complete the Session Quiz / Feedback Form.

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Website: [www.pureedgeinc.org](http://www.pureedgeinc.org)

Email: [getmoving@pureedgeinc.org](mailto:getmoving@pureedgeinc.org)



# Introductions

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Gill McClean

**[gill@pureedgeinc.org](mailto:gill@pureedgeinc.org)**

Director of Professional Development &  
*National Trainer*

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# Who We Are

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**Pure Edge, Inc. (PEI)** is a private operating foundation that provides direct service to organizations through professional development & strategy thought partnership.

PEI also provides grants to national organizations that advance the work of whole child development & SEL.

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# Introductions

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# Learning Objectives

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- ❖ Understand the impact of stress on educators and scholars.
- ❖ Understand how mindfulness can help educators and students manage stress and powerful emotions.
- ❖ Experience Brain Breaks exercises as participant.



# Engaging Activity

**Please respond to the poll on the next slide to share which of the following images most accurately reflects how you are feeling right now:**



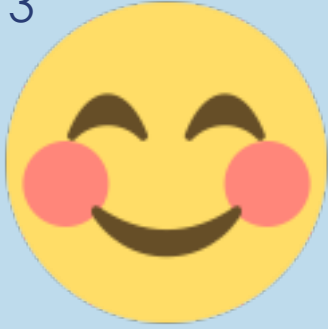
1



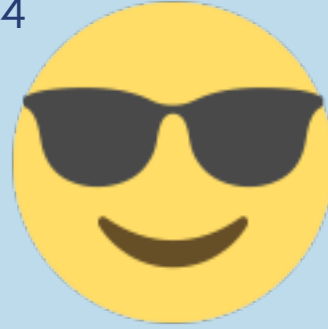
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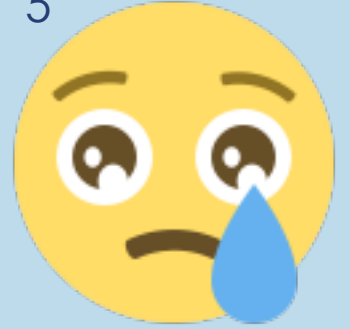
3



4



5



6



7



8



9



10



# Engaging Activity: Mindful Minute





Breathe

Move

Rest



In order to have an impact on others, you must first have an impact on yourself.



# Nasal Breathing

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# Benefits of Nasal Breathing

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- ❖ Filters dust and impurities from the air
- ❖ Warms the air to body temperature
- ❖ The diaphragm is more easily controlled, which supports the development of internal core strength
- ❖ More control over lengthening the breath (extended exhalations help activate the parasympathetic nervous system)
- ❖ Increased oxygen from nasal breath increases energy and vitality

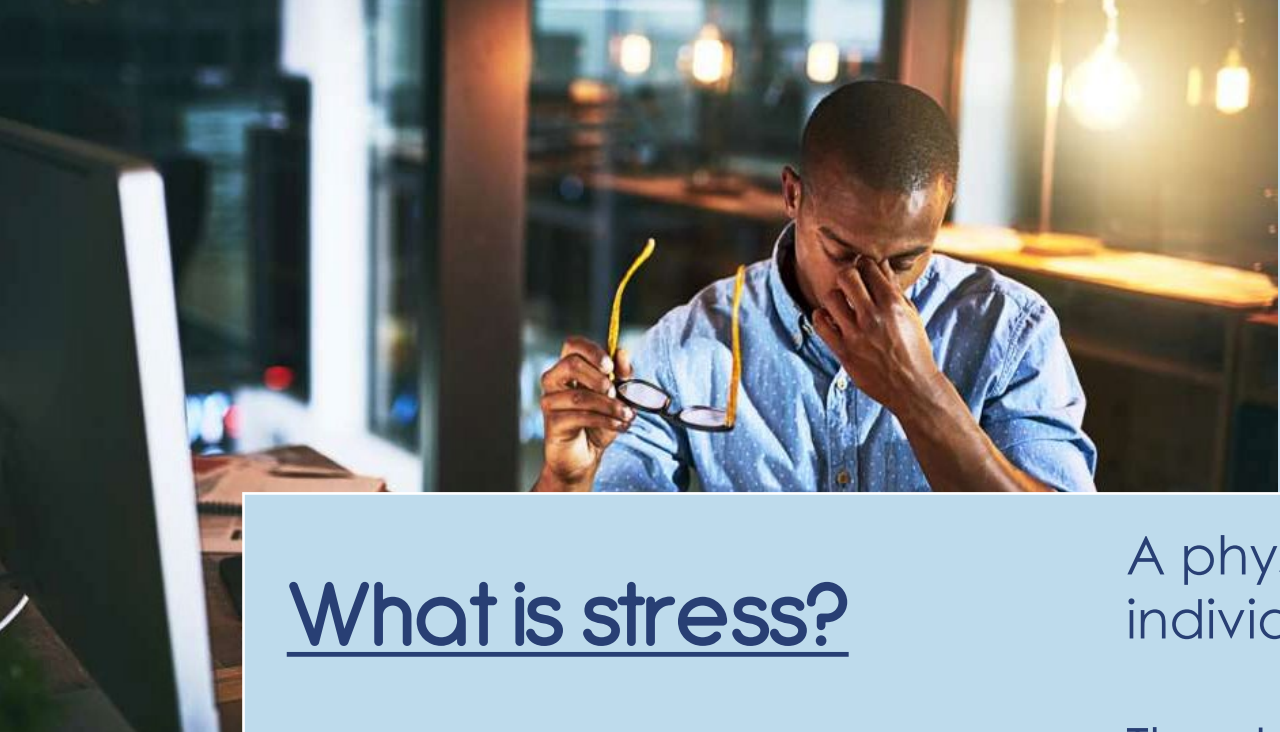




# Engaging Activity: Even In – Even Out

1. Start in Seated Mountain with a tall spine, relaxed shoulders, and eyes gently closed.
2. Breathe naturally through the nose.
3. We are going to focus on making our inhales and exhales even.
4. Inhale deeply through the nose and exhale through the mouth for a count of one.
5. On the next breath, lets count to two on the inhale and the exhale.
6. Repeat, continuing to extend the breath up to a count of five.





## What is stress?

A physiological reaction that prepares an individual to respond to a stressor.

## What is a stressor?

The stressor is usually something that threatens the well-being or homeostasis (stable equilibrium) of the individual.







# Engaging Activity: Think-Ink-Share



Where do you feel  
stress in your body?

Where do you feel  
joy in your body?

## Benefits

- ❖ Positive challenge
- ❖ Motivates us to take action
- ❖ Promotes well-being
- ❖ Enhances performance

## Detriments

- ❖ No relief in sight
- ❖ Makes us physically sick
- ❖ Weakens immune system
- ❖ Impairs performance



# STRESSOR: Pandemic (CDC)



- Health-related fear



- Sleep problems



- Eating problems



- Concentration problems



- Worsening of chronic health problems



- Increased use of alcohol, tobacco, and other drugs



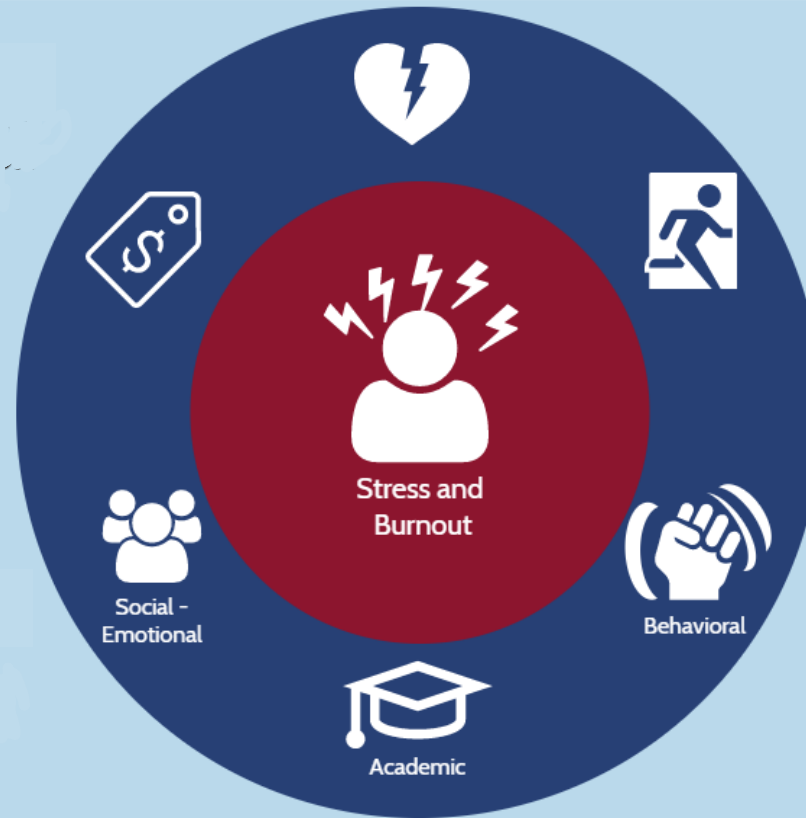
- Isolation
  - 50% of 20K responders reported feeling lonely (Cigna Survey)

# Why Focus on School Stress?

In highly stressed school environments, teachers and learners pay the costs.

Teacher turnover:  
**\$2 BILLION**  
each year

“Stress and disappointments”:  
**49% of teachers**  
say it isn't worth it.



**40-50%**  
of **new teachers** leave  
within first 5 years.

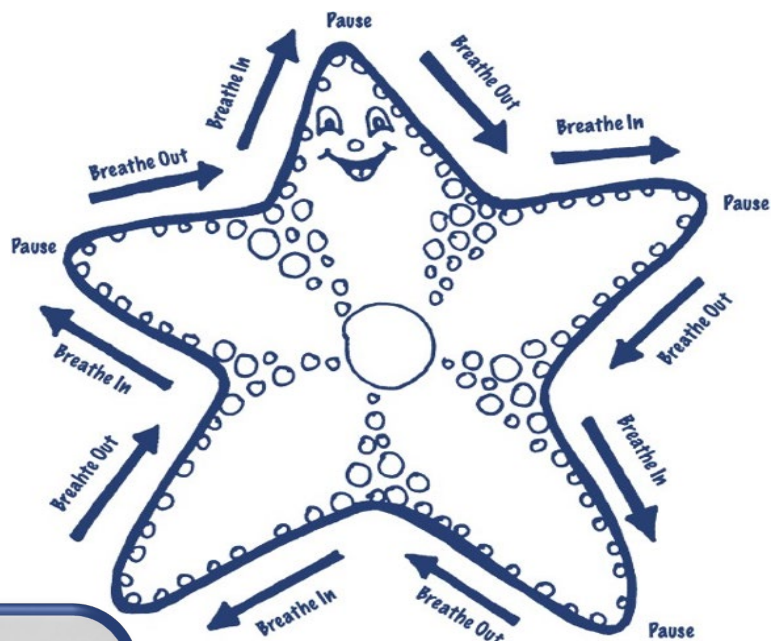
High DAILY levels of stress:  
**46% of teachers**

New principals NOT retained  
beyond third year:  
**50%**

When teachers are highly stressed, students show lower levels  
of both social adjustment and academic performance.



# Engaging Activity: Starfish Breathing or Take Five



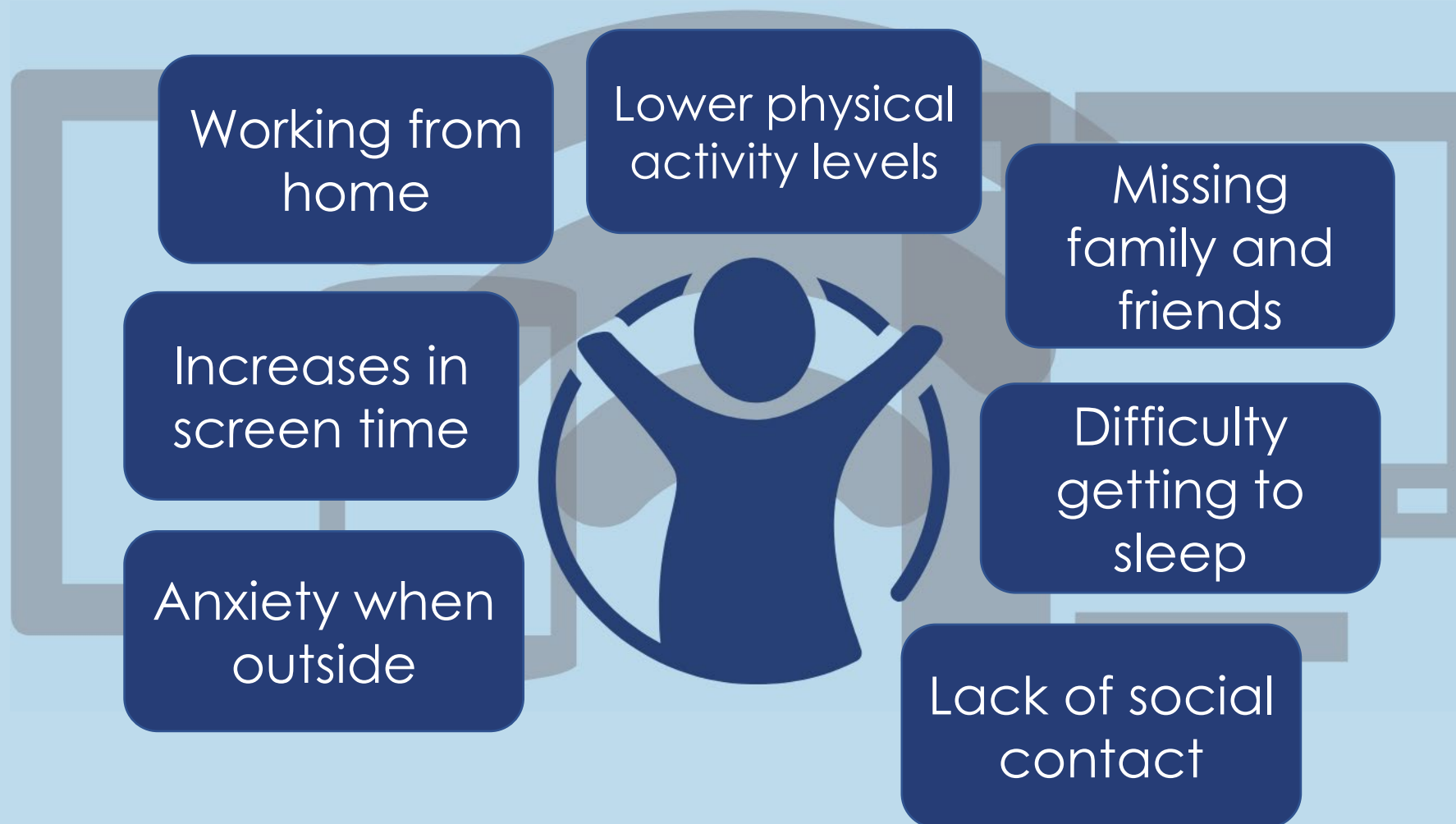
1. Make a starfish with one hand, fingers spread wide.
2. Put the index finger from the other hand on the outer base of the thumb.
3. We are going to trace the outline of our starfish hand. Keep looking at your pointer finger while you do your breathing.
4. Inhale (finger traces to top of thumb).
5. Exhale (finger traces down the other side of thumb).
6. Repeat until you have traced the outline of the starfish hand.



*\*Learners are synchronizing their movement, breath, and gaze. On the inhale, index finger and eyes trace upward along a finger; on the exhale, index finger and eyes trace downward along a finger. Each upward movement is coupled with an inhale, whereas each downward movement is coupled with an exhale.*

*\*After Starfish Breathing, you can have learners rest their hands on their chest, continuing to breathe mindfully, as they silently recall three things for which they are thankful.*

# Issues we face...



# Stress Accumulates ↔ Allostatic Load

**Allostatic load** is "the wear and tear on the body," which accumulates as an individual is exposed to repeated or chronic stress.



# Impact of Stress & Trauma on the Heart

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After his death, Dr. Martin Luther King Jr's autopsy found that while he was just 39 years old, he had the heart of a 60-year-old.



# What we hope to do

*Respond*

Vs.

**React**





# Engaging Activity: Chair Twist



1. Sit in Seated Mountain.
2. Inhale, sit up tall.
3. Exhale, touch your right knee with your left hand and put your right hand on your hip (or the back of the chair).
4. Inhale, sit up tall.
5. Exhale, look over your right shoulder.
6. Stay still and take 3 relaxed breaths.
7. Inhale, come back to Seated Mountain.
8. Exhale, repeat to other side.

*\*When teaching learners, if you are facing them make sure you mirror them (e.g., use your right hand when you instruct them to use their left hand).*

*\*If seated on the floor, start from crisscross position and follow the same directions.*





*It is essential for adults working with young children to be well physically and emotionally.*

*Better health enables better relationships with children, and research has long demonstrated that good relationships are crucial for children's learning and social-emotional development.*

Dr. Kate Gallagher  
Director of Research and Evaluation,  
Buffett Early Childhood Institute, University of Nebraska

# Stress Is Contagious



**Higher cortisol levels** were found in students whose teachers reported high levels of stress and burnout.

Researcher **Kimberly Schonert-Reichl** urges educators to be aware of their own mindsets and to practice mental wellness exercises to reduce their stress levels.

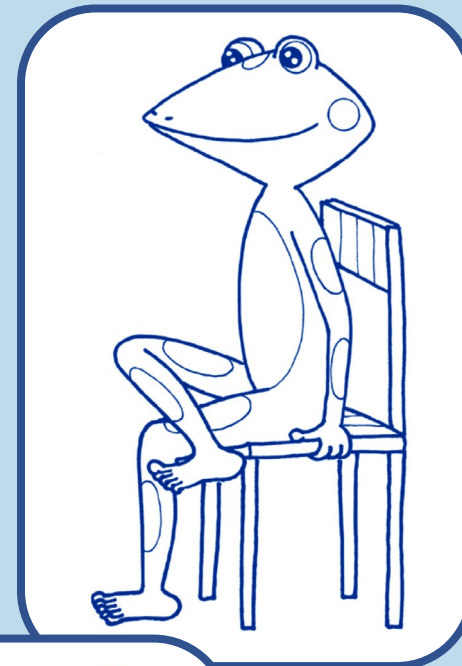


# Engaging Activity: Seated Figure Four

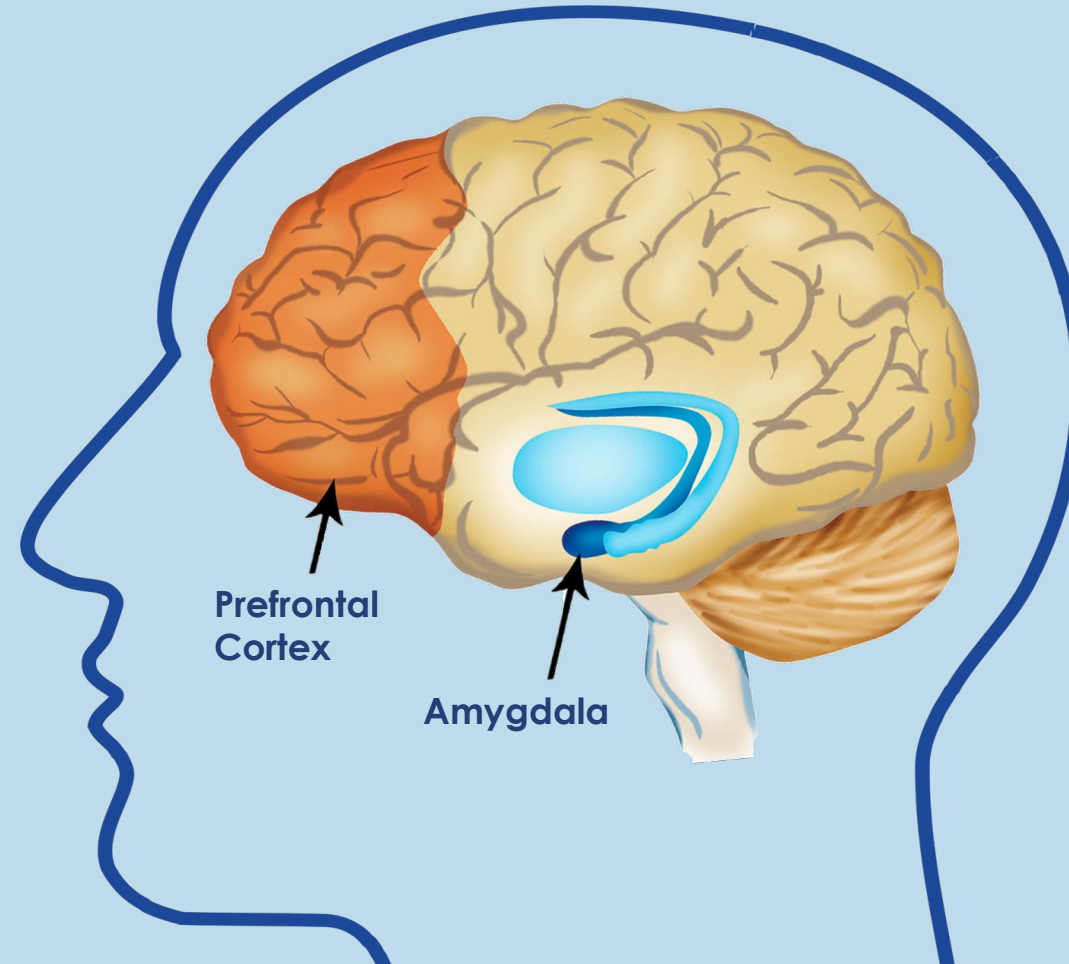


1. Begin in Seated Mountain Pose.
2. Inhale, cross the right ankle over the left thigh, just above the knee. Place the right hand on the right thigh and left hand on the right foot.
3. Exhale, fold torso forward and relax the head down. Take 2-3 breaths here.
4. If it's easier, you can hold the legs of the chair as you fold forward.
5. Inhale, come back to Seated Mountain.
6. Switch legs and repeat on the other side.

*\*Use this sequence to release the back, which can get tired from sitting.*



# Self-regulation & the Brain



# Neuroscience: Self-care & Vagal Tone



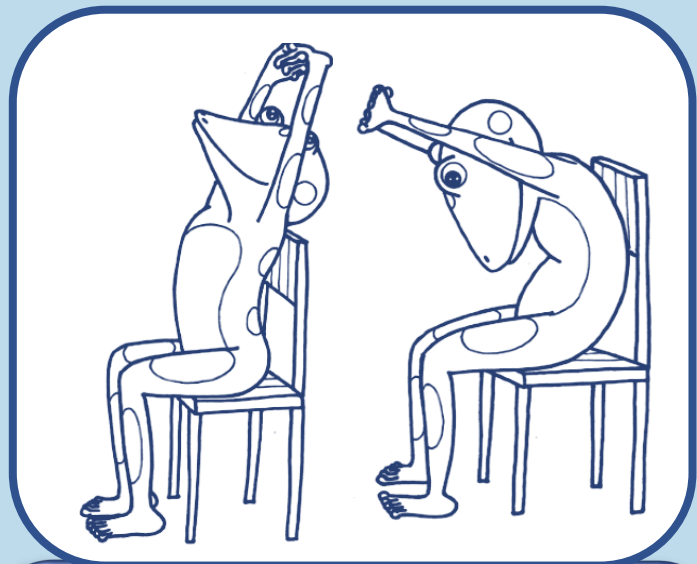
## THE VAGUS NERVE

### How to Hack Your Nervous System

The vagus nerve, the tenth cranial nerve, is the superhighway of the nervous system that connects the body and brain. We can tone the **vagus nerve** through deep breathing exercises.



# Engaging Activity: Chair Cat/Cow



1. Sit in Seated Mountain with hands on knees.
2. As you inhale, stretch your arms overhead and interlace fingers. Reach the center of your chest up toward the ceiling, and lift your chin so that you are looking at the ceiling. (Cow)
3. As you exhale, in one movement bring your hands forward, round your spine and drop your chin toward your chest. (Cat)
4. Repeat for several breaths: inhale, arms up, gaze lifts, chest up. Exhale round the spine, chin tucks, hands forward.
5. Return to Seated Mountain.



*\*You can have young learners moo like a cow and meow like a cat. Just make sure they do a few rounds moving with the inhale and exhale first.*

*\*If on the floor, learners can come to hands and knees. Inhale, the belly drops down toward the floor and we look up toward the ceiling (Cow). Exhale, look at your belly button and round your spine (Cat). Repeat for several breaths.*



“

“The three most important aspects of learning  
–attention, focus, and memory–  
are all controlled by our emotions,  
not by cognition.”

~Marc Brackett

”





# Stress Response



## “Gas Pedal”

Sympathetic Nervous System:  
Fight or Flight



## “Brake”

Parasympathetic Nervous System:  
Rest and Digest



## Blue Zone



## Red Zone



Blue Zone Image: <https://www.shutterstock.com/video/clip-1007757856-worried-stressed-man>

Red Zone Image: <https://www.shutterstock.com/search/man+yelling>

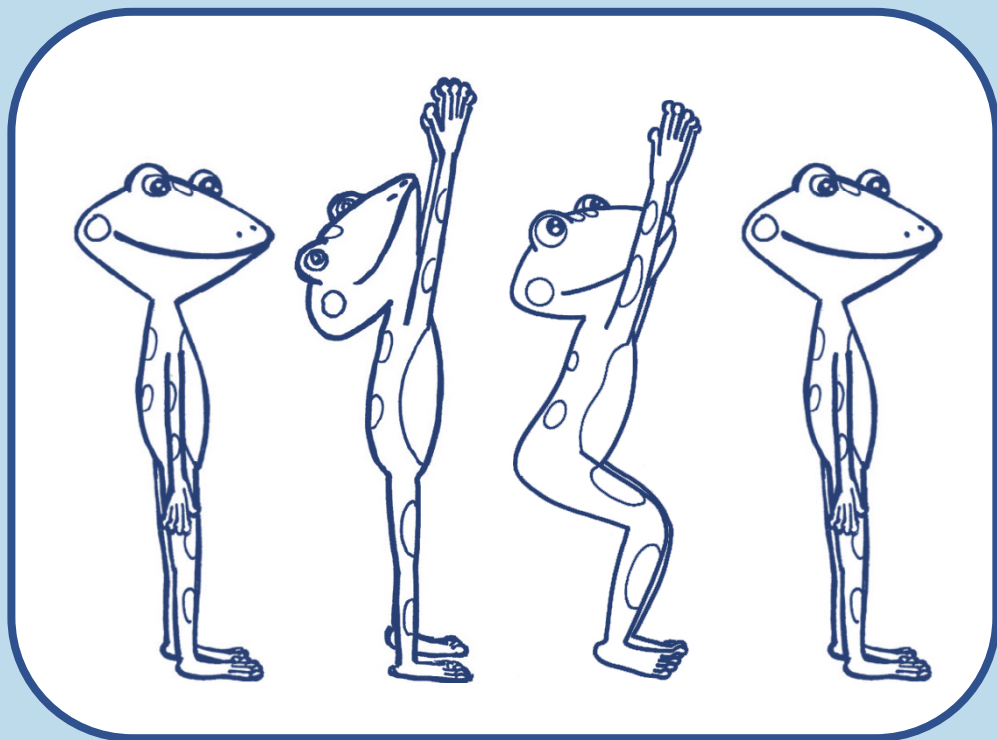
# Green Zone



Image source: <https://www.goodnewsnetwork.org/get-drunk-happiness/>



# Engaging Activity: Mountain/Chair Strength Sequence



# Did you know?

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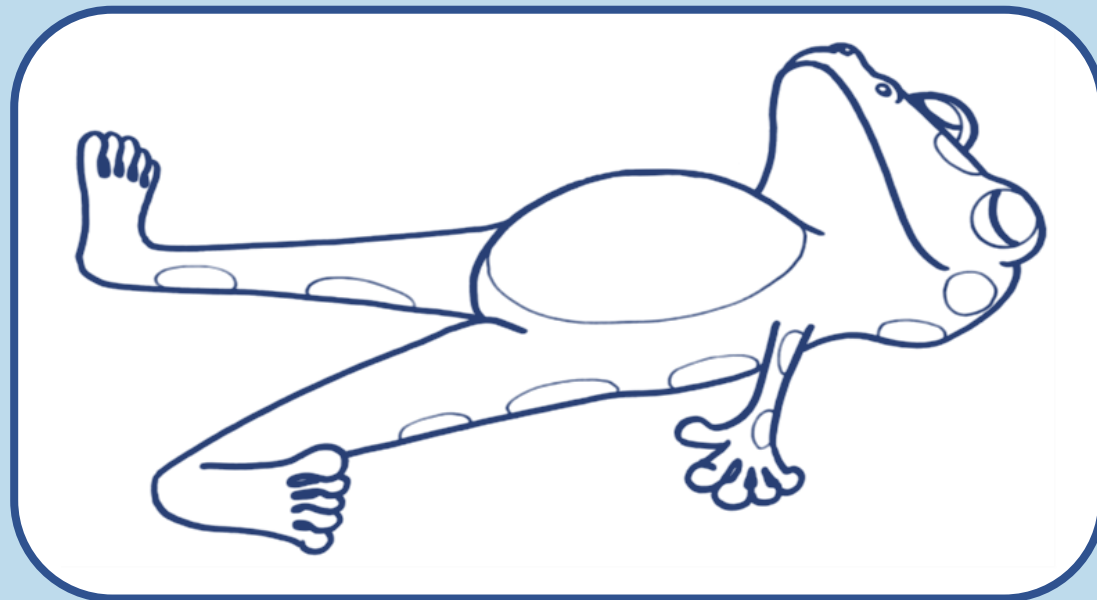
Give yourself time to develop these new patterns/habits. There's a wide range (18-200+ days) in how long it takes to develop a new habit; average time being 66 days.

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# Engaging Activity: Guided Rest



# Brain Breaks Review



## Breathe

- ❖ Mindful Minute
- ❖ Even In – Even Out
- ❖ Starfish Breathing or Take Five



## Move

- ❖ Chair Twist
- ❖ Seated Figure Four
- ❖ Chair Cat/Cow
- ❖ Mountain Chair Strength Sequence



## Rest

- ❖ Guided Rest/Body Scan

# Takeaways

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- ❖ Stress impacts us physically and mentally.
- ❖ We can use the breath and body to decrease Allostatic Load.
- ❖ The “Brain” muscle needs exercise too.
- ❖ Self-care strategies build resilience.



# HEADSPACE: Mindfulness On Demand

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Headspace is donating their app  
to all Educators.

**[go.headspace.com/pureedge](https://go.headspace.com/pureedge)**

**Use your work email address**

# pureedgeinc.org

Evidence-Based Approach  
Thoughtful Partnerships  
Curriculum & Training



Online Curriculum

Log Out

+ MENU



●  
breathe

●  
move

●  
rest



# Optimistic Closure: One Word Takeaway







Pure Community

**Please Note:** You will receive a follow-up email within 24 hours of this session. This serves as your confirmation of attendance.

*Thank you for joining us!*

**Session:** The Neuroscience of Stress and Educator Self-Care  
**Trainer:** Gill McClean, Director of Professional Development

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