

Start with the Heart

Connect 6-8

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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.



START WITH THE HEART: CONNECT weaves Brain Breaks into foundational lessons from the original Pure Power curriculum for grades six through eight. 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 how our own well-being exists in relationship with the well-being of the communities to which we belong. 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 selfawareness 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
- Homeroom classes

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: CONNECT** 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

What is Stress?

GUIDING QUESTIONS

What does physical stress feel like in the body? In the mind?

What does mental stress feel like in the body? In the mind?

OBJECTIVE

Students will understand and articulate the meaning of healthy stress.



- The experiential exercises (Brain Breaks) are as important as the content in this course.
- 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 (e.g., 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 students 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

challenge health resilience stress wellness



BRAIN BREAKS

Seated Mountain Mindful Minute Belly-Heart Breathing Chair Sunrise 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. The upright position ensures that learners can fully expand the lungs to take nice, deep breaths.

🔅 MINDFUL MINUTE

Active Engagement

Let's take a moment and talk about stress. What are some things that stress you out? (List student responses on a whiteboard or chart.)

Take a look at all of these responses. Think about something stressful to you. Now notice: Where do you feel that stress in your body?

Take a few responses from students. 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 take a moment to think of something that brings joy to your life. (List student responses on a whiteboard or chart.) As you think of something that brings you joy, where do you feel joy in your body?

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

🔇 BELLY-HEART BREATHING

Introduce the idea of nasal breathing to the students. For all of our exercises, we will breathe in and out the nose unless otherwise instructed.

Teach

Health and wellness practices offer an effective method for stress management. In general, exercise encourages circulation of the blood and brings oxygen to every cell of the body, including our brain cells, making it one of the best ways to flush out excess stress hormones. Our breathing techniques reduce the feelings of anxiety and upset that often accompany a sense of being stressed out, and taking time to rest helps us listen in to what we feel and need.

Some stressful or challenging circumstances can actually give us the opportunity to set the bar higher, recalibrate our minds and bodies, and develop resilience to conditions that used to knock us off course.¹

Through changing our perception of stress, we can take a different approach to the things that usually make us feel stressed out, like homework, tests, and social pressures. We might still feel challenged by these aspects of daily life, but we can rise to the challenges and open ourselves to the possibility of learning and growing.

Even though some stressors can help us grow and become stronger, it is still important to learn ways to manage our stress. This next exercise is an example of combining breath and movement to release some of the stress in your body. Let's see how we feel after giving it a try.

Brain Break 4

😳 CHAIR SUNRISE TWIST

For Chair Sunrise Twist, you are introducing the concept of connecting breath and movement. Remind students to initiate each movement with an inhale or an exhale.

OPTIONAL GROUP ACTIVITY

Have students work in pairs or small groups to reframe some of the stressors in their lives. Can they choose one or two stressors and explore how that stressor might be helping them to grow? Come back together and have groups share any learnings with the larger group.

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

Over the next few days, when you notice your body exhibiting signs of stress, experiment with pausing and taking a few breaths. Notice if this changes how you are feeling in the moment.

¹ Firdaus Dhabhar, "Good stress, bad stress," Stanford Medicine News-letter, Stanford Medicine, 2012. http:// stanfordmedicine.org/commu

Lesson Two

Breath Awareness

GUIDING QUESTION

How does it feel in your body when you pay attention to your breath?

OBJECTIVE

Students will be able to list the benefits of nasal breathing.

E 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.



mindfulness mindfulness muscle



BRAIN BREAKS

Mindful Minute Belly-Heart Breathing Ocean Breath Chair Cat/Cow Guided Rest

🔇 MINDFUL MINUTE

Connect

Last time, we talked about stress—what stresses us out, where we feel stress in our bodies, and how, in the right amount, stress can help us grow. We also introduced our Brain Break exercises, which are designed to help us manage the stress in our lives.

Today we are going to learn more about one of our most important wellness tools. It is a simple activity that will help you focus, calm down, and relax, but it also allows you to "hack into" your nervous system and your brain by teaching you how to override strong emotions, like anger or fear. Can anyone guess what it is? (The answer: breathing).

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 might feel a lifting sensation or that they are getting taller?)

@ 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?)

8 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

Breathing is, without a doubt, the one thing we do all the time that we rarely think about. 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. It is occurring all the time. The breath is directly connected to the nervous system (brain, spinal cord, and peripheral nerves), as well as to 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.

Today we are going to learn about some other benefits of deep breathing specifically, deep breathing through the nose.

- Nasal breathing filters dust and impurities from the air.
- Nasal breathing warms air to body temperature.
- The diaphragm, which is a sheet of muscle underneath the lungs that serves as the primary muscle of breathing, is more easily controlled.
- Conscious breathing gives you control over a part of your brain that is normally on automatic. You can begin to hack your own brain and nervous system by regulating your breathing.
- Slowing the breath can help relieve stress and control anger or other strong emotions. It can help us stop and think before we act.
- Extending the exhale induces relaxation, as does relaxing the tongue and surrounding facial muscles.

To help focus our breathing while we do movement exercises, we are going to learn a technique called Ocean Breath. We use this particular breathing technique in all of our movement exercises.

Brain Break 3

OCEAN BREATH

Use any or all of the following exercises to introduce Ocean Breath.

EXERCISE 1

Inhale through your nose. As you exhale, whisper the sound "ahhh" through your mouth. Repeat two or three times. On the second or third time, close your mouth, exhale, and send the whisper sound through your nose.

EXERCISE 2

Pretend you are fogging a mirror while breathing through your mouth. Then pretend you are fogging a mirror while breathing through your nose.

EXERCISE 3

Bring your hands to your ears. Press gently so that outside sounds are muffled. Concentrate on the sound of your breath as you inhale and exhale through your nose. You might notice that what you hear is similar to the sound of a seashell. (Fun fact: The cochlea is the part of your ear that enables you to hear this sound. The name is derived from the Latin for "snail shell," because it is spiral-shaped, like a snail shell!")

Teach

The activities we are learning help us develop mindfulness. Mindfulness can be defined as "the ability to notice what is happening as it is happening, with a sense of kindness and curiosity." 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.

In our Brain Breaks exercises, we try to notice when we have become distracted and make a conscious choice to bring our attention back to a particular point of focus. That point of focus more often than not is the breath. (Posture, gaze, or feelings are other examples of points of focus.) 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

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 4

CHAIR CAT/COW

Take feedback from learners. Did you notice a connection between the natural movement of the breath and the movement of the body in cat/cow?

Our next Brain Break is a relaxation exercise. We are going to simply use the power of our attention to help our bodies relax. Let's give it a try.

Brain Break 5

🔇 GUIDED REST

Learners can allow the breath to return to normal during Guided Rest; there is no need to control the breath.

It is still beneficial to breathe in and out the nose during Guided Rest.

Link

Today we looked at the benefits of nasal breathing. We introduced the term "mindfulness" and noticed how when we are mindful of our breath it helps us to observe the state of the body and of the mind. Next time, we will take a look at what is going on in our nervous system when we are relaxed and when we are stressed.

Home Practice

Over the course of your day, practice noticing when you breathe quickly or slowly. If you find yourself worried or stressed, see if you can use steady breathing to release tension and ease your mind.

^{1 &}quot;Cochlea," Merriam-Webster's Collegiate Dictionary. https://www.merriam-webster.com/dictionary/cochlea.

² Feldman, Greeson, 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/.

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

Students will be able to 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 request feedback every time.
- Remind learners to connect their breath with their movements as they practice Recharge Sequence. This will help develop the mindfulness muscle.



VOCABULARY

autonomic nervous system sympathetic nervous system parasympathetic nervous system



BRAIN BREAKS

Mindful Minute Easy In, Extend Out Recharge Sequence Guided Rest

Connect

Last time, we defined mindfulness and learned the benefits of nasal breathing. Does anyone recall the definition of mindfulness?

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

Remind learners that extending the exhalation helps the body to relax.

Teach

How do you feel after Easy In, Extend Out? If you feel calmer or more relaxed, there is a physiological reason for that. You just activated your parasympathetic nervous system.

Let's back up a little. 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 (i.e., working, going to school, getting stuff done, etc.). The sympathetic nervous system also rules our fight, flight, or freeze 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, flight, or freeze response, 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.

🔅 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

Link

Today, we learned about the sympathetic and parasympathetic branches of the autonomic nervous system. Our wellness exercises help us to activate our parasympathetic nervous system, which helps our body to repair and recover (rest and digest) after expending energy externally via the sympathetic nervous system. Next time, we will dive deeper into the nervous system and look at some parts of the brain that influence how our body handles 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?

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.



Designua. (2021, June 04). Sympathetic And Parasympathetic Nervous System Stock Vector – Illustration of connection, central: 220497978. Retrieved from https://www.dreamstime.com/sympathetic-parasympathetic-nervous-system-difference-diagram-connected-image220497978

Lesson Four



GUIDING QUESTIONS

What is the main responsibility of the hippocampus? Amygdala? Prefrontal cortex?

What does it mean to self-regulate?

OBJECTIVE

Students will be able to describe the roles of the hippocampus, the amygdala, and the prefrontal cortex.

TEACHER TIPS

- Explain that the repetition of the Brain Breaks is intentional. We learn these types of exercises 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.



Connect

Last time, we learned how Brain Breaks can help our bodies move out of the fight, flight, or freeze response ruled by the sympathetic nervous system and into a more calm and peaceful state ruled by the parasympathetic nervous system. Today we are going to learn about three important parts of the brain: the hippocampus, amygdala, and prefrontal cortex ("PFC" for short), and how they affect our ability to respond and react to the stressors in our lives.

Brain Break 2

C EASY IN, EXTEND OUT

Teach

Hippocampus comes from the Greek word for "seahorse."¹ You have one seahorseshaped hippocampus in each hemisphere of the brain. The hippocampus can be compared to the brain's scrapbook or the hard drive of a computer. It stores information that you want (and sometimes don't want) to remember, such as your multiplication tables, the names of your classmates and teachers, or an upsetting argument with a friend. The hippocampus transfers information from your short-term memory to your long-term memory. It also makes meaning out of stored memories. The hippocampus tries to make sense of new information by comparing it to stored memories. The hippocampus stores factual memories, like the date of your best friend's birthday. The hippocampus changes as you learn new things.

Amygdala comes from the Greek word for "almond" because of its almond shape.² You have one amygdala in each hemisphere. The amygdala helps keep you safe. It is constantly on the lookout for danger and reacts quickly, enabling you to run away, fight back, freeze, or collapse in fear. It is a master decoder of emotions and threatening stimuli. The amygdala focuses on emotional memories, like when you recall making a wish as you blew out your birthday candles or when your pet dog passed away. When a memory is recalled from connections to the hippocampus, the associated emotions (whether positive or negative) are experienced with it. The amygdala helps create emotions that motivate you to move in response to what is happening in that moment. (Connect the word "emotion" with "motion.")

🔅 RECHARGE SEQUENCE

Teach

The prefrontal cortex, often referred to as the PFC, is located at the front of the brain. (Highlight the word "front" in "prefrontal.")

It controls intense emotions and impulses. It is sometimes referred to as the "seat of good judgment" or the "thinking brain," because it allows you to pause and think before reacting. The PFC helps you self-regulate, or control your behavior, by guiding you to make thoughtful, intelligent decisions.

It is involved in the final step of confronting danger. After the initial automatic emotional reaction from the amygdala, your PFC helps you plan the smartest way to get out of danger. It helps you solve complex problems and choose between right and wrong, even when faced with a challenging situation.

You can think of the amygdala as the brain's inner security guard, the hippocampus as the memory bank, and the PFC as the kind leader or captain steering the ship at the front of the brain. Deep breathing, especially abdominal breathing, helps activate the PFC's power to think clearly and calm the amygdala's impulsive, emotional reactions.

OPTIONAL GROUP ACTIVITY

Provide students with several scenarios and ask them which part of the brain that would be activated. Have students justify their answers. Model the first example and then practice several scenarios as a class. Finally, have students discuss a few scenarios with a partner before a whole-class share.

Sample scenarios:

- You are swimming in the ocean and see a jellyfish swimming near you. (Amygdala)
- You have to memorize the words of a song for a chorus concert. (Hippocampus)
- 3. You need to plan what to pack for an overnight field trip. (PFC)
- You jump up in fright when someone unexpectedly screams "Boo!" behind you. (Amygdala)
- 5. You need to organize the steps for solving a complex math problem. (PFC)
- You need to remember the route to walk home from school. (Hippocampus)
- 7. You are being chased in a competitive game of freeze tag. (Amygdala)
- You need to recall the route you have taken many times to your friend's house. (Hippocampus)
- You have taken three mindful breaths and now must decide how to respond to an upsetting situation. (PFC)
- You are folding an origami crane without any instructions. (Hippocampus)

GUIDED REST

Link

Today we learned about the roles and relationships among three important parts of the brain: the hippocampus, the amygdala, and the prefrontal cortex. Although each part has different responsibilities, all three parts use neurons to communicate with one another. You can remember the hippocampus as a bank where memories are stored; the amygdala as the brain's security guard or fire alarm, alerting us to potential danger; and the PFC as the kind, wise leader who guides us to make thoughtful, intelligent decisions.

Home Practice

See if you can bring your awareness to the play between the amygdala and the prefrontal cortex or the play between emotional response and reasoning in dayto-day life. When are your words or actions motivated by strong or sudden emotion? When are your words or actions motivated by reason and rationality? Are there particular people or circumstances that set the amygdala or the prefrontal cortex in motion? 1 "Hippocampus," *Merriam-Webster's Collegiate Dictionary*. https://www.merriam-webster.com/ dictionary/hippocampus.

2 "Amygdala," Merriam-Webster's Collegiate Dictionary. https://www.merriam-webster.com/ dictionary/amygdala.

BRAIN DIAGRAM





Brain-Breath Connection

GUIDING QUESTION

What tools do you have to calm your amygdala and train it not to overreact?

OBJECTIVE

Students will be able to articulate and demonstrate how the breath can calm their amygdalas so they may effectively communicate and work with the prefrontal cortex to make thoughtful, intelligent decisions.

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.



🔅 MINDFUL MINUTE

Connect

Last time we worked together, we learned about the roles and relationships among three important parts of the brain: the hippocampus, the amygdala, and the prefrontal cortex.

- The hippocampus is like a bank where memories are stored.
- The amygdala is like the brain's security guard or fire alarm, alerting us to potential danger.
- The PFC is like the kind, wise leader who guides us to make thoughtful, intelligent decisions.

Today, we are going to continue exploring the connections in the brain, with a particular focus on the role of the breath.

Teach

Although the amygdala's job is to keep us safe, it sometimes thinks we are in danger when we are not. If it senses a threat, the amygdala sends oxygen to our arms and legs in preparation for a fight, flight, or freeze response, which means less oxygen for the PFC, the thinking part of our brain. Less oxygen to the PFC makes it difficult to think clearly and make smart decisions.

What might be a possible solution to get more oxygen to our brain? Breathing!

Brain Break 2

TAKE FIVE

Teach

Have you ever experienced your protective amygdala sounding off its alarm and reacting to a situation, only to later discover that it made a mistake and overreacted?

Provide an example. Explain how when we're calm, the amygdala sends information to the PFC (the brain's reasoning center). Highlight how the PFC is responsible for thinking about and focusing our thoughts, predicting the possible outcomes of our actions, and deciding what is right or wrong. The PFC also supports our learning and our ability to work toward achieving our goals.

Describe how when we practice mindful breathing, we have the power to override the body's stress response and use our PFC to Plan with Focus and Care. The amygdala is programmed to react quickly and impulsively when we are frightened, angry, or stressed. If we can stop and take three mindful breaths, it gives the amygdala a chance to settle down and communicate with the PFC, which can decide if the situation warrants such a fearful or angry response. It gives us an opportunity to think before we react.



Active Engagement

Teach students Dr. Dan Siegel's "handy" model of the brain to review the parts of the brain. In this model, one fist represents both hemispheres of the brain. Students each raise one hand, palm facing them, with the thumb curled into the palm. The thumb represents the limbic system, the emotional system in the brain, of which the amygdala is part. 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.¹

The brain operates best when all of its parts are in communication with one another. During stressful times or when you are experiencing powerful emotions, mindful breathing can help bring the PFC back online and help us to become more responsive to a situation instead of reacting based only on powerful emotions or stress.

Brain Break 4

OPTIONAL INDIVIDUAL ACTIVITY

Recall a time when you felt so overwhelmed with emotion that you said or did something you did not mean to say or do. If you could rewind and go back in time, how would you help your amygdala have a conversation with your hippocampus and your PFC? Write this conversation in the form of a journal entry, play, interview, or comic strip.

Link

Today we journeyed into the brain to examine how the prefrontal cortex influences our ability to plan and make intelligent decisions, even when faced with a difficult situation. The practice of mindful breathing helps bring all parts of the brain into communication with one another. With consistent practice, over time, the brain can learn to be less reactive and instead respond more thoughtfully in challenging situations so your kind leader, or PFC, can successfully guide you.

Home Practice

This week, pick a time to practice one of our breathing exercises (Belly-Heart Breath; Ocean Breath; Easy In, Extend Out; or Take Five) every day. As we practice these exercises during non-stressful times, we develop our mindfulness muscle and, over time, increase our ability to be responsive in stressful situations.

¹ Daniel J. Siegel, "Hand Model of the Brain," 2017. https://drdansiegel.com/hand-model-of-the-brain/.

BRAIN DIAGRAM





The Anger Iceberg

GUIDING QUESTION

How do strong emotions affect how you react in different situations?

OBJECTIVE

Students will be able to identify personal anger triggers and choose effective, constructive ways to cope with anger.



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.¹



Connect

Last time we worked together, we journeyed deeper into the brain to examine how the prefrontal cortex influences our ability to plan and make intelligent decisions, even when faced with a difficult situation. We discovered that through mindful breathing, we can keep the PFC online and support the brain to function at its best. With consistent practice, over time, the brain can learn to be less reactive and to instead respond more thoughtfully in challenging situations. Today, we are going to explore the powerful emotion of anger.

Brain Break 2

🔅 EASY IN, EXTEND OUT

Teach

Use the questions below² to help guide a whole-class discussion around anger:

- What makes you angry? Include small, minor annoyances and big things that make you furious.
- How do you know when you are angry?
- Where in your body do you feel anger? List your physical symptoms.

 What is the first sign of anger you experience? List the early warning signs that let you know you are becoming angry.

As you facilitate the discussion,

- Reinforce the idea from lesson one that we experience emotions/stress in our bodies.
- Remind learners that the amygdala is the part of the brain associated with emotions like fear, anxiety, and anger.

Brain Break 3

🔅 RECHARGE SEQUENCE

Learners can use Ocean Breath when they do Recharge Sequence.

Teach

An iceberg is an enormous piece of floating ice found in the coldest parts of the ocean. Only the top 10 percent of an iceberg can be seen above the surface, which means that the majority of it is hidden from view. Anger can be compared to an iceberg. Many times, our anger represents only a small part of what we are actually feeling. It is a surface emotion, with the deeper emotion or emotions hiding below the surface. When you experience anger, it is important to ask yourself, "What am I feeling other than anger?" Feelings that may be concealed beneath the surface include humiliation, guilt, fear, jealousy, anxiety, frustration, worry, insecurity, rejection, helplessness, and feeling disrespected. Share one of these possible deep emotions and then have students contribute their own. Record answers on the "Anger Iceberg" chart (on the portion of the iceberg submerged in water).

Since everyone experiences different underlying emotions, each person's Anger Iceberg might be different. Learning about these deeper emotions makes you more aware not only of your own feelings but also of the feelings of others, and this awareness teaches compassion and empathy. taking three mindful breaths, or walking away and dealing with the situation once you have calmed down.

Link

Sometimes a strong emotion like anger is only the tip of the iceberg, with deeper emotions hidden beneath the surface. Remember, as you practice a specific state, such as anger or calm, it becomes a trait.

Home Practice

As you move through your day, can you notice the earliest signs of anger or another strong emotion when it arises?

Brain Break 4

OPTIONAL GROUP ACTIVITY

Have students work in pairs or small groups to respond to the question What can you do to cope with anger in an effective, healthy way when you experience the early warning signs of anger?

Have pairs or groups share their responses with the class. Chart the responses on a large piece of paper, chalkboard, whiteboard, or Smart Board.

Some examples of healthy ways to cope with anger include writing in a journal, releasing anger through physical activity (e.g., dance or sports), talking to someone, 1 Vasundhara Sawhney, "It's Okay to Not Be Okay," November 10, 2020. https://hbr.org/2020/11/its-okay-tonot-be-okay.

2 Inner Health Studio, Anger Management Worksheet. http://www. innerhealthstudio.com/angermanagement-worksheets.html.



Lesson Seven

Mindfulness of Body, Breath, and Mind: STOP

GUIDING QUESTIONS

What is the difference between a reaction and a response?

How do you know, in your body, when you are experiencing a strong reaction to an experience or situation?

OBJECTIVE

Students will be able to articulate the difference between "responding" and "reacting" to a situation.

TEACHER TIPS

 As you introduce STOP to learners, emphasize the importance of practicing the skill while feeling neutral. This builds the mindfulness muscle over time so that when learners are feeling powerful emotions, their bodies and brains are used to pausing, taking deep breaths, and observing what is going on internally.



none



BRAIN BREAKS

Mindful Minute Take Five Brain Balance Sequence STOP

Connect

Last time, we explored anger. We examined how anger feels in our bodies, what its early signs are for each of us, and how powerful emotions like anger are often only the tip of the iceberg, with deeper emotions hidden beneath the surface. This week we are going to learn a strategy that will help us notice the early signs of powerful emotions and catch and repattern reactive tendencies.



Teach

When we feel provoked or triggered by a person or situation, our common default is to react.

A reaction can be thought of as an unconsidered or abrupt behavior or action. Often a reaction springs forth from a sudden strong emotion or an accumulation of strong, unexpressed emotions. In mindfulness practice, we are learning how to identify and work with strong emotions before they become reactions. When we feel intense emotions, we might experience physical clues: shaking, heat in the face, tight muscles, rapid heartbeats, stomachaches, the urge to hit or kick or stomp. Mindfulness techniques offer us a chance to respond rather than react. When we respond to a situation, it means we are aware of our bodies, our breath, and our minds, and we are better equipped to behave or act in a way that will not cause further confusion, difficulty, or harm.

Brain Break 3

S BRAIN BALANCE SEQUENCE

Teach

STOP is the gap between a reaction and a response. It takes the split second before we say or do something and expands it so that we give ourselves time to make a mindful choice. The letters that make up STOP stand for: Stop. Take a few breaths. Observe the sensations in your body. Proceed with awareness.¹

Let's break down STOP step-by-step.

- The first step of STOP teaches us to form the habit of taking a pause when we notice we are feeling a strong emotion. This can be the most difficult step!
- The second step, take a few breaths, helps calm the amygdala and increases communication between the amygdala and the PFC.
 - Any mindful breathing, in and out the nose, will work for STOP.
 - Easy In, Extend Out extends the exhalation, which is calming.

- Belly-Heart Breathing encourages abdominal breathing, which is also calming.
- 3. To explain the third step, observe the feelings in your body, guide students to notice what they are feeling in their bodies. Try to get students to be detailed in their observations. Remind learners of the lessons where we have examined what stress, joy, and anger feel like in the body.
- 4. The fourth step of STOP, proceed with awareness, helps students integrate mindfulness into good decision making. Once they have calmed themselves through taking three mindful breaths and have taken in the information about their feelings from their observations, they will be able to make more mindful choices about how to move forward when they experience a strong emotion.

Even though STOP is designed to help us when we feel powerful emotions, it is important to practice STOP at times when we are feeling calm or neutral. This way, when we are in a more charged situation, our bodies and brains will be accustomed to pausing, taking deep breaths, and observing what is going on internally before proceeding. Let's give STOP a try right now.

Brain Break 4

STOP

Even though students may not be experiencing a powerful emotion in the moment, they can still observe the feelings in the body and make informed choices about how to proceed.

Some simple examples of practicing STOP when feeling neutral would be:

- Observing they are thirsty, then taking a drink of water.
- Observing they are anxious about an assignment, then choosing to work on the assignment instead of doing something social.
- Observing they are feeling sad about an interaction with a friend, then planning to have a conversation with the friend to address it.

Link

Now that we have added STOP to our tool kit, we'll be expanding our discussion of reaction versus response with next week's conversation on how habits shape our brain and how our brain grows and changes in response to environment and experience.

Home Practice

Keep track of how many opportunities you have to use STOP. These opportunities needn't be big or significant. Maybe STOP comes in handy when you hit a mental wall while working on homework or taking a test, during a tense conversation with a friend or family member, or in the midst of a competitive game when your energy and attention have started to wane.

¹ Elisha Goldstein, "Stressing Out? S.T.O.P." Mindful, May 29, 2013. http://www.mindful.org/stressing-out-stop/

Lesson Eight

Habits and Neuroplasticity

GUIDING QUESTION

How does neuroplasticity contribute to the formation of new habits?

OBJECTIVE

Students will be able to define neuroplasticity by interpreting the statement "Neurons that fire together wire together."



- Help learners make the connection between neuroplasticity and practicing Brain Breaks by drawing their attention to how what was once unfamiliar (the exercises) now likely feels more familiar.
- That familiarity comes from connections that have developed in their brains as they have repeated the exercises over time. The more the exercises are repeated, the stronger the connections will grow.
- This is why we practice Brain Breaks regularly, not only when we feel upset. We are training our brains to respond from a state of calm.



VOCABULARY

neuron neuroplasticity neurotransmitters



BRAIN BREAKS

Mindful Minute Chair Sunrise Twist Brain Balance Sequence STOP

Connect

Last time, we learned the technique STOP to help us pause and respond mindfully to challenging situations. As we integrate techniques like STOP and our other Brain Breaks over time, we are increasing our ability to respond instead of react to the stressors in our lives. In this lesson we will discuss habits and how they are interwoven with a neurological process called neuroplasticity.¹

Teach

The human brain is made up of neurons, or brain cells, which communicate by sending messages to one another. Messages are passed on, or transmitted, from neuron to neuron through special chemicals called neurotransmitters. A neuron is similar to an on-off light switch. It is either "off" during its resting state or "on" when it is sending, or transmitting, a message to neighboring neurons. You are able to learn and remember things because your neurons are constantly making and strengthening connections with one another. Learning occurs as more and stronger connections are made between neurons.

Below, you'll see several photographs of neural circuitry in the brain.² The leftmost image portrays the neural circuitry of a newborn. The second panel shows the

Brain Break 2





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 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

> Brain Break 3 O BRAIN BALANCE SEQUENCE

Teach

There is a saying inspired by the work of Dr. Donald Hebb, "Neurons that fire together, wire together." Each of your experiences, including your thoughts, feelings, and sensations, becomes rooted in the network of brain cells that produce that experience. The connection between these neurons is strengthened every time you repeat a particular thought or action. This is a good thing when you learn something useful, like remembering your morning routine to get ready for school or the route from your home to your friend's house. The strengthening of neural connections is not so great when you repeat bad habits, such as being unkind to your classmates, being unkind to yourself through negative self-talk, or becoming super stressed out every time you have to take a test.

The more we think calming and relaxing thoughts, the more we feel calm and relaxed. The more we think stressful thoughts, the more stressed out we feel. The brain is trained by what we think because of neuroplasticity. We become what we repeatedly practice. This means that if we consistently practice reacting with anger and worry, over time those will be our strongest neural and behavioral pathways when we are under stress. The good news is that because of the brain's amazing ability to grow and change, you can rewire it to have healthier responses by practicing mindfulness. You can train your brain to respond to stress in a more calm and relaxed manner.

Brain Break 4

Link

Today we learned about training our brains through practice and repetition to help us become better at things we want to improve. Every moment is an opportunity to shape and grow your brain. Your habits and experiences, which include what you learn, how you think, and your behavior, gradually mold your brain, just like a sculptor molds clay. Mindfulness practice helps you take care of your brain and grow to your full potential by training your attention to focus on what you choose.

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 it will become easier to perceive habits the more you actively look for them.

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

¹ Daniel J. Siegel, Brainstorm: The Power and Purpose of the Teenage Brain. New York 2013: Penguin Publishing Group.

Lesson Vine



GUIDING QUESTION

What are examples of healthy ways to relax?

OBJECTIVES

Students will experience different relaxation techniques. Students will describe the benefit of incorporating rest and relaxation into their day.

TEACHER TIPS

- Rest can be challenging for learners. Like any of the Brain Breaks, it takes practice.
- If learners fidget or have trouble staying still, encourage them to bring their attention to the experience they are having with kindness and a sense of curiosity.
 A manipulative such as a pipe cleaner or a smooth stone can work well to give additional sensory input while a learner is resting.
- Rest can feel vulnerable for some learners, especially if lying down. Be sure to allow learners to rest on their side or belly if lying on their back feels uncomfortable to them.



Connect

Last time, we learned about neuroplasticity, which is the idea that whenever we repeat an action or experience, we form a new neural connection in the brain. With enough repetition, this connection becomes fortified. As we repeat our health and wellness exercises, we are training our brains to access a state of calm, even in stressful situations. Today we will discuss the importance of incorporating rest into your daily routine as a way to manage the stressors in your life.

Brain Break 2

Teach

Not all stress is bad. An example of positive, healthy stress may be having butterflies in your stomach or sweaty palms before having a performance or delivering a presentation to your classmates. This type of stress, in moderation, can sometimes motivate you to prepare well and perform better. A little bit of stress can help you rise to a challenge—for example, being nervous about an upcoming exam can encourage you to study for it harder. But too much stress for long periods of time is not healthy. Stressing out too much over a test can make it difficult to concentrate and remember the necessary information. Stress and stressors (the things that cause stress) are not the same for everyone. Something that causes you stress might not cause your friend stress, and vice versa.

It is important for our overall well-being to have some strategies in place to manage the stress in our lives. These strategies won't make the stressors go away, but they will enable us to better handle the stress we experience. Since we know our lives will always have some amount of stress in them, it is good to integrate these simple strategies into our daily routines.¹ The strategies we are focusing on in class are breathing, movement, and rest. These are not the only stress management strategies, but they are simple and effective. And, based on what we know about neuroplasticity, we know that the more we practice the strategies, the easier it becomes for us to respond instead of react when in stressful situations.

Brain Break 3

Teach

Today we will explore the Guided Rest exercise in a slightly different way. We have learned that we experience emotions in the body. Stress can make our shoulders feel tight or our stomach feel upset. Anger can make our hearts beat faster and our faces flush, and we might experience an urge to lash out. Each of us has our own way of experiencing strong emotions in the body. In general, when we feel strong emotions like anxiety, worry, fear, or anger, we can become stiff or tense. When we are happy and relaxed, our bodies feel looser and more open. With the next exercise, we will try to feel the difference in our bodies between tension and relaxation.

Active Engagement

Guided Rest: Progressive Muscle Relaxation

We are going to try a guided rest using a technique called Progressive Muscle Relaxation. I will talk you through tensing and releasing different parts of the body. This process helps us to release tension we sometimes don't realize we are holding. When you tense your muscles, be sure not to overdo it! Let's get started.

- If space permits, have students lie down on mats or on the floor.
- Otherwise, learners can sit in a comfortable position, leaning back in the chair, or, if they choose, crossing their arms on the desk and letting their head rest on their forearms in front of them.
- As you lead the Progressive Muscle Relaxation exercise, read the instructions slowly and pause where indicated
- Whether you are sitting up or lying down, find a comfortable position. Your eyes can be closed or softly open.
- Start by tensing the right toes, foot, ankle, calf, shin, knee, and thigh, and then tense the whole right leg. Hold here for a few breaths, keeping the right leg tense and the rest of the body relaxed. (Pause). Now relax the leg.

- Now tense the left toes, foot, ankle, calf, shin, knee, and thigh, and then tense the whole left leg. Hold here for a few breaths, keeping the left leg tense and the rest of the body relaxed. (Pause). Now relax the leg.
- Now tense the right fingers, hand, wrist, forearm, and elbow, all the way up to the right shoulder. Hold here for a few breaths, keeping the right arm tense and the rest of the body relaxed. (Pause). Now relax the arm.
- Now tense the left fingers, hand, wrist, forearm, and elbow, all the way up the the left shoulder. Hold here for a few breaths, keeping the left arm tense and the rest of the body relaxed. (Pause). Now relax the arm.
- 6. Now tense the whole body, starting with toes and fingers, now tense the legs and the arms, the belly, the chest, the back, the shoulders and the face. Hold here for a few breaths, keeping the whole body tense. (Pause). Now relax the whole body.
- Take a few moments to rest in silence, just noticing how the body feels. (Pause for at least 30 seconds).
- When you are ready, slowly open your eyes. If you are lying down, make your way back into a comfortable sitting position.

Invite students to share their experiences.

The next exercise uses our sense of hearing to bring our attention into the present moment. Notice how you feel before we start the exercise, and we will check in again at the end.

INDFUL LISTENING

Have learners perform Mindful Listening in a seated position.

As you introduce Mindful Listening, take learners through the following steps. A shortened version of the exercise is listed in the appendix.

LAYERS OF SOUND EXERCISE

 Sit up comfortably with a tall spine. Softly close your eyes or simply bring your gaze down. First, we are going to open our ears wide and stretch our hearing beyond this classroom to listen for sounds far away from us. Listen for the most distant sound you can perceive. You do not need to identify the sound or what is making the sound.

Give students about 10 seconds of silence.

 Now we are going to zoom in our hearing to observe sounds close to us in this room. Without moving, allow your ears to explore the sounds around the room.

Give students about 10 seconds of silence.

3. Now that we have explored the room's sounds, we are going to tune in to the sounds of our bodies.

Give students about 10 seconds of silence.

4. Slowly open your eyes.

Ask these questions:

- What sounds did you notice?
- Which sounds did you like or dislike?
- Did you find listening to the sounds farthest away or the sounds your body makes most calming? Why?

OPTIONAL GROUP ACTIVITY

Have students work in pairs or small groups to brainstorm answers to the following questions:

- What are some healthy ways to relax?
- When in your day can you incorporate some time to rest and relax?
- What would help you to make sure that you actually take the time to rest and relax (e.g., checking in with a friend, using a calendar reminder, etc.)?

Link

Today, we experimented with different ways to help our bodies release stress and relax. We practiced breathing, movement, progressive muscle relaxation, and Mindful Listening. Stress-management techniques, like the ones we explored today, work best when they are regularly practiced, not just during times of extreme stress. Remember, practice means progress!

Home Practice

Try to notice when your stress response kicks in during the day. Remember that your secret weapon against stress is mindful breathing. When you start to sense familiar stress signals, focus on long, slow exhales and notice how you feel.

¹ Jim Loehr and Tony Schwartz, "The Making of a Corporate Athlete," *Harvard Business Review*, January, 2001. https://hbr.org/2001/01/the-making-of-acorporate-athlete.

Lesson Ten

Homeostasis and Stress

GUIDING QUESTIONS

How does it feel to be in balance? How does it feel to be imbalanced?

OBJECTIVE

Students will be able to identify external factors that affect how they feel internally.

E TEACHER TIPS

• As students learn Anchor Breathing, remind them that it is expected that their minds will wander as they engage in the exercise. Their job is simply to notice, with a sense of kindness and curiosity, that their mind has wandered, then bring the attention back to the anchor.





BRAIN BREAKS

Mindful Minute Anchor Breathing Tree Guided Rest

Connect

Last time, we explored the practice of rest and discussed the importance of building rest and relaxation into our daily routine as a way to manage the stress in our lives. In this lesson, we will discuss the difference between feeling balanced and imbalanced in our daily lives, and we will explore these feelings through movement and breath.

Brain Break 2

Teach

Homeostasis is "the tendency of the body to seek and maintain a condition of balance or equilibrium within its internal environments, even when faced with external changes." Homeostasis is not a static state, but rather something we are constantly moving toward or away from. For example, our bodily systems will naturally attempt to maintain homeostasis by involuntarily regulating our heart rate and our internal temperature.

The body is often faced with external changes. What are some external factors that might influence your internal homeostasis (sense of balance)? Have students offer suggestions. Weather, time of day, the food we put in our bodies, the time and energy we spend on different activities, relationships, technology, schoolwork, sports: These are some examples of external factors that are likely to have an impact on how we are functioning, both physically and emotionally.

One of the goals of practicing Brain Breaks is to learn how to move toward a sense of balance even when the internal and external environments are not necessarily in harmony.

Our health and wellness practices aim to both reduce present stress and get us ready for handling future stress. As we practice the following exercise, notice when you begin to feel stress in the body. Can you feel muscles stretching and strengthening? Can you feel your lung capacity increasing as you breathe deeply? How do you respond to that stress?



Teach

When external factors disturb your internal conditions, the body and brain will try to bring you back into balance. In order to support internal balance, it is important to identify what we have control over versus what we do not have control over. What are some things you have control over? What is out of your control? If we are able to identify what aspects of our health and wellness we have control over, we will be better prepared to manage external sources of stress, which are usually out of our control.

OPTIONAL GROUP ACTIVITY

Draw the two pans of a balance scale (like the scales of justice) on a large piece of paper, chalkboard, whiteboard, or Smart Board. Over one pan, write "What I Can Control." Over the second pan, write "What I Cannot Control." Add students' examples of what is within and outside of their control to the respective pans.

Brain Break 4

GUIDED REST

Link

We've discussed how balance isn't just about being able to hold a posture without falling over. Balance is a process. As your lives get busier and fuller, it is worth engaging with that process and noticing what throws you off, causing you to move farther away from homeostasis.

Home Practice

Until we meet again, check in with yourself throughout each day and try to get a read on the question, "Am I moving toward or away from balance?" 1 "Homeostasis," Merriam-Webster's Collegiate Dictionary. https://www.merriam-webster.com/ dictionary/homeostasis.



Making and Breaking Habits

GUIDING QUESTIONS

What are some habits that have positive effects on your sense of balance?

What are some habits that have negative effects on your sense of balance?

OBJECTIVE

Students will be able to describe how habits can have positive or negative effects on our behaviors and relationships.

¥ TEACHER TIPS

 As we near the end of the course, encourage learners to share whether they notice a difference doing these exercises now versus at the beginning of the course.



BRAIN BREAKS

Mindful Minute Anchor Breathing Brain Balance Sequence Attitude of Gratitude



unconscious malleable

🔅 MINDFUL MINUTE

Connect

In the previous lesson, we learned that the body is constantly adapting to fluctuations in environmental circumstances.

Remember, balance is not a static state, but rather something we are constantly moving toward or away from.

Today, we are going to look at our habits and how they bring us toward or away from balance. What are our current habits? What are some habits we'd like to change? What are some habits we'd like to acquire? Which of these habits, if any, support our health, wellness, and sense of balance?

Brain Break 2

C ANCHOR BREATHING

Teach

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.

Our habits are not necessarily permanent. Our brains, ideas, beliefs, and habits are malleable and dependent on conditions. When we make an effort to reroute our habitual thoughts and actions, the brain absorbs and adapts to this effort.

As we carry out new or habitual patterns of movement, behavior, and thought, neuroplasticity occurs within us. Remember that neuroplasticity is the brain's process of building and releasing internal connections as a response to our environment and experiences. Experiences that get repeated over time create strong connections in the brain. These connections can become our habitual patterns of thinking, feeling, and behaving.

Brain Break 3

S BRAIN BALANCE SEQUENCE

Teach

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 neural networks don't stop growing and proliferating when we become adults. In fact, these networks shape-shift until the day we die. We know 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.

Habits are not only actions that we take we also have habits in the types of thoughts that we think and feelings that we feel. In our next exercise, we will practice positive thoughts and feelings through cultivating our sense of gratitude.

Brain Break 4

OPTIONAL INDIVIDUAL ACTIVITY

Ask students to write down habits they would like to make or break. Have them answer the question "How will making or breaking this habit bring me toward balance?"

Invite learners to share their responses with the larger group.

Link

When we bring mindfulness to established habits, we can begin the task of deciding which ones we would like to create. Some of the habits we create now will be beneficial throughout our lives.

Home Practice

Over the next week, continue to investigate and observe your daily habits and routines (including habitual thoughts, habitual speech, and habitual behaviors). Do you notice any habits that did not occur to you today?

Lesson Twelve



GUIDING QUESTIONS

What does it mean to be part of a community?

How are members of a community interconnected? How are members of a community interdependent?

OBJECTIVE

Students will participate in a mindfulness web exercise to kinesthetically sense and appreciate the interconnectedness of community members.

E TEACHER TIPS

 Remind learners that as they practice the Brain Breaks, they are simply observing their experience with a sense of kindness. They do not need to control the experience or have a different experience from the one they are actually having.



Connect

In our last session, we took a look at some habits we have formed in our lives that support our health and wellness and some that do not. In today's class, we are going to look at our well-being in the context of community. Each of us is a part of many different communities, and our well-being (or lack of well-being) affects the communities we belong to.

Brain Break 2 C ANCHOR BREATHING

Teach

Introduce the concept of community. Have students share different communities of which they are members (e.g., nuclear family, extended family, religious institution, class, school, after-school clubs, sports team, band or orchestra). Create a chart with concentric circles to represent different communities and their respective sizes. The innermost circle represents the individual. The outermost circle represents the world.

In between are a variety of communities, including one's home, neighborhood, city, state, country, and continent. Use a different color to highlight each concentric ring. Point out how one person is part of many different, yet interconnected and interdependent, communities.

As a member of all of these different communities, we have an impact. Our well-being supports the well-being of our communities, and vice versa.

Brain Break 3

C RECHARGE SEQUENCE

Active Engagement

Mindfulness Web

Have students stand in a circle. Bring out the ball of yarn. Demonstrate how you reflect upon one mindful or kind thing you have done since we started this unit. Hold on to a piece of the yarn before passing the ball of yarn to a student across from you in the circle. Have each student share one aspect of mindfulness that makes them proud for having put into practice or a kind act they have done that benefited one of the communities they are a part of.

Point out that as the ball of yarn is tossed from one student to the next, a web is created, connecting each member of the group. Each strand of the web represents an individual act of kindness or mindfulness that has contributed to improving the community both inside and outside of the classroom. When every student has had a chance to share their reflections, explain how the web symbolizes the class community. In a community, when something happens to one member, everyone is affected. Have everyone pull the yarn so the web is taut. Tug on your piece of yarn and ask if everyone can feel the tug, which signifies the interconnectedness of each group member. Invite individual students to tug on the web to ensure everyone feels the tug.

What might the tug represent (or suggest) about the connections between each member of our class community?

So the symbolism of the web is still present, while students are still standing holding the yarn, lead a discussion about the importance of showing kindness to and respect for yourself and others. Introduce the concepts of interconnectedness and interdependence. If time allows, go around the circle and have each student complete the sentence "Kindness is..." or "Mindfulness is..." or "Community is..."

OPTIONAL GROUP ACTIVITY

Have students write, draw, or talk in pairs about what elements in a community support their sense of interconnectedness and interdependence. How can the health and wellness practices we have learned support this classroom community going forward?

Brain Break 4

ATTITUDE OF GRATITUDE

Link

Today we looked at what it is to be a member of a community. We also explored how when we support our own well-being, we are better able to have a positive impact in our community. I hope that some of the strategies we have learned together will support your well-being and the well-being of the communities to which you belong.

Home Practice

This week, practice random acts of kindness. Small acts of kindness, such as a smile, a hug, or a kind word, can have a big impact, in addition to strengthening your power to be kind.

Brain Break Scripts



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.
- When your attention wanders, gently bring it back to your breathing space.





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.

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.





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.

Brain Balance Sequence

- 1. Inhale, take the right arm overhead and the left foot slightly behind, placing only your toes on the floor.
- 2. Exhale, lift the left leg, knee bent, and touch the right hand to the inside of the left knee.
- 3. Inhale, return the right arm overhead and the left foot slightly behind, placing only your toes on the floor.
- 4. Exhale and again lift the left leg, knee bent, and touch the right hand to the inside of the left knee.
- 5. Repeat on the other side.







Chair Cat/Cow

- 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)
- 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.

Chair Sunrise Twist

- 1. Sit in Seated Mountain.
- 2. Inhale, stretch arms overhead for Seated Sunrise.
- 3. Exhale, twist to the right, placing left hand on right knee and right hand on right hip or the back of the chair. Keep right shoulder relaxed. Take a few breaths here.
- 4. Inhale, back to Seated Sunrise.
- Exhale, twist to the left, placing right hand on left knee and left hand on left hip or the back of the chair. Keep left shoulder relaxed. Take a few breaths here.



- 6. Inhale back to Seated Sunrise.
- 7. Exhale to Seated Mountain.



Easy In, Extend Out

- 1. Breathe in naturally.
- 2. Breathe out slowly, making the exhalation longer than the inhalation.
- 3. Keep going, making the exhalations longer than the inhalations.
- 4. Notice how you feel.



[•] Lengthening the exhalation tends to have a calming effect on the mind and body.



Guided Rest

- 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.
- 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.
- Put your attention on your shoulders. Feel your shoulders relax. (Repeat for arms, wrists, hands, and fingers.)
- 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).
- Put your attention on your belly. Notice how the breath moves the belly softly up and down.

- Put your attention on your hips. Feel your hips relax. (Repeat for legs, knees, ankles, feet, and toes.)
- 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.
- 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.
- Slowly start to wiggle your fingers and toes. Take a deep breath in and stretch your arms overhead. As you exhale, relax.
- Open your eyes and slowly return to a seated position.
- 17. Notice how you are feeling.

- 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.



[•] You can shorten the exercise by leaving out some body parts.

[•] This exercise can be practiced lying down or seated.



Mindful Listening

- 1. Breathing in and out mindfully, tune in to the sounds outside the room.
- 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).







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.







Ocean Breath

- 1. Inhale through your nose.
- 2. As you exhale, whisper the sound "ahhh" through your mouth. Repeat two or three times.
- 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.



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.
- Inhale, come all the way up to standing with arms overhead and look up.
- 7. Exhale, return to Mountain.





Seated Mountain

- 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.





STOP*

- 1. **S**top.
- 2. Take a few breaths.
- 3. Observe the feelings in your body.
- 4. Proceed with awareness.

- Learners go through the four steps: S-T-O-P.
- The main focus is to hone learners' observation skills to help them make more mindful choices. When we observe, we are just noticing what we feel in our bodies; we are not saying if something is good or bad.
- It is a good idea to practice this exercise when learners are not experiencing strong emotions, so that they will be able to implement it when they are.
- Have willing learners share feedback on what they observe in step three. Some typical observations might include temperature (e.g., hot, cold) heartbeat (e.g., fast, slow), comfort or discomfort, hunger or thirst, tired or excited, etc. As learners become more experienced, they may become aware of more subtle sensations in the body.
- Underscore two important features of mindfulness practice:
 - 1. Consistent practice—keep trying!
 - 2. Learn from unmindful moments without being harsh on yourself.

[•] STOP is designed to help learners practice selfregulation when they are experiencing strong emotions.

^{*}Elisha Goldstein, "Stressing Out? S.T.O.P.," Mindful, May 29, 2013. http://www.mindful.org/stressing-out-stop/.



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.
- 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.



Taking in the Good

- 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.
- Allow the feeling associated with the memory to sink into your mind. Act as a sponge, absorbing the memory and the feeling together.



Tree

- 1. Begin in Mountain and bring hands to hips.
- 2. Keep your eyes focused on a point 3 feet in front of you.
- 3. Shift your weight to your left foot.
- 4. Bend your right knee and lift up your right heel.
- 5. Point your knee out to the side. Keep your weight on your left foot. Take a few breaths here.
- If you feel steady, you can stay right here or you can lift the right foot and place the sole on the inner left calf. Keep the right knee pointing out to the right. Take a few breaths here.
- If you are still steady, you can move the foot to the inner thigh, using your hand if you need to.
- Inhale the arms up overhead as if you were spreading branches. Balance for 5 to 10 breaths.
- 9. Exhale, return to Mountain pose. Repeat on the other side.



Glossary

AMYGDALA:

a roughly almond-shaped mass of gray matter inside each cerebral hemisphere that is involved with the experiencing of emotions

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

CEREBRAL CORTEX:

the wrinkly gray outer surface of the cerebrum

CEREBRUM:

the principal and most anterior part of the brain in vertebrates, consisting of two hemispheres; is responsible for the integration of complex sensory and neural functions and the initiation and coordination of voluntary activity in the body

CHALLENGE:

a task or situation that tests someone's abilities

COMMUNITY:

a body of individuals organized into a unit; any group sharing interests or pursuits

COPE:

to deal effectively with something difficult

EMPATHY:

the ability to understand and share the feelings of another

HABIT:

a settled or regular tendency or practice—usually one that is difficult to give up

HEALTH:

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

HIPPOCAMPUS:

the elongated ridges on the floor of each lateral ventricle of the brain, thought to be the center of emotion, memory, and the autonomic nervous system

HOMEOSTASIS:

the tendency of the body to seek and maintain a condition of balance or equilibrium within its internal environments, even when faced with external changes

INTERCONNECTEDNESS:

the idea that all things are linked

INTERDEPENDENCE:

a mutual or shared dependence on, or need for, one another

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)

MALLEABLE:

easily influenced; pliable

MINDFULNESS:

the quality or state of being aware of someone or something, including oneself

MINDFULNESS MUSCLE:

an individual's capacity to direct and redirect attention and awareness

NEURON:

a specialized cell transmitting nerve impulses

NEUROPLASTICITY:

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

NEUROTRANSMITTER:

a chemical substance released at the end of a nerve fiber by the arrival of a nerve impulse

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 gray matter of the anterior part of the frontal lobe that is highly developed in humans and plays a role in the regulation of complex cognitive, emotional, and behavioral functioning

RELAX:

to become less tense or anxious

RELEASE:

to allow to move, act, or flow freely

RESILIENCE:

to withstand challenges and obstacles

SELF-REGULATION:

the ability to manage your behavior and the expression of your emotions in a way that is appropriate to the environment you are in

STRESS:

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

STRESSOR:

an external source of stimuli that causes stress to an organism

SYMPATHETIC NERVOUS SYSTEM:

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

UNCONSCIOUS:

not conscious; done or existing without your realizing it

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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