Pure Edge

Start with the Heart

Engage
9–12

Contents

Introduction

About Pure Edge, Inc.

PURE EDGE, INC. (PEI) is a private operating foundation that provides direct service to organizations through professional development and strategy thought partnership. PEI also provides grants to national organizations that advance the work of whole child development and Social and Emotional Learning (SEL).

Our Approach

The full Pure Power curriculum reflects the philosophical orientation and instructional recommendations advocated by the Joint Committee on National Health Education Standards and best practices for health and wellness, including exercises, physical therapy, mindfulness, and nutrition.

Effective health and wellness education promotes critical thinking in students and encourages them to make connections between concepts around healthy living and personal experience. Young people need to be reflective decision-makers. They must learn to identify and analyze how culture, media, and technology shape their everyday physical, mental, and emotional health.

Research completed by the National Association for Sport and Physical Education (NASPE) and the Centers for Disease Control and Prevention (CDC) reveals that there is a direct relationship between academic achievement and fitness. Movement and exercise enhance the learning state for memory retention and retrieval. Therefore, physical activity is a catalyst for learning in all content areas and should be an essential element of students' daily routines.

The knowledge that students gain through this program enhances their own health and wellness, as well as the health and wellness of their peers and community. The program promotes a supportive environment where individuals' similarities and differences are acknowledged and accepted.

About Start with the Heart: Engage

START WITH THE HEART: ENGAGE weaves Brain Breaks into foundational lessons from the original Pure Power curriculum for grades nine through twelve. The content portion of each lesson invites learners to examine what we need to support our own well-being. This involves exploring the body's stress response, understanding the role of the brain and the nervous system, reflecting on our habits, and learning about the practice of mindfulness. Alongside the topical content of each lesson, the curriculum offers simple, life-enhancing, research-based exercises that build learners' ability to manage the stress in their lives. These breathing, mindful movement, and rest or relaxation exercises are skills that learners can practice for the rest of their lives. The skills support learners' SEL competencies in the areas of self-awareness and self-management.

We designed the curriculum with ease of delivery as a top priority. Each lesson can be delivered in about 30 minutes. Instruction is scripted. Video supports for almost all of the Brain Breaks are available on pureedgeinc.org. Many lessons also include an optional group activity, which extends the lesson time and allows learners to go a little deeper in their exploration of the topic at hand or the exercises of the day.

The curriculum can be used and adapted in any course. It aligns well with:

- Advisory classes
- Elective classes
- Freshman seminar

We recommend delivering on a consistent schedule, at the same day and time.

- Daily
- Two or three times a week
- Weekly (If teaching weekly, incorporating Brain Breaks on non-lesson days will support retention and maximize impact).

The curriculum meets SEL, health, science, and PE standards.

- Builds resilience
- Teaches stress management skills that are simple to implement
- Explores the neuroscience of stress and helps learners understand their own stress responses

Our hope is that **START WITH THE HEART: ENGAGE** will make it easy for you to share simple practices and explore academic content with learners in support of their physical, mental, emotional, and academic well-being.

Pure Edge Team

Lesson One

The Power to Shine

GUIDING QUESTIONS

What does health mean to you?

What does wellness mean to you?

OBJECTIVE

Identify two benefits of breathing exercises and/or nasal breathing.

TEACHER TIPS

- In this course, the experiential exercises (Brain Breaks) are as important as the content.
- After each Brain Break in lesson one, take feedback from learners: Would anyone like to share something they noticed?
- You may get a variety of responses—physical observations; emotional states; thoughts.
- Reinforce the idea that anything learners notice is okay; we are simply noticing what we observe with a sense of kindness toward ourselves.
- Make room for a range of experiences and responses. For example, if two or three learners say they feel "relaxed" or "calm," you can ask, "Does anyone not feel relaxed?" Even if no one speaks up, this creates space in the room for learners to have and accept different experiences.

VOCABULARY

health
wellness
well-being

BRAIN BREAKS

Mindful Minute
Seated Mountain
Anchor Breathing
Even In, Even Out
Chair Twist

Connect

Welcome to health and wellness. These lessons might be a little different than your other classes. Your other classes primarily focus on external subjects, such as math, English, or history. In this class, however, the central subject is you.

For the purposes of this course, "health" is everything related to your body—your muscles, bones, internal organs, and brain. We will be paying special attention to how we can tune in to certain functions of the brain.

"Wellness" is everything related to thoughts and emotions—understanding how they arise and understanding how we can use them constructively to achieve well-being in our lives.

As we learn about topics related to our health and wellness, we are also going to be learning practical exercises to support our well-being.

We will learn three types of exercises: breathing, mindful movement, and rest or relaxation. These exercises will strengthen the body, calm the mind, and help us manage our emotions.

Let's get started by trying our first exercise.

Brain Breaks 1 and 2

SEATED MOUNTAIN

Seated Mountain is the foundation for all seated and breathing exercises.

MINDFUL MINUTE

Teach

The next exercise we will learn is a breathing exercise. Did you know that we breathe 15 times per minute, which means we breathe 21,600 times per day? Some people say they don't know "how to breathe," but breathing happens automatically and effortlessly.

Why do you think we might need to do breathing exercises?

- *Full, deep breathing brings oxygen to all parts of the lungs. Most of the time we only breathe into the bottom portion of the lungs.*
- *Fuller inhalations allow oxygen exchange to happen over a greater surface of the lungs and within the bloodstream.*
- *Full exhalations help remove carbon dioxide from red blood cells.*
- *When your blood is more oxygenated, all of your internal organs become better oxygenated too, which in turn provides your body with more energy.*

In our health and wellness exercises, we will use nasal breathing unless otherwise instructed. This means we will breathe in and out the nose.

Brain Break 3

ANCHOR BREATHING

Teach

Here are a few reasons why we recommend nasal breathing:

- *Nasal breathing filters dust and impurities from the air.*
- *The diaphragm, which is a sheet of muscle underneath the lungs that serves as the primary muscle of breathing, is more easily controlled.*
- *When the breath is long and slow, you can calm the nervous system and focus your mind.*
- *Extending the exhale induces relaxation, as does relaxing the tongue and surrounding facial muscles.*

Brain Break 4

EVEN IN, EVEN OUT

OPTIONAL GROUP ACTIVITY

Think of a place, time, or community in your life where you felt you were able to truly be yourself and belong. What did that feel like? What elements were there that supported you?

If time allows, have learners write, draw, or talk in pairs about what elements in a community support their sense of belonging. They can share with the large group.

Make a connection between this sense of belonging and any classroom norms or guidelines you would like to establish as your group works together to establish a safe classroom environment.

Brain Break 5

CHAIR TWIST

Link

Take a moment to consider how you felt (physically and mentally) at the start of class and how you feel now that you've practiced these simple exercises.

Home Practice

Throughout the rest of the day/week, notice where, when, and with whom you feel safe and secure. Identify what it is about the place you are in or the people you are surrounded by that helps you feel safe and secure.

Lesson Two

What Is Stress?

GUIDING QUESTION

How can we distinguish between healthy and unhealthy stress?

OBJECTIVE

Identify potential sources of physical, emotional, and social stress.

TEACHER TIPS

- Continue to seek feedback from learners after the Brain Breaks.
- Continue to emphasize the importance of noticing their experience with a sense of kindness.
- Explain that we will always start the class with the Mindful Minute as a way to check in with ourselves.

VOCABULARY

adrenaline
cortisol
stress

BRAIN BREAKS

Mindful Minute
Anchor Breathing
Ocean Breath
Recharge Sequence
Guided Rest

Brain Break 1

MINDFUL MINUTE

Connect

In our first lesson, we began to explore how investing in our own health and wellness can support our well-being. We learned about some of the physical benefits of breathing through the nose and how we can "hack" our brains through conscious breathing. Can anyone remember any of the benefits of nasal breathing?

One thing that affects our well-being is stress. In this lesson, we will start learning about the physiological purpose of stress.

Active Engagement

Think about something stressful to you. Now notice: Where do you feel that stress in your body?

Take a few responses from learners. You will hear a range of responses. Underscore that stress is something we experience not only in the mind but also in the body.

Now let's think about something joyful. Where do you feel joy in the body?

Take a few responses from learners again. Emphasize that we are including joy to remind ourselves to also focus on positive experiences.

Brain Break 2

ANCHOR BREATHING

Teach

The nervous system uses stress in order to respond to the world around us. Some stress is good, and some stress is bad—it all depends on how much of it there is, what form it takes, and where it is directed.

We tend to think of stress as a negative force, but it is actually one of nature's most essential processes. Stress initiates and responds to movement in the body. When we get up to walk across the room, our bodies release two hormones: cortisol and adrenaline. These hormones carry the messages that let our bodies know it's time to perform an activity. Our bodies then respond to these messages by increasing our heart rates and shifting the rhythm of our breath ever so slightly, among other things.[1]

Cortisol and adrenaline are also released when our environments demand that we are alert and focused. For example, if you have a big test coming up, you might state that you feel stressed out. Various factors in your environment have the potential to flip the stress switch, some more than others.

Something that causes stress for you might not cause stress for your best friend, and some things cause so much stress that your levels of adrenaline and cortisol are too high for you to feel healthy and well.

Being able to mindfully identify stress is one of the key factors to effective self-regulation.

Active Engagement

Exercise and mindfulness practices help flush excess cortisol from our systems. If you feel an inkling of stress before we get our bodies moving, notice if there is any reduction in stress during or after rest.[2]

Brain Breaks 3 and 4

- **OCEAN BREATH**
- **RECHARGE SEQUENCE**

Learners can use Ocean Breath when they do Recharge Sequence.

Active Engagement

Bringing our attention to specific parts of the body can help us become aware of stress and tension that we are holding without realizing it. As we move through this guided rest exercise, see how the power of your attention alone can help your body relax.

Brain Break 5

- **GUIDED REST**

Link

Mindfully identifying your physical and emotional reactions to stress is a learned skill. If you work on developing this skill every day, you will gradually become more attuned to your needs.

Home Practice

Try to notice when your stress response kicks in during the day. How does it feel when a teacher calls on you and you are not prepared? How does it feel when you actually know the answer to a teacher's question, but in your excitement, you draw a blank? Remember that your secret weapon against stress is mindful breathing. When you start to sense familiar stress signals, focus on long, slow exhales to help your body and mind calm down.

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1 "Understanding the stress response," *Harvard Health Publications*, 2016. http://www.health.harvard.edu/staying-healthy/understanding-the-stress-response.

2 "Exercising to relax," Harvard Men's Health Watch, *Harvard Health Publications*, 2011. http://www.health.harvard.edu/staying-healthy/exercising-to-relax.

Lesson Three

Sympathetic and Parasympathetic Nervous Systems

GUIDING QUESTIONS

What is the sympathetic nervous system, and when should it be dominant?

What is the parasympathetic nervous system, and when should it be dominant?

OBJECTIVE

Characterize and contrast the main functions of the sympathetic and parasympathetic nervous systems.

TEACHER TIPS

- Continue to ask for feedback after some Brain Breaks; it is not necessary to do feedback every time.
- Explain that the repetition of the Brain Breaks is intentional; we learn these types of exercises best through repetition.

VOCABULARY

autonomic nervous system
sympathetic nervous system
parasympathetic nervous system

BRAIN BREAKS

Mindful Minute
Even In, Even Out
Recharge Sequence
Guided Rest

Brain Break 1

MINDFUL MINUTE

Connect

Last time, we defined and discussed stress and noticed how it feels in our bodies. Today, we will take a look at the sympathetic and parasympathetic branches of the nervous system and how the wellness exercises we are learning can affect our stress response.

Brain Break 2

EVEN IN, EVEN OUT

Teach

There are two branches of the autonomic nervous system that are functioning all the time: the sympathetic nervous system (SNS) and the parasympathetic nervous system (PNS). "Autonomic" means "involuntary."[1] *The sympathetic nervous system rules everything in our body that expands, or moves toward activity. The parasympathetic nervous system rules constriction and rest. Dilation of the pupils, for example, occurs via the sympathetic nervous system, while constriction of the pupils occurs via the parasympathetic nervous system.*

The sympathetic nervous system provides the fuel required to engage with and take care of circumstances outside the body.[2]

The sympathetic nervous system rules our fight-or-flight response, which is how our body responds to perceived danger. In a sympathetic state, the body does not have the energy it needs to heal from sickness or injury, digest food or information, or restore itself. We live in a fast-paced, technology-driven world, so our sympathetic branch is activated more often than the parasympathetic one.

In order to recover from and prepare for our interactions with our external environments, the parasympathetic system must have the upper hand.[3] *The parasympathetic system helps return the body to a state of balance after a sympathetic response. While the sympathetic nervous system is known to rule fight-or-flight, the parasympathetic nervous system rules "rest and digest." In a parasympathetic state, our inhalations and exhalations become smooth and quiet and the nervous system becomes calm.*

Wellness practices like Brain Breaks counter unnecessary activation of the sympathetic nervous system through even breathing, long exhalations, deep rest, and the repetition of positive, peaceful thoughts.

Active Engagement

As we do the next movement exercise, notice if and how your inhalation boosts your energy and if and how your exhalation winds you down.

Brain Break 3

RECHARGE SEQUENCE

Learners can use Ocean Breath when they do Recharge Sequence.

OPTIONAL GROUP ACTIVITY

As a class, identify activities in the day that activate one's sympathetic nervous system and activities that activate one's parasympathetic nervous system. Do students feel they are in balance, or do they need more of either sympathetic or parasympathetic activity?

Note: While screen time can feel "relaxing," it actually activates the body's stress response.[4]

Brain Break 4

GUIDED REST

Link

Even though the autonomic nervous system governs involuntary functions, we are able to influence the quality of its operation. By mindfully tuning in to what is happening within us and around us, we can learn to regulate our emotions and reactions, thus avoiding unnecessary or unwanted stress.

Home Practice

Begin to hone your awareness of your own autonomic nervous system. Notice when you feel rushed, energetic, hyper, or worried—that's sympathetic. Notice when you feel relaxed, at ease, mellow, or unperturbed—that's parasympathetic. Which one is turned on more often?

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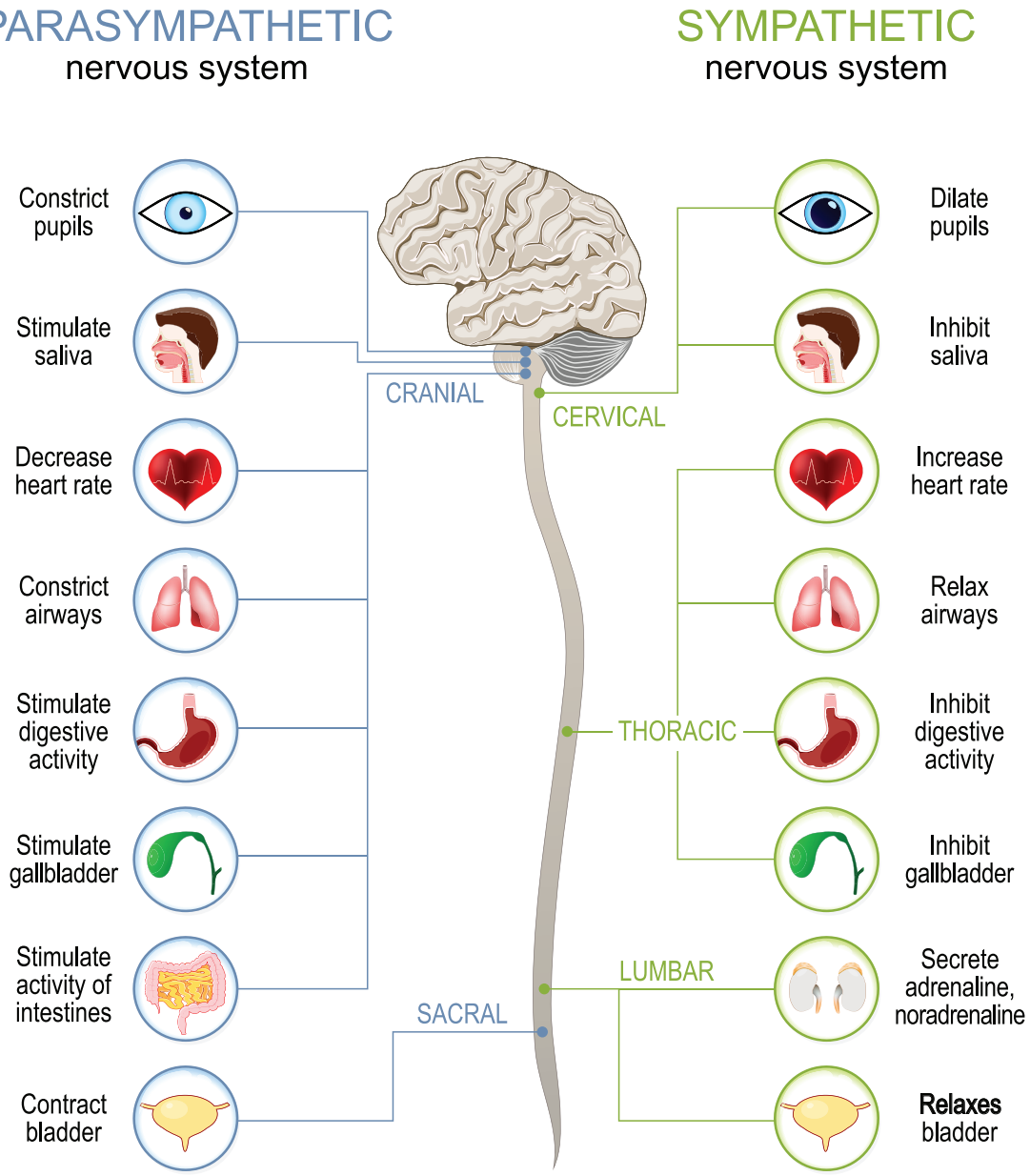
1 Eric H. Chudler, "Autonomic Nervous System," Neuroscience for Kids, University of Washington, 2014. https://faculty.washington.edu/chudler/auto. html.

2 "Sympathetic Nervous System," *Encyclopedia Britannica*, 2016. http://www.britannica.com/science/sympathetic-nervous-system.

3 "Parasympathetic Nervous System," *Encyclopedia Britannica*, 2016. http://www.britannica.com/science/parasympathetic-nervous-system.

4 V. L. Dunckley, "Screens and the Stress Response," *Psychology Today*, November 17, 2012. https://www.psychologytoday.com/us/blog/mental-wealth/201211/screens-and-the-stress-response.

SYMPATHETIC/PARASYMPATHETIC NERVOUS SYSTEMS



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Lesson Four

What is Mindfulness?

GUIDING QUESTION

What is mindfulness?

OBJECTIVE

Define mindfulness.

TEACHER TIPS

- As you introduce the Brain Breaks today, emphasize that it is natural and expected for the mind to get distracted during the exercises. When a learner notices that their mind has wandered, they should simply bring their attention back to the breath. This process of continually bringing one's attention back to the point of focus is how learners will strengthen the mindfulness muscle.

VOCABULARY

mind
mindfulness
mndfulness muscle

BRAIN BREAKS

Mindful Minute
Even In, Even Out
Stork
Mindful Listening

Brain Break 1

MINDFUL MINUTE

Connect

Last time, we learned how Brain Breaks can help our bodies move out of the fight-or-flight response ruled by the sympathetic nervous system and into a more calm and peaceful state ruled by the parasympathetic nervous system. In this lesson, we will continue to learn how to strengthen and balance our minds through a wellness technique known as "mindfulness."

Brain Break 2

EVEN IN, EVEN OUT

Teach

The word "mind" developed from the Old English word "gemynd," which translates to "memory" or "thought." Our minds are full of thoughts, in the form of questions, plans, daydreams, worries, hopes, and ideas.

Often we are too busy or distracted to actually notice most of these thoughts, but thoughts are the basis of most of what we say and do.

Mindfulness can be defined as "the ability to notice what is happening as it is happening." This sounds simple, but we know from experience that it is not necessarily easy to notice what is happening as it is happening, even if we are just trying to notice what is happening in our own minds.

Mindfulness practice is one way to improve our ability to become more aware of what we are thinking. Since the mind is involved in nearly every aspect of daily life, it is important to work our "mindfulness muscle." We work the mindfulness muscle every time we notice what we are thinking. We work the mindfulness muscle every time we realize we have become distracted and make a conscious choice to bring our attention back to a particular point of focus. In our Brain Breaks exercises, that point of focus more often than not is the breath. (Posture, gaze, or feelings are other examples of points of focus.)

As we work the mindfulness muscle, it is essential to do so with a sense of kindness and curiosity for what we observe.

Active Engagement

As we do the following Brain Breaks, try to keep your attention on your breath and posture. When you notice that your mind has wandered, bring it back to your point of concentration. It is not bad or wrong for your mind to wander; in fact, it is expected!

Brain Break 3

STORK

Learners can use Ocean Breath.

Active Engagement

Mindfulness is not about determining whether what you are thinking is right or wrong. We are simply noticing that the mind has wandered or that the mind is filled with thoughts, then gently guiding it back to where we want or need it to be.

As we practice our final Brain Break today, remember to observe your mind without judging yourself when your mind decides to wander. When you notice the mind has wandered, simply bring it back to your point of focus.

Brain Break 4

MINDFUL LISTENING

Link

Today, we became acquainted with the basic definition of mindfulness, which is the ability to become aware of what is happening as it is happening. In our next lesson, we will continue to develop mindfulness by paying close attention to the body.

Home Practice

Until we meet again, set a goal of noticing ten thoughts a day. Simply notice what you are thinking. If you are trying to focus on a conversation, a task, or a project, notice when your attention wanders from that conversation, task, or project. Then flex your mindfulness muscle and bring your attention back.

Lesson Five

Mindfulness of Body

GUIDING QUESTIONS

When do you notice your body's messages?

How do you usually respond to your body's messages?

OBJECTIVE

Demonstrate mindfulness of body by locating and naming past or current physical feelings.

TEACHER TIPS

- During today's Mindful Minute, you can bring the learners' attention to different parts of the body after they notice the breath.
- We are fine-tuning the learners' ability to pay attention to the body in today's exercises. ***That*** they notice and ***how*** they notice (in the present moment, with an attitude of kindness and curiosity) is more important than ***what*** they notice.

VOCABULARY

none

BRAIN BREAKS

Mindful Minute
Mountain/Chair Strength Sequence
Stork
Guided Rest

Brain Break 1

MINDFUL MINUTE

Connect

In our last lesson, we became acquainted with the basic definition of mindfulness, which is the ability to become aware of what is happening as it is happening. In this lesson, we will continue to flex our mindfulness muscles by paying close attention to the body.

Teach

Our bodies send us messages throughout the day. Can you name one message your body has sent you so far today (e.g., hunger, fullness, tiredness, alertness, warmth, cold)? Name one thing you are feeling in your body right now.

When we become mindful of the body, we notice the state of the body as it is right now. There is no right or wrong way to be mindful of the body, and there is no right or wrong way to feel in the body. Our objective is simply to grow our awareness of what we are experiencing as we are experiencing it.

The body is our most concrete tool in mindfulness practice. Our breath and our thoughts are slightly more ephemeral. But the muscles, bones, organs, and nervous system are all part of an intelligent, complex feedback loop that is inextricable from our intellectual and emotional lives. Gradually, as we observe the state of the body over time, we begin to more clearly observe thoughts and feelings as well.

Let's give it a try and carefully observe the feelings in the body as we practice our next Brain Break.

Brain Break 2

MOUNTAIN/CHAIR STRENGTH SEQUENCE

Learners can use Ocean Breath.

OPTIONAL GROUP ACTIVITY

Before the next exercise, have the class brainstorm feeling words that can apply to the body: heavy, light, energized, tired, alert, warm, cold, hungry, full, expansive, contracted, sore, sweaty, painful, strong, steady, unbalanced…

Active Engagement

As we move through the next posture, continue to notice sensory or motor activity occurring in different parts of the body. Bringing yourself back to the essential components of the exercise—posture, breath, gaze—is excellent strength and resilience training for the mindfulness muscle.

Brain Breaks 3 and 4

STORK

During the exercise, ask learners to bring their attention to specific parts of the body and notice what they feel (e.g., standing leg, chest, arm).

GUIDED REST

Link

Our goal today was to simply focus our attention on the feelings in our bodies. When we observe the feelings in our bodies without judgment, we are strengthening our mindfulness muscle. Next time we will explore the mind-body connection further by looking at the vagus nerve, known as the messenger between mind and body.

Home Practice

Choose specific times of the day to check in with how and what your body is feeling—ideally, once in the morning, once in the afternoon, and once in the evening. Note whether your physical sensations change from check-in to check-in. Also note whether your physical sensations do or do not seem influenced by or connected to external inputs (e.g., weather, food, sounds, smells, activity, social interactions).

Lesson Six

Emotions and the Vagus Nerve

GUIDING QUESTION

What is the vagus nerve?

OBJECTIVE

Identify the vagus nerve as the nerve that is associated with emotions.

TEACHER TIPS

- As you introduce Take Five, bring learners' attention to how the breath, the sense of touch, and the gaze all combine to help them build focus.

VOCABULARY

vagus nerve

BRAIN BREAKS

Mindful Minute
Take Five
Mountain/Chair Strength Sequence
Guided Rest

Brain Break 1

MINDFUL MINUTE

Connect

Last time, we practiced noticing the feelings in the body as a tool for developing our mindfulness practice. Today we are going to talk about the vagus nerve, a part of our nervous system that operates largely by transmitting messages from the body to the brain.

Brain Break 2

TAKE FIVE

Teach

Even though the brain is the most central part of the nervous system, we also have nervous systems in our hearts and our guts. These function independently of the brain and send constant updates to our brains about their condition.

The vagus nerve[1]—"vagus" means "wanderer" in Latin—delivers messages directly from the internal organs (e.g., heart, lungs, digestive tract) to the brain. In fact, 80 percent of its activity consists of this bottom-up transfer of information. The vagus nerve is also associated with the sensing and expression of emotions. It innervates the vocal cords and modulates both how we change our voices to express emotion and the muscles in our faces, where we also express emotion. In addition, it courses along our hearts, where we often feel emotions.[2]

Emotions are triggered by a single event or series of events, like seeing a beautiful sunset or hearing a moving piece of music. Our brains register our emotions, but scientists don't fully agree on how and why emotions are produced.[3] Recent research shows that the organs in our body, not just our faces, are affected by and involved with the production and experience of emotional states. Stress, for example, which might derive from feeling overwhelmed or frustrated, can cause physical symptoms, such as stomachaches, headaches, or restricted respiration. Conversely, feelings of love, gratitude, and compassion can actually support heart health.[4]

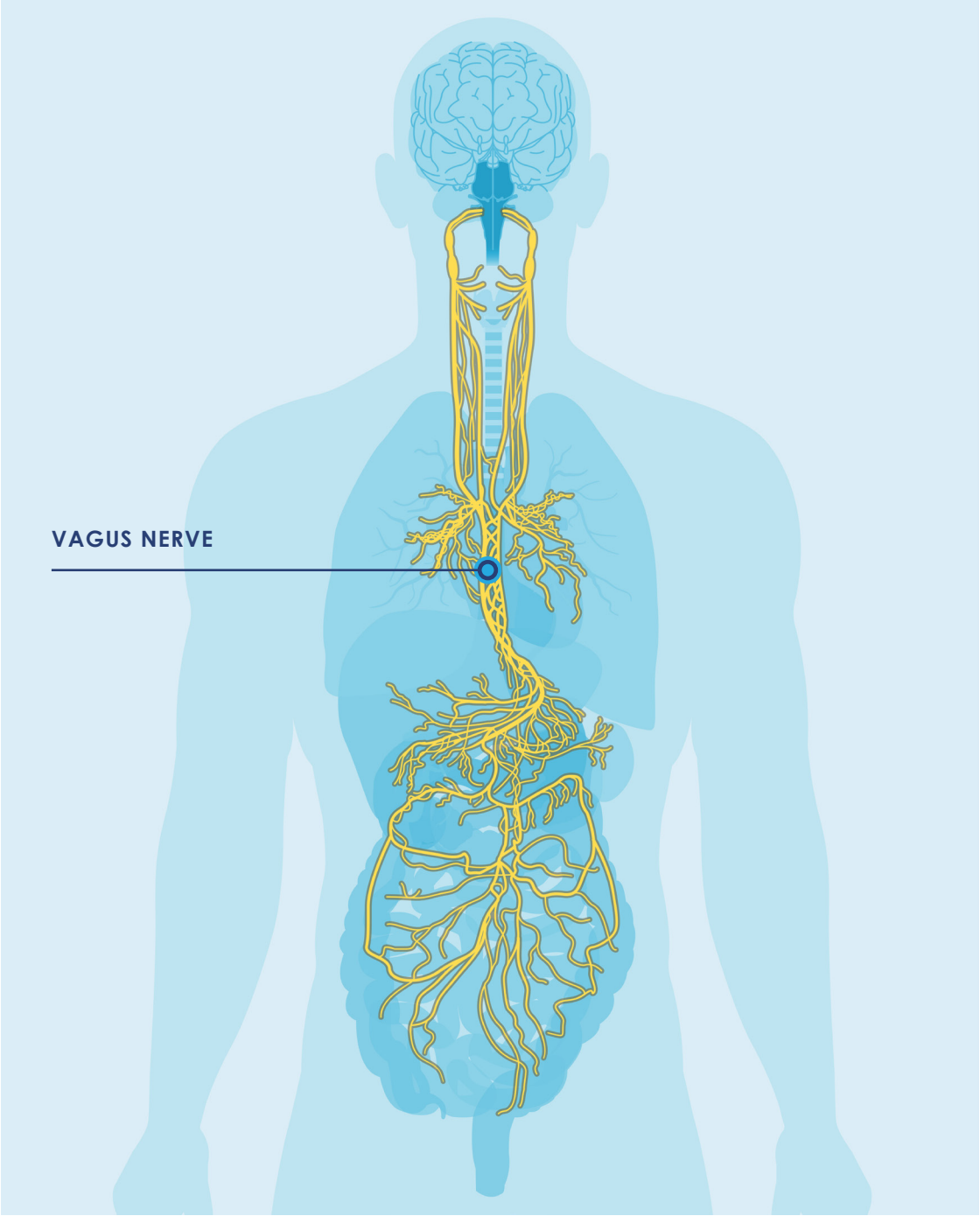
We have the power to influence how we feel, which suggests that the brain and the body work together to manifest our perceived experiences. Our inner awareness, physiological functions and external inputs all have a hand in creating an emotion or a feeling.[5]

Brain Break 3

MOUNTAIN/CHAIR STRENGTH SEQUENCE

Learners can use Ocean Breath.

VAGUS NERVE



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Active Engagement

We can stimulate the vagus nerve through doing deep breathing exercises. When we stimulate the vagus nerve, it becomes easier for our body to activate the parasympathetic nervous system, which helps move us from a state of fight, flight, or freeze into rest and digest. Every time you exhale, especially every time you exhale lengthily, the vagus nerve is toned, or refined.

Our Guided Rest routine is also one of the best things we can do for the health of the vagus nerve. When the vagus nerve is relaxed, strong emotions are quelled and stress is reduced.

Brain Break 4

GUIDED REST

Link

Today we explored the nervous system in depth through the lens of the vagus nerve. We can tone our vagus nerves through long, concentrated exhalation. In our next lesson, we will spend some more time focusing on breath awareness and mindfulness.

Home Practice

Experiment with practicing some of our breathing exercises and extending the exhale. Do you notice a change in how you feel? That might be your vagus nerve responding.

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1 Christopher Bergland, "How Does the Vagus Nerve Convey Gut Instincts to the Brain?", *PsychologyToday*, 2014. https://www.psychologytoday.com/blog/the-athletes-way/201405/how-does-the-vagus-nerve-convey-gut-instincts- the-brain.

2 David DiSalvo, "Forget Survival of the Fittest: It Is Kindness That Counts," *Scientific American*, 2009. http://www.scientificamerican.com/article/forget-survival-of-the-fittest/.

3 Antonio R. Damasio, "The Science of Emotion," Library of Congress. http://www.loc.gov/loc/brain/emotion/Damasio.html.

4 Patti Neighmond, "Gratitude Is Good For The Soul And Helps The Heart, Too," National Public Radio, 2015. http://www.npr.org/sections/health-shots/2015/11/23/456656055/gratitude-is-good-for-the-soul-and-it-helps-the- heart-too.

5 Manuela Lenzen, "Feeling Our Emotions," *Scientific American*, 20

Lesson Seven

Mindfulness of Breath

GUIDING QUESTION

When do you tend to notice your breath?

OBJECTIVE

Understand the relationship between breath awareness and mindfulness practice.

TEACHER TIPS

- While the general rule is that inhalations energize us and exhalations calm us, it is important to honor the learners' own experiences. Our goal is to help them increase self-awareness and bring their attention to the effects the breath has on their own bodies and nervous systems.

VOCABULARY

none

BRAIN BREAKS

Mindful Minute
Belly-Heart Breathing
Chair Cat/Cow
Mindful Listening

Brain Break 1

MINDFUL MINUTE

Connect

The vagus nerve, which we learned about in our last lesson, is a nerve that is associated with emotion. Emotions show themselves in our bodies in the form of sensations. How does anxiety feel in your body? How does happiness or excitement feel in your body?

Do you ever notice a change in your breath or heart rate depending on your mood? How does your breath feel when you are angry? What happens in your heart? We will spend this lesson on body and breath awareness.

Teach

The average person takes approximately 23,000 breaths per day.[1] *How many of your 23,000 daily breaths do you notice? Breathing is an involuntary function, which means the body will breathe whether or not the brain is deliberately directing it to do so. This is fortunate—if breath was not automatic, we wouldn't have any time to think about doing, saying, or feeling anything else. It also means that it takes a degree of effort and practice to experience our breath in a conscious way. When do you tend to notice your breath?*

The breath is directly connected to the nervous system (brain, spinal cord, and peripheral nerves), as well as the cardiovascular, digestive, and musculoskeletal systems. Every cycle of inhalation and exhalation supports circulation of blood and hormones, proper breakdown of food and waste, and the structural health of muscles and bones. There is no separation between the quality of the breath and the health of the physical body. (Project or distribute images of physiological systems mentioned herein.)

Mindfulness of breath helps us pause and observe the state of the body and the state of the mind. The sound, feeling, and movement of your breath can offer insight into how you are reacting or responding to thoughts, feelings, and external stimuli. Your mindfulness muscle grows each and every time you simply recognize that you are inhaling and exhaling. Over time and with repetition, noticing and interpreting the breath will become easier and, possibly, more interesting.[2]

Brain Break 2

BELLY-HEART BREATHING

For today, have learners do three rounds of Belly-Heart Breathing.

1 ROUND ONE

Have learners notice what happens physically in the body when they inhale. (Do their chest and belly expand? Do they feel a lifting sensation or that they are getting taller?)

2 ROUND TWO

Have learners notice what happens in the body when they exhale. (Do their chest and belly contract? Do they experience a slight feeling of drawing in or folding in toward oneself?)

3 ROUND THREE

Just do the exercise without a specific point of focus.

As always, make space for all learner experiences when gathering feedback. There is no right or wrong way to experience the breath.

Teach

We can use the breath to gauge what and how we are feeling. When we are angry, we might hold the breath. When we are sad or crying, the breath might become jagged. When we are relaxed or asleep, the breath will be calm, deep, and smooth.

We can also use the breath to interpret or influence the way we feel physically, mentally, and emotionally. The breath is connected to the nervous system in the same way an accelerator and a brake pedal are connected to a car. Inhaling accelerates, and exhaling brakes. When we need to psych ourselves up for something, we take a deep breath. When we need to relax, taking long, slow exhales will make us feel calmer. When we are upset, focusing on the exhalation is most useful.[3]

Active Engagement

In the next exercise, we will initiate each physical action with either an inhalation or an exhalation. See whether you can feel how the physical movement in this posture is a natural extension of the movement of the breath that we explored in Belly-Heart breathing.

Brain Break 3

CHAIR CAT/COW

Learners can use Ocean Breath.

Link

We have learned to notice feelings in the body and the quality of the breath. In our next lesson, we are going to learn about how our brains respond to positive and negative experiences. We will also learn a technique for establishing positive mental patterns.

Brain Break 4

MINDFUL LISTENING

Home Practice

Choose specific times throughout the day to check in with your breath—once in the morning, once in the afternoon, and once in the evening. Note whether your breath patterns change from check-in to check-in. Note whether your breath does or does not seem influenced by or connected to external inputs (e.g., weather, food, sounds, smells, activity, social interactions).

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1 Walker Meade, "Every Breath You Take," *The Herald Tribune*, 2010. 71 http://www.heraldtribune.com/article/20100112/ARTICLE/1121008 .

2 Greg Feldman, Jeff Greeson, and Joanna Senville, "Differential effects of mindful breathing, progressive muscle relaxation, and loving kindness meditation on decentering and negative reactions to repetitive thoughts." http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2932656/.

3 Rick Hanson, "Relaxed and Contented: Activating the Parasympathetic Wing of Your Nervous System," WiseBrain, 2007. http://www.wisebrain.org/ParasympatheticNS.pdf.

Lesson Eight

Taking in the Good

GUIDING QUESTION

What is "Taking in the Good"?

OBJECTIVE

Understand that the Taking in the Good technique can be used to commit positive experiences to long-term memory.[1]

TEACHER TIPS

- Continue to emphasize the breath-movement connection in Belly-Heart Breathing and Chair Cat/Cow.
- As they practice the exercises, invite learners to reflect on the types of thoughts they notice when their mind starts to wander. Do they notice a negativity bias at work in their own brains?

VOCABULARY

none

BRAIN BREAKS

Mindful Minute
Belly-Heart Breathing
Chair Cat/Cow
Taking in the Good

Brain Break 1

MINDFUL MINUTE

Connect

We have learned to notice thoughts in the mind, feelings in the body, and the quality of the breath. Today we are going to learn a technique called Taking in the Good. This is a technique for building positive thought patterns.

Brain Break 2

BELLY-HEART BREATHING

Teach

A bias is an inherent or learned prejudice against a thing, person, or group when compared with another. We all have biases; some are useful and some are harmful. Nearly all humans share a negativity bias, which is our tendency to hold on to or collect negative information in the form of memories or impressions.

Our negativity bias can be attributed to our brain's brilliant instinct for safety and survival. Knowing how and when to identify danger or a threat is highly important, but sometimes our negativity bias can become overactive. In the modern world, our negativity bias can take the shape of excessive worry, anxiety, frustration, aggression, or judgment.

Neuroscientist Rick Hanson said, "The brain is like Velcro for negative experiences, but Teflon for positive ones." This means that unpleasant experiences stick to the brain's long-term memory, while pleasant experiences are less likely to stay put. It takes 2 to 3 seconds for your brain to remember something unpleasant and about 20 to 30 seconds for your brain to remember something pleasant.[2]

Brain Break 3

CHAIR CAT/COW

Learners can use Ocean Breath.

Active Engagement

In the next exercise, we will work on bringing our attention to a positive thought or memory for an extended period of time. This supports the brain's ability to transfer a positive thought or impression into long-term memory.

Research shows that mindful concentration on a positive thought or memory can have a favorable impact on our mental, emotional, and physical health and wellness.[3]

Brain Break 4

TAKING IN THE GOOD

As you debrief Taking in the Good, you can note that Taking in the Good is not the same as toxic positivity.

- Taking in the Good is a technique that encourages our minds to absorb positive experiences and helps us cultivate resilience and gratitude.
- Toxic positivity is the assumption that despite a person's emotional pain and turmoil, they should **only** have a positive mindset.
- Remind learners that the best way to deal with negative emotions is to let yourself feel the emotions you're feeling and let them pass, not to push them under the rug.[4]

OPTIONAL GROUP OR PAIR-SHARE ACTIVITY

After practicing Taking in the Good, have learners describe in detail (with either the whole group, a small group, or a partner) the positive memories they chose to work with. If materials are on hand and time allows, learners can document or visualize their respective memories on individual pieces of paper, on a large sheet of paper (to be posted in the classroom), or in a journal (if available).

Link

Remember that Taking in the Good requires practice; you are training your brain to remember the positive, which goes against its negativity bias. Next time, we will look further into how different parts of our brain support our feelings of safety, contentment, and connection.

Home Practice

Until we meet again, try flexing your mindfulness muscle by noticing when your mind veers off on a negative track. Instead of forcing the negative thought out of your mind, invite a positive thought in. Then invest all of your attention in that positive thought for at least 30 seconds. Notice how you feel in your body and in your mind after actively Taking in the Good.

1 Sharon Salzberg, *Real Happiness*, Workman Publishing, 2010.

2 Rick Hanson, "The Five Essential Skills," June 25, 2018. https://media.rickhanson.net/home/files/TakingintheGood.pdf.

3 Rick Hanson and Rick Mendius, "Positive Emotions and Taking in the Good," 2007. http://www.wisebrain.org/PositiveEmotions.pdf.

4 Vasundhara Sawhney, "It's Okay to Not Be Okay," November 10, 2020. https://hbr.org/2020/11/its-okay-to-not-be-okay.

Lesson Nine

Finding Safety, Contentment, and Connection

GUIDING QUESTIONS

What does safety mean to you?

What does contentment mean to you?

What does connection mean to you?

OBJECTIVE

Understand how safety, contentment, and connection are correlated with brain function.

TEACHER TIPS

- Remind learners that we are repeating the same exercises because our brains learn best through repetition.
- Doing the same Brain Breaks consistently over time is the best way to expand resilience and support learners in gaining lasting skills to manage their stress and support their well-being.

VOCABULARY

brain stem
limbic system
prefrontal cortex

MATERIALS

Image of the brain, with the three parts highlighted and clearly labeled (to be projected or distributed) — see end of lesson.

BRAIN BREAKS

Mindful Minute
Take Five
Mountain/Chair Strength Sequence
Taking in the Good

Brain Break 1

MINDFUL MINUTE

Connect

In our last lesson, we focused on how to positively rewire our brains' negativity bias with Rick Hanson's Taking in the Good exercise.

Today we will discuss how feelings of safety, contentment, and connection are associated with three particular parts of the brain.

Brain Break 2

TAKE FIVE

Teach

The brain is the uppermost part of our central nervous system, which is a vast network of cells that remains in constant communication with the body, regulating all of our bodily processes and functions, including those of the sense organs, which gather information from the outside world.

The brain stem—the oldest part of the brain—directs our bodily survival mechanisms, such as heart rate, circulation, respiration, digestion, and reproduction. When our survival is secure and these mechanisms are working properly, we feel safe.

The limbic system—the second-oldest part of the brain—is a relay station for hunger, thirst, memory, fear, and emotions. When the limbic system is balanced, we feel content.

The prefrontal cortex (or PFC) is the most recent addition to the mammalian brain. "Cortex" means "bark"—the cortex is a thin layer that makes up the outer layer of the brain.[1] The prefrontal cortex makes up the foreground of the cerebrum, which is responsible for thinking, memory, reason, cooperative planning, social responsibility, empathy, reflection, and language. When the prefrontal cortex is functioning well, we are able to connect with ourselves and others.

The functions of these parts show how the brain is more than just an anatomical structure. Rather, it is responsible for addressing the three basic needs all people share: the need for safety, the need for contentment (or satisfaction), and the need for connection (or community).[2]

Active Engagement

Health and wellness practices help us begin to appreciate the messages our bodies receive from our brains and vice versa. During the next Brain Break, simply focus on appreciating how the brain and body coordinate and organize information (verbal instructions and physical demonstrations) into movement and how the brain and the body call upon past experience in order to effectively repeat learned postures.

Brain Break 3

MOUNTAIN/CHAIR STRENGTH SEQUENCE

Learners can use Ocean Breath

Teach

Can you think of the opposite of safety? Of contentment? Of connection? When we do not feel safe, we tend to feel fear or insecurity. When we do not feel content, we tend to feel as though we are lacking. When we do not feel connected, we might feel rejected or alone. When stress hormones run rampant, the PFC becomes temporarily impaired and the limbic system can become overactive.

Teach learners Dr. Dan Siegel's "handy" model of the brain to review the limbic system, brain stem, and PFC. In this model, one fist represents both hemispheres of the brain. Learners each raise one hand, palm facing them, with the thumb curled into the palm. The thumb represents the limbic system. All four fingers, which represent the cerebral cortex, fold to cover the thumb, forming a fist. The fingernails represent the PFC, the wrist is the base of the skull, and the forearm is the spinal cord. When we are overcome with anger, stress, or anxiety, we may "flip our lid," or lose self-control. The prefrontal cortex goes off-line, and the limbic system is in control. This can be demonstrated with an exploding fist.[3]

Brain Break 4

TAKING IN THE GOOD

OPTIONAL GROUP OR PAIR-SHARE ACTIVITY

Have the class choose a community (such as their town, school, or even classroom) and explore (in pairs or small groups) what elements are necessary for them to experience safety, contentment, and connection within that community. What steps could they and other members of the community take to ensure that this community offers safety, contentment, and connection for all of its members?

Link

Our health and wellness practices provide training not only for the body but for all areas of the brain. Part of this training is coming to understand the exchange between our internal experiences and our external environments and then approaching these intersecting planes with an attitude of mindfulness. As social creatures, we are constantly affected by what is happening around us. In turn, what is happening around us is affected by our own speech and actions. In our next lesson, we will discuss "emotional regulation," a multifaceted physical-mental-emotional process that can be affected by stress.

Home Practice

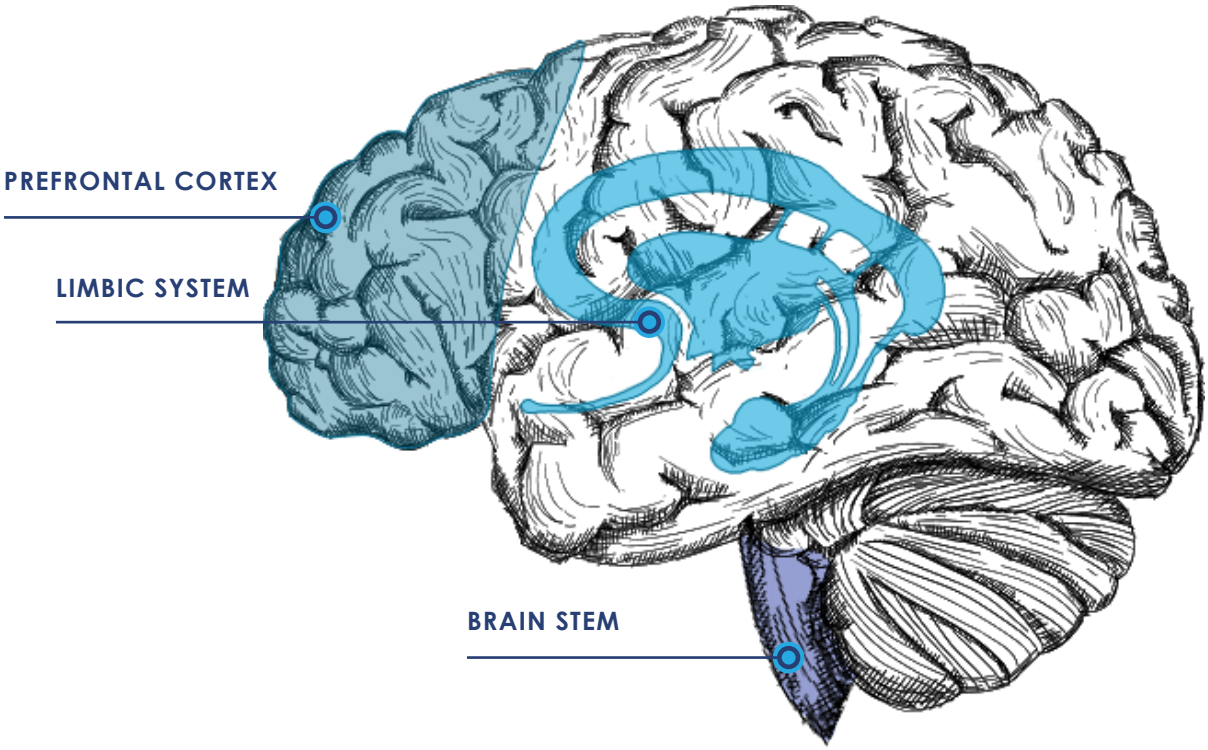
Until we meet again, try to identify signs of distress that you experience before you "flip your lid." When you notice these signals, take a step back and take a few mindful breaths. See if this helps get the PFC back online and lets you move forward with a sense of calmness.

1 "Cortex," *Merriam-Webster's Collegiate Dictionary*. http://www.merriam-webster.com/dictionary/cortex.

2 Rick Hanson, *Hardwiring Happiness*, Harmony, 2013.

3 Daniel J. Siegel, "Hand Model of the Brain," 2017. https://drdansiegel.com/hand-model-of-the-brain/.

IMAGE OF THE BRAIN



Lesson Ten

Emotional Regulation

GUIDING QUESTIONS

When do you feel emotionally regulated?

When do you feel emotionally dysregulated?

Why is emotional regulation important for our health and wellness?

OBJECTIVE

Define emotional regulation and provide examples of how emotional regulation helps us appropriately respond to our environments.

TEACHER TIPS

- As we learn the Brain Breaks, we are practicing observing our experience with kindness. We are not trying to control our experience or have a different experience from the one we are having.
- Emotional regulation does not mean to not feel emotions; it means being able to feel them and still make appropriate decisions on how to express that emotion based on our environment.
- As we learn to accept our experience without judging it, it becomes easier to make decisions that support our emotional regulation—the ability to respond instead of react.

VOCABULARY

emotional regulation
dysregulation

BRAIN BREAKS

Mindful Minute
Even In, Even Out
Recharge Sequence
Guided Rest

Brain Break 1

MINDFUL MINUTE

Connect

In our last lesson, we learned that safety, contentment, and connection are three fundamental human needs and are connected to the healthy functioning of our brains. In this lesson, we will discuss "emotional regulation," a multifaceted physical-mental-emotional process that can be affected by stress.

Brain Break 2

EVEN IN, EVEN OUT

Teach

Being able to mindfully identify and appropriately express emotions is called emotional regulation. Balanced emotional regulation entails an intricately choreographed dance between feelings, thoughts, physiological signals (such as heart rate and breath patterns) and nonverbal communication (such as body language and facial expressions).[1]

Both the limbic system and the prefrontal cortex participate in this multipart process, but the degree to which each is involved depends on each of our senses of emotional balance or lack thereof.

Emotional regulation is one of the most important skills for leading a balanced life, but it is also one of the most difficult to learn. This is because the stability of our emotional lives has the potential to become dysregulated due to a variety of factors, most of which are not necessarily within our control.[2]

Just as we must learn to identify and regulate symptoms of stress, we also must learn how to identify and regulate emotions. This means that when we feel sad, we recognize that we are sad. When we think we are angry, we take a moment to look and see: "Am I truly angry? Or could this be anger concealing hurt?" When we know we are putting on a happy face even when we feel awful, we wonder, "Why do I feel the need to act one way when I feel another?" Often emotional regulation requires learning to ask ourselves questions and then learning the honest answers to those questions.

Studies have shown that healthy relationships are important to longevity, or the potential for living a long life.[3] *Emotional regulation is a key underpinning of any healthy relationship, since it also entails being able to perceive, understand, and accept the feelings and thoughts of others. Empathy and compassion are largely functions of the prefrontal cortex. When the limbic system overrides the prefrontal cortex, it can be difficult to empathize with another person's experience.*

Brain Break 3

RECHARGE SEQUENCE

Learners can use Ocean Breath.

Active Engagement

Physical regulation is a good place to begin the process of emotional regulation. Through our practices of mindful breath and movement we learn, again and again, what it feels like to move through our experiences in a thoughtful, nonreactive way.

Brain Break 4

GUIDED REST

OPTIONAL GROUP OR PAIR-SHARE ACTIVITY

When you feel dysregulated, what are some things that help you get back on track?

Have learners discuss in pairs, have a large group conversation, journal, or draw in response to this question.

Link

Our capacity for emotional regulation is not fixed. There are circumstances and forces that work against our ability to emotionally regulate, and there are practices available to us that will boost our ability to emotionally regulate. Next time, we will take a look at neuroplasticity, which is a process in the brain that allows us to grow and change, including growing and changing our habitual responses to challenging situations.

Home Practice

Consider an area of your life that evokes strong emotions. What are some practical ways you can apply emotional regulation in this area of your life?

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1 Saudino and Wang , "Emotional Regulation and Stress,"*Journal of Adult Development*, 2011. http://link.springer.com/ article/10.1007%2Fs10804-010-9114-7#page-2 .

2 Bessel Van der Kolk, "Developmental trauma disorder: Towards a rational diagnosis for children with complex trauma histories," *Psychiatric Annals*, 2005. http://www.traumacenter.org/products/ pdf_files/preprint_dev_trauma_disorder.pdf .

3 Veronique Greenwood, "The Longevity Project: Decades of Data Reveal Paths to Long life," *The Atlantic*, 2011. http://www.theatlantic. com/health/archive/2011/03/the-longevity-project-decades-of-data-reveal-paths-to-long-life/72290/.

Lesson Eleven

Habits and Neuroplasticity

GUIDING QUESTION

How does neuroplasticity contribute to the formation of new habits?

OBJECTIVE

Describe how neuroplasticity and habit modification and formation are related.

TEACHER TIPS

- Help learners make the connection between neuroplasticity and practicing Brain Breaks by drawing their attention to how what was once unfamiliar (the exercise) now likely feels more familiar.
- That familiarity comes from connections that have developed in their brain as they have repeated the exercise over time. The more the exercise is repeated, the stronger the connections will grow.

VOCABULARY

neuroplasticity

BRAIN BREAKS

Mindful Minute
Anchor Breathing
Chair Twist
Attitude of Gratitude

Brain Break 1

MINDFUL MINUTE

Connect

In our last lesson, we pondered the confluence of body, brain, stress, and emotions within the framework of regulation and dysregulation. In this lesson, we will discuss habits and how they are interwoven with a neurological process called neuroplasticity.[1]

Brain Break 2

ANCHOR BREATHING

Teach

Let's review what a habit is. Habit are actions we repeat so often that they become automatic.

For the most part, human beings function according to habit. Habits make up our daily routines, like eating meals at regular times, brushing our teeth, or walking down the same streets when we commute to and from school. We learn habits everywhere: at home, at school, from our friends, or within the particular religious or ethnic background we belong to. Because we do not consciously decide to pick up every habit we have, many of our habits are not apparent to us. Some habits are helpful, some are neutral, and some are unhelpful.

Neuroplasticity is a neurological process that allows us to learn, grow, and change. It is also a factor in making or breaking habits. Scientists have found that new habits, ideas, and thoughts can be continually learned and changed throughout our entire lives. Sensory input prompts neurons to communicate, and if particular neurons communicate with one another often enough, a strong neural connection is made. The work of scientist Donald Hebb inspired a phrase to describe this process: "Neurons that fire together, wire together." On the other hand, if those neurons someday cease to fire together, the wiring might weaken. When you make an effort to reroute your habitual thoughts and actions, your brain absorbs and adapts to this effort.

Brain Break 3

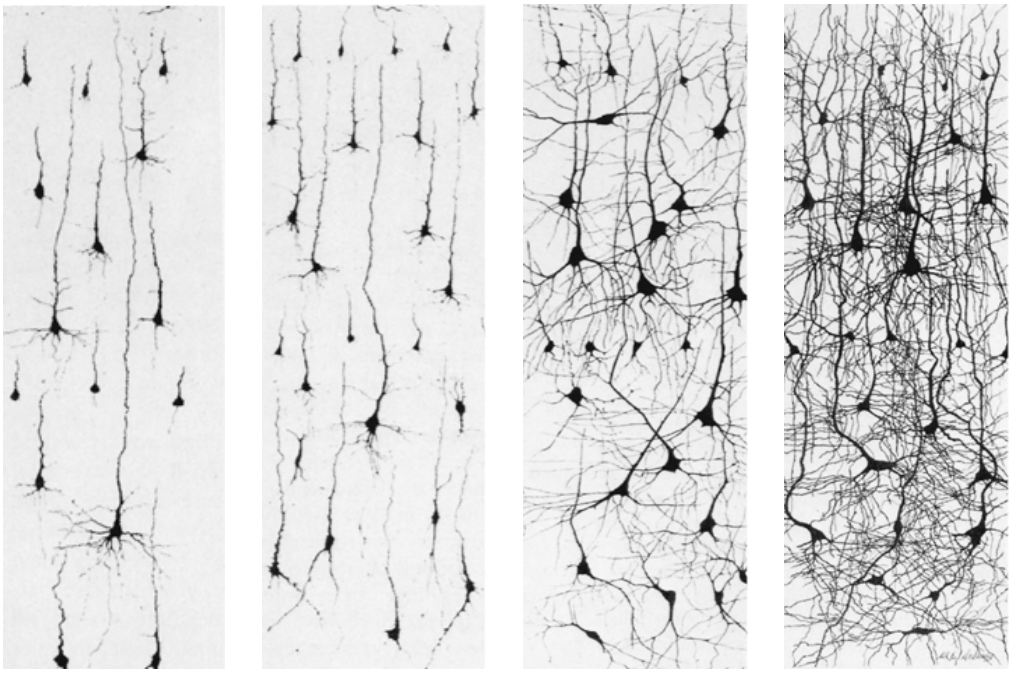
CHAIR TWIST

Learners can use Ocean Breath.

Teach

As we carry out new or habitual patterns of movement, behavior, and thought, neuroplasticity occurs within us. On the following page, you'll see several photographs of neural circuitry in the brain.[1] *The leftmost image portrays the neural circuitry of a newborn. The second panel shows the neural circuitry of a three-month-old. The third panel illustrates the neural circuitry of a fifteen-month-old. The fourth panel displays the neural circuitry of a two-year-old. Which panel shows the greatest*

NEURAL CIRCUITRY IN THE BRAIN



density in neural connectivity?

When we are born, our brain has already been formed with almost all the neurons (brain cells) we will ever have, but these neurons are not all connected. Neurons forge connections through experience, repetition, and conditioning.[2]

As a person ages, the brain's wiring becomes increasingly complex and interconnected. Neuroplasticity is what allows us to learn from our experiences and transfer that understanding to other experiences. Our first years of life entail huge transformations in the brain, but our neural networks don't stop growing and proliferating when we become adults. In fact, these networks shape-shift until the day you die.

The child brain and the teenage brain are the most neuroplastic. This means they are primed for learning and wide open to environmental stimuli and input. Childhood and adolescence are the best times of life to learn skills, pick up information, and form beneficial habits.

Active Engagement

For our next Brain Break, we are going to learn another technique to help our brains focus on what is already good and positive in our lives. Remember that every time we

take time to focus on positive things, we are using the process of neuroplasticity to hack our brains and override the brain's negativity bias. With repetition of this type of exercise over time, it will feel more and more natural to take a positive approach, because we will have developed stronger connections in the brain that encourage us to do so.

Brain Break 4

ATTITUDE OF GRATITUDE

Link

When we commit ourselves to habits that support health and wellness, physiological changes can take place in the body, the brain, and the nervous system. This is why it is important to incorporate activities that support positive physical, mental, and emotional flexibility into daily life. Next time we will look at a strategy based in neuroscience to help us form the habits we want to incorporate into our lives.

Home Practice

Throughout the next several days, take time to notice your personal habits. It might be difficult at first, since most of our habits are largely unconscious, but the more you actively look for habits, the easier it will become to perceive them.

1 Steven Handel, "Mindfulness Is Self-Directed Neuroplasticity,"The Emotion Machine, 2011. http://www.theemotionmachine.com/mindfulness-and-neuroplasticity.

2 Eric H. Chudler, Neuroscience for Kids, University of Washington, 2016. https://faculty.washington.edu/chudler/cells.html.

Lesson Twelve

The Architecture of Healthy Habits

GUIDING QUESTION

What are the four key ingredients to successful habit formation?

OBJECTIVE

List the key ingredients for forming new habits.

VOCABULARY

none

TEACHER TIPS

- For the optional group activity, it might be helpful to make a list of all of the Brain Breaks you have covered in this unit to share with the learners.

BRAIN BREAKS

Mindful Minute
Belly-Heart Breathing
Stork
Attitude of Gratitude

Brain Break 1

MINDFUL MINUTE

Connect

In our last lesson, we discussed how the process of neuroplasticity allows us to actively change our brains throughout our whole lives. Today as we wrap up our unit on health and wellness, we will talk about how habits are formed and what we can do to participate in the process of creating new habits. We will address which, if any, of our Brain Breaks you might like to incorporate as habits moving forward.

Brain Break 2

BELLY-HEART BREATHING

Teach

Similar to skyscrapers, statues, and houses, we require the proper internal and external supports when building new habits. The scaffolding underlying successful habit formation is made up of motivation, preparation, repetition, and perseverance.

✓ **Motivation:**

To kick-start a new habit, it is important to understand your motivation. Motivation is what gets you going, what excites and challenges you. When you are clear about your motivation, it is like directing an arrow toward a target: you know where you want to go, and you are set on getting there. Our motivations can be varied. For example, we could be focused on our personal well-being; we could want to further a cause that is important to us; we could want to enhance our performance in school or in an extracurricular activity. What other motivations can you think of?

✓ **Preparation:**

Once you are clear on your motivation, you can figure out the means by which to reach your goal. Preparation for the process is crucial. When you prepare, you think about the beginning, middle, and end. You also think about potential obstacles and how you will overcome them.

For instance, if you have a test tomorrow, you might prepare by studying the evening before, having a good dinner, getting to bed at a reasonable hour, waking up early enough to do a little wellness practice, eating a hearty breakfast, and preparing calmly for the day. All of these actions would support your readiness for your test.

✓ **Repetition:**

To actually form a long-term habit, you need to consistently repeat the actions that support this habit. Neuroplasticity occurs through repetition. When we have a new experience, our neurons communicate with one another. This communication creates or strengthens neural connections. Similar to skiing down a snowy hill, if we repeatedly take the same route, the path becomes more and more defined with each run.

✓ **Perseverance:**

When the going gets tough, you can draw upon your physical, intellectual, and emotional reserves. This is what we call "perseverance"—the refusal to give up despite setbacks. Consider a big goal or aspiration you have for yourself. What obstacles might you face? What can you do about these obstacles? Who can you turn to for inspiration and support? Even though perseverance has to come from within, it never hurts to surround yourself with people who will cheer you on.

Active Engagement

Our overarching health and wellness goal is an awareness of body, breath, mind, and emotions. Through our posture practice, we are creating new habits or patterns that make us physically and mentally stronger, steadier, and more flexible. As we move, can you observe physical habits that you may or may not have noticed before? Are there any posture-related habits you'd like to modify or establish?

Brain Break 3

STORK

Learners can use Ocean Breath.

OPTIONAL GROUP OR PAIR-SHARE ACTIVITY

Take a moment to consider a habit that you would like to establish in your daily life, then use our habit formation rubric to consider a few questions: What is your motivation? What will you do to prepare? What will you have to repeat? How will you persevere against the odds? Remember that motivation can be individual or collective.

Brain Break 4

ATTITUDE OF GRATITUDE

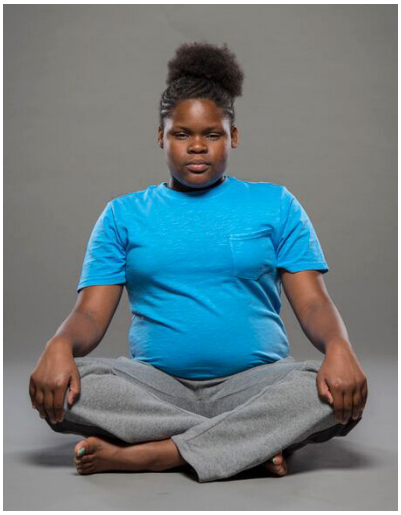
Link

Learners and teachers face a tremendous amount of stress every day. How that stress manifests in our lives is largely determined by whether or not we are able to identify, regulate, and reduce it. The more empowered we are to navigate stress, the happier and healthier we can be, and the better we will be able to make a positive contribution to the communities to which we belong. I hope that some of the strategies we have learned together will continue to be helpful to you as you support your own well-being.

Brain Break Scripts

BREATHE

Anchor Breathing



1. Sit down and get comfortable.
2. Rest your hand on your chosen breathing space: belly, chest, or just under your nose.
3. Do your breathing and keep your attention on your breathing space.
4. When your attention wanders, gently bring it back to your breathing space.

- *Notice when your mind has wandered away from your anchor (belly, chest, or nose) and bring your mind back to that point of concentration. It is not bad or wrong for your mind to wander. We are simply noticing that the mind has wandered and then gently guiding it back to where we want it to be.*

REST

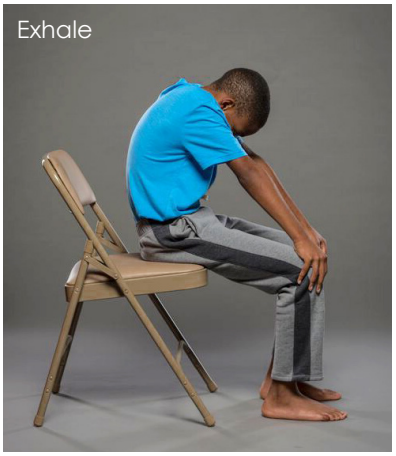
Attitude of Gratitude

1. Sit comfortably, and if you like, you can close your eyes.
2. Think of something or someone in your life for which you are thankful or grateful. It can be anything or anyone!
3. Take a few moments to just appreciate this thing or person.
4. Now think of another thing or person for which you are grateful.
5. Take a few moments to appreciate this thing or person.
6. Notice how you feel.

BREATHE

Belly-Heart Breathing

1. Bring one hand to your chest and one hand to your lower belly.
2. Breathe in and feel the movements of the chest and belly.
3. Breathe out and feel the movements of the chest and belly.
4. As you inhale, the chest and belly move outward. As you exhale, the chest and belly move inward.
5. Repeat until you hear the chime.
6. Notice how you feel.



MOVE

Chair Cat/Cow

1. Sit in Seated Mountain with hands on knees. You can either keep your hands on your knees throughout the exercise or interlace your fingers and press the palms away from you.
2. As you inhale, reach the center of your chest up toward the ceiling and lift your chin so that you are looking at the ceiling. If you have interlaced your fingers, reach your arms overhead. (Cow)
3. As you exhale, round your spine and drop your chin toward your chest. If your hands are overhead, bring them forward in the same movement until your arms are parallel with the floor. (Cat)
4. Repeat for several breaths: Inhale, chest up, gaze lifts. Exhale, round the spine, chin tucks, gaze drops.
5. Return to Seated Mountain.

MOVE

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 on other side.

- *In Chair Twist, notice what happens to your knees as you twist to one side. Try to keep the knees even with each other and pointing straight ahead.*

BREATHE

Even In, Even Out

1. We are going to focus on making our inhales and exhales even. Try to stay with my count, but do not force or hold your breath.
2. Inhale deeply through the nose for a count of one.
3. Exhale for a count of 1.
4. Inhale (1, 2)
5. Exhale (2, 1)
6. Inhale (1, 2, 3)
7. Exhale (3, 2, 1)
8. Inhale (1, 2)
9. Exhale (2, 1)
10. Inhale (1)
11. Exhale (1)
12. Breathe naturally through the nose.
13. Notice how you feel.

- *The inhalation and exhalation should be equal in length. Count up as you breathe in (1, 2, 3) and count down as you breathe out (3, 2, 1). The count may increase up to a count of five as the learners become more comfortable with the exercise.*

REST

Guided Rest

1. Lie down on the floor on your back. Spread your feet apart. Turn your palms up to face the ceiling and close your eyes.
2. Put your attention on your forehead. Feel your forehead relax.
3. Put your attention on your eyes. Feel your eyes relax. (Repeat for ears, nose, and mouth.)
4. Put your attention on your cheeks and jaw. Feel your cheeks and jaw relax.
5. Put your attention on your neck. Feel your neck relax.
6. Put your attention on your shoulders. Feel your shoulders relax. (Repeat for arms, wrists, hands, and fingers.)
7. Put your attention on your chest. Feel your chest relax.
8. Put your attention on your back. Feel where your back touches the floor (or the chair).
9. Put your attention on your belly. Notice how the breath moves the belly softly up and down.
10. Put your attention on your hips. Feel your hips relax. (Repeat for legs, knees, ankles, feet, and toes.)
11. Bring your awareness to your breathing and notice where you feel the breath in your body. Maybe you notice it in your nostrils. Maybe you feel it in your chest. Maybe you feel it in your belly.
12. See if you can get really quiet. Maybe you will even feel your heart beating inside your body.
13. Let learners rest in silence for a few moments.
14. Ring chime.
15. Slowly start to wiggle your fingers and toes. Take a deep breath in and stretch your arms overhead. As you exhale, relax.
16. Open your eyes and slowly return to a seated position.
17. Notice how you are feeling.

- *You can shorten the exercise by leaving out some body parts.*
- *This exercise can be practiced lying down or seated.*
- *Learners who do not feel comfortable lying on their backs may lie on their bellies or sides.*
- *Variation: Start with the feet and work up toward the head.*

REST

Mindful Listening

1. Breathing in and out mindfully, tune in to the sounds outside the room.
2. Once you feel as though you've observed all the sounds outside the room, move your awareness to the sounds inside the room.
3. After calmly noticing sounds inside the room, hear the sounds within your own body (e.g., thoughts, heartbeat, breath, digestion).

- *Optional: Repeat steps in reverse, beginning with the body and progressively expanding attention to sounds inside and then outside the room.*

BREATHE

Mindful Minute

Have learners sit in Seated Mountain. Take about one minute to have learners bring their attention to the present moment. Start by having learners bring their attention to the breath, noticing its qualities (e.g., fast, slow, warm, cool, shallow, deep). For the rest of the Mindful Minute, you can keep your attention on the breath or use one of several techniques: a quick body scan, noticing feelings, or focusing attention on sounds in/outside the room.

MOVE

Mountain/Chair Strength Sequence

1. Begin in Mountain Pose.
2. Inhale, raise your arms overhead.
3. Exhale, bend your knees and sit back as though you were going to sit in an imaginary chair.
4. Hold for 3 breaths.
5. Inhale, come back to Mountain Pose.
6. Increase hold to 5 breaths as stamina increases.

BREATHE

Ocean Breath

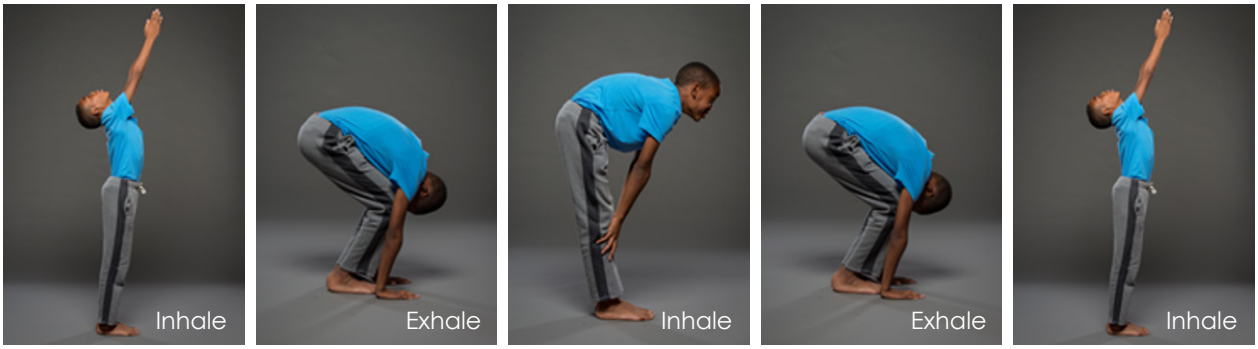
1. Inhale through your nose.
2. As you exhale, whisper the sound "ahhh" through your mouth. Repeat two or three times.
3. On the next breath, close your mouth. As you exhale, send the whisper sound through your nose.
4. See if you can find the same whisper sound in the nose on the inhalation and the exhalation.

- *Ocean Breath is created by lightly constricting the throat to create a hissing sound as you breathe in and out through the nose.*
- *If you can't find the sound at first, just keep practicing.*

MOVE

Recharge Sequence

1. Begin standing in Mountain with feet slightly apart, hands at your sides.
2. Inhale, take your arms overhead and look up.
3. Exhale, fold over your legs, bending the knees slightly to allow the hands to rest on the shins, the feet, or the floor.
4. Inhale, place hands on shins, then straighten legs and look up.
5. Exhale, fold over the legs once more.
6. Inhale, come all the way up to standing with arms overhead and look up.
7. Exhale, return to Mountain.



MOVE

Seated Mountain

1. If in a chair, sit with feet on the ground and knees pointing straight ahead. If on the floor, sit with crossed legs.
2. Place your arms straight at your sides or hands resting on side of chair or lap.
3. Sit up nice and tall and keep your shoulders relaxed.
4. Take deep breaths in and out; feel the floor beneath the feet.

MOVE

Stork

1. Begin standing in Mountain, hands at hips.
2. Keep your eyes focused on a point 3 feet in front of you.
3. Stand firmly on the left foot.
4. Inhale, pull up the right knee and hold it with your right hand.
5. Take 3 to 5 breaths here.
6. For a challenge, on the exhale open the knee out to the right and turn your gaze over your left shoulder. Take 3 to 5 breaths here.
7. Inhale, come back to center.
8. Exhale, return to Mountain pose.
9. Repeat on the opposite side.

- *If learners are wobbly, as they stand firmly on the left foot they can keep right toes on the ground for support, with right knee bent. If they feel steady, they can lift the right foot up for one breath to start building balance.*

BREATHE

Take Five

1. Lift 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 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 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.*

REST

Taking in the Good

1. Think of one thing from the day that you feel good about, and be specific—for example, you listened, you were more creative, you lent a helping hand, someone smiled at you, etc.
2. Hold on to that memory for the next 30 seconds. Remember it in as much detail as you can.
3. Allow the feeling associated with the memory to sink into your mind. Act as a sponge, absorbing the memory and the feeling together.

Glossary

ADRENALINE:
a hormone secreted by the adrenal glands, especially in conditions of stress, increasing rates of blood circulation, breathing, and carbohydrate metabolism and preparing muscles for exertion

AUTONOMIC NERVOUS SYSTEM:
the part of the nervous system responsible for control of the bodily functions not consciously directed, such as breathing, the heartbeat, and digestive processes

BRAIN STEM:
the central trunk of the mammalian brain, consisting of the medulla oblongata, pons, and midbrain and continuing downward to form the spinal cord

CORTISOL:
a steroid hormone produced by the adrenal cortex

DYSREGULATION:
abnormality or impairment in the regulation of a metabolic, physiological, or psychological process

EMOTIONAL REGULATION:
a complex process that involves initiating, inhibiting, or modulating one's state or behavior in a given situation

HEALTH:
the state of being free from illness or injury in the body

LIMBIC SYSTEM:
a complex system of nerves and networks in the brain, involving several areas near the edge of the cortex concerned with instinct and mood, that controls the basic emotions (fear, pleasure, anger) and drives (survival)

MIND:
the element of a person that enables them to be aware of the world and their experiences, to think, and to feel; the faculty of consciousness and thought

MINDFULNESS:
the quality or state of being conscious of or aware of something

MINDFULNESS MUSCLE:
an individual's capacity to direct and redirect attention and awareness

NEUROPLASTICITY:
the brain's capacity to change and rewire according to environment and experience

PARASYMPATHETIC NERVOUS SYSTEM:
the branch of the autonomic nervous system that serves to lower the heart rate, increase intestinal and glandular activity, and relax muscles

PREFRONTAL CORTEX:
the cerebral cortex that covers the front part of the frontal lobe of the brain

STRESS:
pressure or tension exerted on a material object; a state of mental or emotional strain resulting from adverse or very demanding circumstances

SYMPATHETIC NERVOUS SYSTEM:
the branch of the autonomic nervous system that serves to accelerate heart rate, constrict blood vessels, and raise blood pressure

VAGUS NERVE:
either of the tenth pair of cranial nerves, supplying the heart, lungs, upper digestive tract, and other organs of the chest and abdomen

WELL-BEING:
the state of being comfortable, healthy, or happy

WELLNESS:
the state or condition of being in good mental and emotional health

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